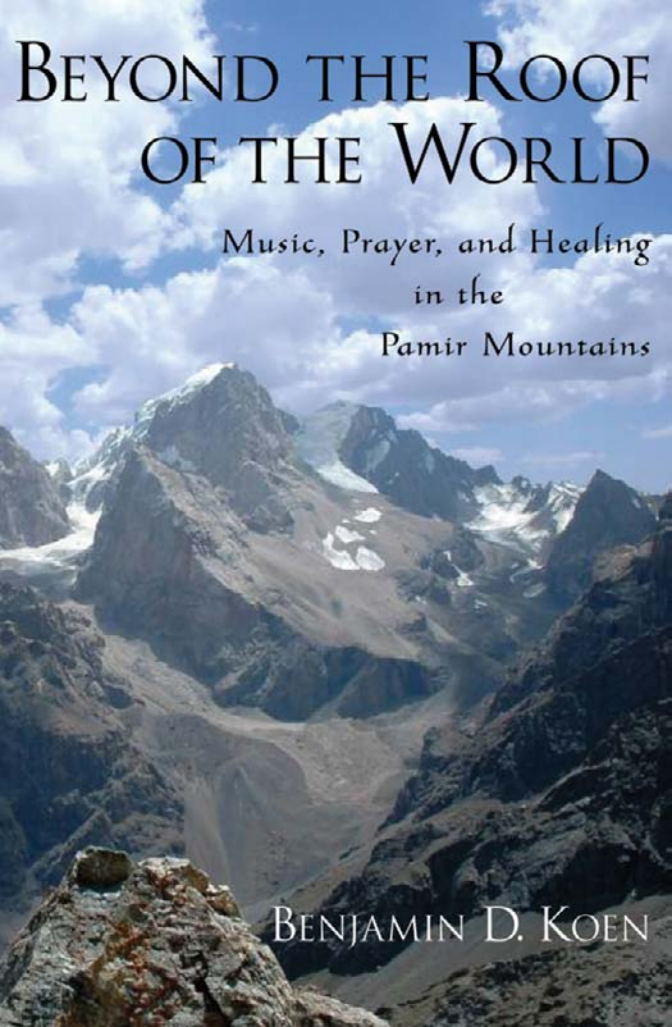
Beyond the Roof of the World

Music, Prayer, and Healing in the Pamir Mountains



Benjamin D. Koen

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BENJAMIN D. KOEN

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For Saba,
Naseem, and Solya

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Language, Pronunciation, and Transliteration

The Persian language is the mother tongue of Iran, Tajikistan, and Afghanistan. Note that "Persian," not "Farsi," is the correct name for the language when speaking in English. "Farsi" is the transliteration of the Persian word for the language. In English, the national language of Tajikistan is commonly referred to as Tajik, Tajik-Persian, or Persian. In the language itself, it is called Tâjiki or Fârsi. To indicate the closest pronunciation of the Tajik-Persian found in this text, I employ the basic transliteration system found in Lewis (2000, xvii), which is straightforward for the English reader.

Vowel	Sound
a	lab
â	law
e	bed
i	machine
u	tutu
o	go

Consonant	Sound
kh	Bach (German) or José (Spanish)
zh	vision

The "â" sound in Tajik lies in between the sound found in "law" and that of "go," whereas in the standard Persian spoken in Iran, it is most often pronounced as the sound of "law." The "gh" and "q" represent sounds not found in English, a hard velarized "g" pronounced higher up in the mouth" (Lewis, 2000, xvii). Many authors often use the French "r" as a reference, which serves as a good starting point, however, the intended sound is quite distinctive and unlike the French "r." To pronounce the Tajik-Persian (or Persian) "gh" or "q," a helpful comparison can be made with the pronunciation of the English "g." To pronounce "g" (as in "gap"), one makes contact with the middle of the tongue to the point where it meets the soft palette; the tongue disallows airflow until the point of contact is released, thus producing the sound "g." With the same process in mind, rather than using the middle of the tongue, one should use the area that produces the French "r," the back of the middle velar region, which must make contact with the palette so that there is no possible airflow. When this point of contact is released, the proper sound is produced. One must have the "gh" or "q" sound in mind, or a hard "k" sound might be produced. Other consonants are basically consistent with their English equivalents. Plurals in Persian are generally created by the addition of ân, ât, or hâ on the end of a word. For simplicity and clarity, I have opted to use "-s" to indicate plural forms.

Beyond the Roof of the World

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I

Medical Ethnomusicology and the Ontology of Oneness

He drew a circle that shut me out—
Heretic, rebel, a thing to flout.
But Love and I had the wit to win:
We drew a circle that took him in!

—Edwin Markham

The healing powers arising from the mystical intercourse of music and prayer have captured the attention of prophets and poets, scientists and physicians, the lay and the learned alike throughout the ages and across the world. In the present global-cultural milieu, where professional, affordable healthcare is scarce at best for the majority of humanity, where a staggering number of people in the wealthiest country of the world are without basic health insurance, where medical mistakes have become far too numerous, and where an increasing number of individuals are opting for ICAM (integrative, complementary, and alternative medicine) approaches to health care, much can be learned from cultures that have ancient traditions of ICAM healing. The Pamir Mountain region of Tajikistan is one such cultural area, where the local worldview and physical landscape have allowed the musical, religious, spiritual, and scientific domains of knowledge to remain connected, often for the common goal of healing, rather than being separated into diametrically opposed boxes of human understanding and experience—usually compartmentalized as "science," "religion and spirituality," and "music and the arts."

While it is still overwhelmingly true that "in the West, music simply is not part of the biomedically driven clinical reality encountered in doctors' offices, clinics, and hospitals" (Friedson 1996, xi), the last decade has seen a new degree of interest and openness on the part of physicians, scientists, and funding institutions to support and conduct research that considers music, prayer, meditation, and related practices as potentially efficacious medical and psychological interventions for use in clinical and public health settings. This broad-based interest includes a deeper awareness that spirituality and belief are essential to include in the outmoded mind-body description of a human being.

Across diverse cultures, musical healing is practiced within the context of broader belief systems and religions, which often function as holistic entities. Friedson observes, for instance, that "in traditional African societies, religion and healing form an amalgam that is often functionally irreducible into constituent parts" (Friedson 1998, 274). Throughout traditional cultures of the world, music is almost always central to healing, and is viewed as being essentially spiritual or "other worldly." Additionally, a common etiological view among practitioners in traditional healing systems is that "any illness is . . . ascribed to a disturbance of the balance between man and spiritual or mystical forces, and the aim of health seeking is to restore the equilibrium" (Oosthuizen 1989, 30). Music is often described as the bridge by which the physical and spiritual are connected and can be the most vital component of a healing ceremony or practice. Moreover, the physical and spiritual dimensions are often viewed not as separate dimensions that must be connected but, rather, as aspects of one reality, where music functions as a balancer of these aspects, facilitating and contextualizing the ritual performance of healing that occurs through the interaction of physical, spiritual, and musical forces.

Establishing a balance of the physical and spiritual, however, is not only a central concern in cultures where traditional or indigenous knowledge is integral to life; it is of profound importance to countless individuals in the most technologically developed countries of the world. It is for this very reason that ICAM is dramatically increasing. Developments in ICAM, many concepts, approaches, and techniques of which emerge from or are related to traditional practices, imply a fundamental change in the understanding of health and *what* comprises a human's *being,* which can no longer be described in strictly biological, material, or mechanistic terms. The ICAM movement aims "to shift some of the basic orientations of medicine: toward healing rather than symptomatic treatment, toward a closer relationship with nature, toward a strengthened doctor-patient relationship and an emphasis on mind and spirit in addition to body" (Weil 2000, 442). Furthermore, it recognizes humans as empowered with the natural capacity to heal, given the proper context of

being—holistically viewed as inclusive of the biological, psychological, social, emotional, and spiritual dimensions of life.

There is a growing interest in integrative approaches to health and healing among academic and popular sectors of society, as well as an increased use of complementary and alternative treatments by the general public in places where biomedicine is the norm (Levin 1997; Astin 1998). A corollary to this is the increase and development of course offerings on complementary methods in medical schools in the United States (Wetzel et al. 1998). Concurrently, there is an increased interest in spirituality and religion (Levin 1997) that links directly with the public and academic interest of including aspects of spirituality and religiosity in medicine (Larson and Larson 1994; Larson et al. 1998; Koenig 1997). Moreover, patients feel that "technology is not enough . . . [they] want something more, something that goes beyond the proper functioning of the physical body" (Dossey 1999, 18). Indeed, the central theme in the broad discourse within and around ICAM is that the proper functioning of the physical body does not, and cannot exist in a vacuum, and must include the individual's assessment of a condition, belief, spirituality, emotional, and psychological states. As the placebo and nocebo effects, biofeedback, psychoneuroimmunology, modern physics, as well as the miraculous cures and spontaneous healings that are documented throughout the history of medicine have overwhelmingly shown, there can be an efficacious relationship between the tangible and intangible—between belief, consciousness, the metaphysical, and the body.[1] An important institutional response to this expanded awareness has been the formation of the National Center for Complementary and Alternative Medicine (part of the NIH) in 1998. This center funds research in various areas, which have parallels in diverse cultural contexts of music and healing, including prayer, dance, psychotherapy, imagery, hypnosis, and meditation.

A critical addition to the discourse, which has yet to be brought to the forefront, even though it shapes all healing experiences, is the laden frame of *cultural context*—the dynamic, multidimensional spaces and places where music and related praxes are empowered with cultural and personal meaning to promote health and facilitate healing. This is but one area in which medical ethnomusicology strengthens the course of integrative medicine. In addition, medical ethnomusicology brings a wealth of diverse healing practices and in-depth knowledge of music and sound phenomena to bear within the ever-present and ever-changing frame of culture.

The inclusion and utilization of both the physical and spiritual realms in healing has been described as a "sacred clinical reality" (Kleinman 1980, 241), which builds on the socially and culturally informed concept of "clinical reality"—or a complex of interrelated features including "the beliefs,

expectations, norms, behavior, and communicative transactions associated with sickness, health care seeking, practitioner-patient relationships, therapeutic activities, and evaluation of outcomes" (Kleinman 1980, 42). Building from this framework, healing systems or clinical realities oriented toward that which is spiritual, religious, or metaphysical "emphasize sacred reality, illness orientation (meaning that they take into account the patient's account of the problem as their central concern), symbolic intervention, interrogative structure, family centered locus of control . . . and substantial expectation of change, even cure" (Kleinman 1988, 120). Through an in-depth exploration of one such sacred clinical reality from the heart of the Pamir Mountain region of Badakhshan, Tajikistan, and further illustrations drawn from diverse experiences outside of Pamir, this book illuminates a constellation of culture-transcendent principles and processes that underlie diverse practices of healing across world cultures.

Movements in the Field

As a work positioned within the ICAM discourse and at the intersections of medical, cognitive, and applied ethnomusicology, this book moves in new directions beyond the conventions of the discipline of ethnomusicology in two important ways. First, the study connects ethnomusicology and health science by employing an integrative methodology of physiological experiments in the context of ethnographic field research in Pamir, during which time I often engaged in a collaborative research approach in which I worked with local medical doctors and traditional healers in the field to explore multimodal practices of musical and spiritual healing. This approach, in part, aims to provide a more holistic perspective of *sacred clinical musical healing* experiences, and encourages integrative and collaborative approaches across disciplinary borders. Second, this book suggests that the culture-transcendent principles and processes explored here can be relevant to one's own life, and our contemporary world. I should emphasize that while some may view this to be a bold or challenging statement, it is not intended to be so. Rather, I view this as an unfolding expression of an outward-looking orientation that is growing in ethnomusicology and academia as a whole. This outward-looking orientation results from an aspiration to do work of value, import, and of benefit to others, which, while a central concern to many in the discipline, is especially strong among the new generation of young scholars, who are keenly focused on and passionate in their concern for making contributions in three core areas. First, they hope to serve and benefit the people in the cultures where they conduct their research; second, they endeavor to advance ethnomusicological knowledge and that of related disciplines; and

third, free from the circumscription of disciplinary borders, social constructs, or conventions, through their research and practice, they aspire to contribute to the lives of people beyond their immediate cultural area of research.

These aspirations are, in part, what initially drew me to ethnomusicology, and what have compelled several scholars to pursue applied research in the medical ethnomusicology realm. Certainly, it cannot be said that these three points are new and only of interest to the younger generations of ethnomusicologists and colleagues in related fields of study and applied practice. On the contrary, these motivations, along with an inherent love for people and music, have oft been the direct or underlying impetus that has inspired many a heart and mind throughout the history of ethnomusicology. I highlight these three points here because they form a sense of primacy that compels many in our disciplines to conduct research that is not only meaningful and relevant to one's self and the culture from which it emerges, but also to people beyond that particular cultural milieu.

In hand with these concerns is an ontological sensibility that uniquely shapes how many younger generation ethnomusicologists view themselves and those with whom they work in the field. Fortunately, like their predecessors, this generation is by no means uniform. Nevertheless, the sociocultural changes of the last quarter century have not only created a unique global awareness and opportunity for engagement among the peoples of the world that was not as typical or possible previously but also have shaped the processes of acculturation and academic training of these scholars, making them keenly aware that they are intimately linked to and part of the whole of humanity, which, for those who engage cultural domains as central to their research, comprises the broadest sociocultural frame of life on the planet. Simultaneously, there is a growing awareness that each individual comprises a unique cultural landscape that might or might not share certain aspects with the broader surrounding and overlapping cultural frames of meaning that range from a relationship between two people and extend to humanity as a whole. This ontological sensibility is unique in the way that it further engenders respect and cultural sensitivity for individuals and cultural groups, on the one hand, and, on the other hand, simultaneously imbues a person with a sense of belonging to the whole—a sense that is not dependent on sameness for belonging to be real. Rather, difference or variation, whether it is in physical form, belief, behavior, or temperament, is viewed as a function and expression of the infinite strands of individual diversity of the whole, not a way to separate people into categories of opposition.

Exploring the tension between different ontological frames and the physical universe, which in part, facilitates different degrees of the experience of

wholeness or fragmentation, the physicist David Bohm draws attention to the dynamic between what he calls the "implicate order," which gives rise to the manifest or "explicate order" in the universe (Bohm 1980). He shows how one's awareness and understanding of the common ground between matter and consciousness brings forth an experience and reality directly representative of that particular awareness and understanding. If attention is given only to the divided and fragmented explicate order, "an illusion may arise in which the manifest static and fragmented content of consciousness is experienced as the very basis of reality and from this illusion one may apparently obtain a proof of the correctness of that mode of thought in which this content is taken to be fundamental reality" (Bohm 1980, 262), thus divorcing one's consciousness from the underlying "wholeness of the implicate order." For instance, the long-standing false notion of an essential dichotomy between the mind and body can be seen as the result of attention to what might appear as separate and unrelated parts of a human being, rather than viewing them as aspects of one whole. In relation to this, Varela, Thompson, and Rosch suggest, "Descartes' conclusion that he was a thinking thing was the product of his question, and that question was a product of specific practices—those of disembodied, unmindful reflection" (Varela et al. 1991, 28). Their thesis, which is, on many points, expressive of Bohm's technical and philosophical argument, and that encourages a balance between what they call "two planetary forces, science and Buddhism" (Varela et al. 1991, 254), intersects with the present book in many ways.

This book is also concerned with a harmony between multiple domains of knowledge—science, religion, spirituality, belief, culture, music, and experience—and approaches *ways of knowing* and *ways of healing* as being centrally connected to transformative experiences in which multiple types of music, prayer, and meditation are key for embodying a state of being that is expressive of wholeness and health. Another shared aspect is that Varela, Thompson, and Rosch are also concerned with making a positive difference in the world that is not confined to contributing knowledge to "their" area of cognitive science alone, but seeks to appeal to a readership that might engage mindfulness awareness as a way of enacting a better world.

These formulations in physics (Bohm 1980) and cognitive science (Varela et al. 1991) are mentioned here to give a broader purview of the ontological sensibility that is growing within academia, which informs the younger generation of ethnomusicologists' lifeworlds, and that categorically shifts former presumptions based on separateness and otherness to connectedness and wholeness.

This ontological shift also has important implications for ethics in the field. While this ontology engenders an increased respect for the diversity of another

human being or culture, there is a corollary increased sense of belonging or shared existence on the planet that allows for a more intimate and transparent engagement and discourse between all participants in field research about ethical issues that previously might have been viewed as taboo for participants to broach, or nonessential to critical ethnographic or scientific research. Indeed, in a shared world, where people are interconnected and entangled through cultural, social, political, economic, and ecological factors, the dynamics and perspectives that shape our understandings of cultural and moral relativism are changing daily, reflecting our collective struggle in coming to grips with shared global ethics and the implications inherent in the principle of the oneness of humanity.

The dialectic of ethics in the field, while it is unique to each researcher and situation, can be seen as mirroring broader sociocultural processes. For instance, the conflicts and resolutions between individuals or countries on the global stage, whether it is in the context of the United Nations or other international dialogues, can be viewed as processes of searching for common ethical ground. Moreover, the dramatic increase of international and intercultural dialogue over the past decade further shapes the sense of a shared world in which we conduct research, offer our understandings, sing our stories, express our music, and apply what we have learned. Whereas in previous periods of research and crosscultural interaction, the myriad topics and realities expressive of heritage, culture, and tradition were enriching by virtue of their diversity alone, for this century's researcher or socially conscious citizen, they are but starting points for the creation of a new culture of mutual learning and the dialogic enaction of an ever-advancing civilization.

One of the local and international dialogues where the search for common ground is fully present is the discourse on HIV/AIDS. Within such a charged subject, approaches that push the conventions of a discipline might seem to invite a critical gaze. Perhaps this is why Gregory Barz, in his benchmark work in medical ethnomusicology, *Singing for Life, HIV/AIDS and Music in Uganda*, says in his conclusion "I hope I will be forgiven for venturing just a bit beyond the borders of Uganda, if only to demonstrate the effectiveness . . . of music within HIV/AIDS intervention programs elsewhere in sub-Saharan Africa" (Barz 2006, 216). In the ontological paradigm that I have begun to convey here, neither an implied apology, nor hope for forgiveness would enter into the mind of the reader of Barz's sensitive and thought-provoking ethnography. Rather, a reader from the new paradigm would encourage him and others engaged in this work to stretch as far as they are able, bringing as many people into the process as possible to effect a positive change through musical affect and performance sooner than later, not only across the continent of Africa, but any

place in the world where music and the expressive arts can educate people to transform not only the persistent misunderstandings about HIV/AIDS but also behaviors, relationships, health practices, perceptions, and health outcomes. Barz's *Singing for Life* is an example of a work that is not only concerned with the multivocal singing of a particular story with sensitivity and transparency but, quite simply, it is concerned with making a difference in human life.

Serving others or making a positive difference in human life through one's work is the hallmark of the new ontological paradigm from which medical ethnomusicology emerges. It is interesting to note that the recurrent and central theme voiced within the Association for Medical Ethnomusicology[2] is that *what* we do benefit people through music's potential to promote health and facilitate healing. Moreover, among the diverse membership of the association and the multiplicity of interests and approaches to research, applied practice, and performance, many are involved in some aspect of collaborative research, and are also active musicians in a wide array of settings where music is central to effecting positive changes in health.[3]

Ontology of Oneness

The core value on which my research rests is a particular sense of being that I have called ontology of oneness. In the field, ontology and epistemology can be viewed as two aspects or frames that characterize and guide field research. Ontologically, contrary to the dominant, binary and often divisive perspectives that frame the field in terms of "we/they," "insider/outsider," "researcher/subject," "Eastern/Western," "native/foreigner," or other oppositions expressed with labels of color, gender, class, or nationality, I believe that the all-inclusive perspective of that there is only "we" is more productive. Of course, this "we" is neither singular, static, nor is it an expression of sameness. Rather, it is a kind of a mosaic, a fabric of infinite and beautiful diversity whose threads are interwoven and cojoined at multiple levels in a shared existence. It is a manifestation of the principle of unity *in* diversity that allows for and demands difference in the various parts of an entity for that entity to be healthy and whole.

Surely, the current use of these opposing terms in academic discourse is at times due to the conventions of language, for the sake of convenience, the desire to express the views of people other than the researcher, or in an effort to be "objective." However, there is often embedded in these terms *meaning* that not only shapes the research, but the manner in which ethnographic or health science methods are employed. Of course, any ontological view will shape how methods are used and data collected and shared. Nevertheless, views that do

not allow for unity in diversity, and that perpetuate practices that prefer to simplistically and "neatly" box up, categorize, and label individuals or groups of people according to outmoded and fallacious assumptions, not only bias research, but are dangerous, especially in a field like ethnomusicology, which is often responsible for educating people about cultures and individuals with which and about whom they are often unfamiliar or perhaps misinformed.

Viewing *the field* as a multifaceted dimension that is inclusive rather than exclusive I believe is essential to advance research across the humanities and sciences. That is, *the field* need not be viewed as "out there," some "other," often "foreign" place where one goes to collect data. Rather, *the field* can also be viewed as "in here," a boundless, inclusive circle, any and every place *in* the world, *in* and *of* the mind and soul—beyond notions of *in* and *out*. Perhaps the field is neither here, nor there, but an already given condition into which we all are born. Perhaps the field simply *is not*.

Reflexivity, Transparency, and Accuracy

Along with these movements and ontological sensibilities, is an increased influence that reflexive anthropology is having across academia, which is fully present in, but certainly not limited to, ethnomusicology and anthropology. For instance, within the health science literature, this influence is most notably present in the establishment and expansion of the medical humanities and ICAM, as well as the growing awareness of the importance of narrative medicine, where the voices, thoughts, and beliefs of all participants, including patients, family, researchers, and practitioners, are becoming further integrated into a multivocal expression of human experiences that traverse domains of illness, disease, grief, pain, suffering, health, healing, birth, and death. Additionally, over the last decade, the dramatic increase in the range and scope of research in medical anthropology can be seen as fueling a unique balance between reflexive and objective approaches to research, which has also shaped the present book.

Such a balance is particularly important to this book in that it proposes a new model of research that integrates physiological experiments, which require a certain type of methodological rigor for meaningful data to emerge; and it can be seen as a reflexive and phenomenological ethnography, which requires a different type of methodological rigor, and which conveys indigenous and cross-cultural epistemologies of healing from Tajik Badakhshan, including threads of indigenous knowledge that exist in that region; other knowledge that is Pamiri, but that might not be considered necessarily "indigenous" (e.g., views from

certain Pamiris who have been trained as medical doctors outside of Pamir, and who might also practice other indigenous modalities of healing); the views and dynamics that a researcher brings to the field; and the thoughts, theories, and new knowledge that can be generated through the interaction of all of these.

Balancing and integrating multiple threads of knowledge in ethnography, has, throughout the history of ethnomusicology and anthropology, been a major concern to say the least. Questions regarding ethics, representation, transparency, and accuracy, among others, are centrally important to the ethnographic endeavor, especially with respect to how researchers portray people, including themselves, in their ethnographies as a way to convey knowledge. A central concern then, for a writer, is to maintain intellectual integrity of the research while conveying as faithfully and accurately as possible, the story of a particular cultural place and time, which, for the overwhelming majority of readers will forever remain a "foreign" place.

To complicate the matter further, if researchers, as was the case for me in Pamir, are deeply involved in the experiences about which we write, especially if our presence and engagement in the field is welcomed, and our participation encouraged and at times requested, even demanded by local associates and informants, there is a double-edged sword that we must confront and balance—to artificially lessen one's role for the sake of disciplinary conventions and so-called "objectivity" in an ethnography where one is clearly engaged, not only as a way of *knowing* or *being*, but as a response to local community members, can be just as unethical as exaggerating one's role in an experience in which one is a peripheral observer.

Bakan (1999) explores this tension as he sets the stage for his ethnography on Balinese Gamelan Belegangur music, where he often portrays himself as a "central character of the story" (1999, 17). Bakan notes that Titon cautions ethnomusicologists about positioning themselves as central to the story saying "autobiographical narrative ethnography" can "displac[e] the reader's interest from the people making music whom we are writing about, to ourselves"; and suggests that a way to avoid this problem is for the author to "skillfully work up a scene and cast herself in the role of a bit player, someone whose participation isn't very important during the event, but whose reflections upon it afterwards serve as a kind of interpretation" (qtd. in Bakan 1999, 16). But what if a researcher, engaging field research with cultural knowledge and sensitivity, integrity and honesty, is more than a "bit player"? One cannot rightfully claim to be a bit player if one was not, anymore than one can claim to be a full participant if one was a bit player or a hands-off observer. Reflexivity then, becomes a vehicle of ethics in ethnography, a way to balance one's writing with the actual experiences from which the ethnography emerges.

Moreover, if a researcher, as is the case for me, endeavors into the realm of applied research and practice, especially when one applies knowledge cross-culturally, a new and multifaceted web of human interaction emerges, which can further illuminate overarching research questions and culture-transcendent aspects of music's efficacy in health and healing, and which has the potential to benefit a broader spectrum of people.[4] Here, reflexivity can be seen as even more critical as a researcher draws from multiple domains of knowledge, epistemologies, and ontologies to effectively apply principles and practices that promote health and healing for people in a different cultural time and place.[5]

My position in this book should be further clarified at the outset. To explain why some Pamiris with whom I had the honor of working cast me into the role of "healer," I rely on a Pamiri aphorism that states *gharib, tabibast*—"an unknown visitor *is* a healer." This notion rests on the belief that all people have access to a spiritual and generative energy known locally as *baraka,* through which one can be a channel for healing one's self and others. Although I am positioned with varying degrees of presence in the ethnography, that presence should not be misunderstood as any statement or claim to be the cause of healing, or that my role should be viewed as extraordinary. Rather, my presence in these pages is a function of my aim to be transparent in the telling of a particular story about health, healing, consciousness, and transformation, of which I am a part, and which includes perspectives, theories, insights, and evidence from science, religion, and spirituality, and the experiences of the people around which this ethnography revolves. There are, for example, experiences in chapter 5, which show a degree of my involvement as a music-prayer participant in contexts of healing; and sections of chapter six that discuss an applied research project I conducted outside of Pamir, which, building on the culture-transcendent principles of the book, aims to benefit a diverse spectrum of individuals who implement practices that I call music-prayer-meditation dynamics, which can effect positive transformations in multiple domains of being and health.

In addition to music-prayer-meditation dynamics, the central principles and processes explored here include neuroplasticity, cognitive flexibility, entrainment, holistic embodiment (or *embeingment*), and the Human Certainty Principle. The potential power of these principles and processes, in part, rests upon their unique connection to what I call the *five factors of health and healing,* namely the physical, psychological, social, emotional, and spiritual factors of life—factors that describe the functional aspects of one whole that constitutes a human's *being*. In addition, a core concept here is that the principles, processes, and factors describe avenues or *ways of healing* that are intimately interwoven with each other and function in dynamic and holistic ways, forging new realities within one's consciousness, and leading to healing transformations in one's

being. Moreover, the *five factors* also describe the broad categories of power that music, prayer, and meditation possess and can uniquely engage.

The particular traditions and practices from Pamir explored in this book, with their laden metaphors and symbolism, exemplify how certain principles and processes are expressed in a highly specialized culture-specific context and how they can link to and effect transformations in the five factors or aspects of a person's being and life. In Pamir, multiple aspects of expressive culture can work in harmony to transform consciousness, engender spirituality, and create health and healing. Certain practices of devotional music and prayer situated within the Pamiri sacred clinical reality form powerful local vehicles to achieve these ends. Among these practices is the preeminent genre of devotional music known as *maddâh* (lit. "praise"). *Maddâh* is a unique integration of ancient music, prayer, meditation, and classical Persian mystical poetry that is performed for several cultural purposes, including the maintenance of health and healing.[6] A related musical-poetic genre of lament, known as *falak* (lit. "heaven" "universe" "fortune"), forms another vehicle for healing in the region, most importantly with respect to the modulation of stress and depression (see Koen 2006). Interwoven with these genres are yet other ways of multimodal healing, which comprise core concepts in the Pamiri sacred clinical reality, and which this book also explores.

This book has a fourfold framework and purpose: to convey through the Pamiri cultural lens how music, prayer, and meditation are performed as preventive and curative practices; to discern underlying principles and processes that transcend cultural specificity; to show parallel processes in diverse cultural contexts; and to illustrate how these processes and principles can be relevant to researchers and practitioners across disciplines. Moreover, this book rests on two premises: first, that multiple domains of knowledge must be integrated to rigorously investigate any subject; second, that science and religion/spirituality can work in harmony to promote health and healing, rather than opposition, and, along with *experience,* and music and the arts, constitute four central ways that humans approach understandings of the worlds in which we live—be they physical or metaphysical.

Notably, from its inception, ethnomusicology has given expression to all of these points. Ethnomusicology has always been a highly interdisciplinary field that reaches across the traditional borderlands of the humanities, sciences, and the arts to achieve its research goals; it is a discipline that seeks to understand deeply the beliefs and practices of humans from across the planet—beliefs and practices that often mix science and religion, or see them as counterparts of life; and it views the sociocultural contextualization of lived experience as central to understanding. Interestingly, the notion that science

and religion, or the physical and spiritual, can be complementary lenses for viewing reality, or can work together to create health, has existed since ancient times across diverse cultures, and is now experiencing a renaissance in contemporary academic discourse in the sciences and humanities. This book aims to contribute, however humbly, to that discourse.

"Medical" and "Ethnomusicology"

Here, it will be helpful to give a brief explanation regarding the use of "medical" in conjunction with "ethnomusicology." Of particular importance is the notion that just as music is culturally contextualized, and its meanings and definitions far from uniform, so too are "medicine" and "medical" practice. For example, the songs, prayers, and ritual complexes that comprise a particular Diné, Baluchi, or Tibetan "medicine" are not the same as the medicine used in conventional biomedicine or music therapy settings; and similarly, a "medical" procedure, intervention, or event, within the traditional practices of the Tumbuka people of Malawai, the Temiar people of Malaysia, or the Isan islanders of Thailand, to mention a few, are altogether different from the medical procedures and interventions that occur in a hospital. Nevertheless, traditional, biomedical, and ICAM practices share a common goal—to create health and healing. From this perspective, medical ethnomusicology emphasizes this commonality by drawing on the core meaning of the term "medical," which is to heal, to cure, to make whole. Similarly, it is interesting to note that in the Pamir Mountain region, the same terms for medicine (*davâ, dâru*) or medical practice (*tibb, tebb*) are used within conventional biomedicine, traditional local practices, as well as within approaches that are musically and/or spiritually based, since all relate to the common goal of creating health or healing. The new discipline, like the broader ICAM movement, is also primarily focused on and oriented toward health and healing, prevention and cure, rather than illness and disease.

In addition, medical ethnomusicology's relationship to medical anthropology is key in understanding the emergence of this new field; and an aspect of the history of ethnomusicology should be noted here to make the relationship clear. Until the formation of the Society for Ethnomusicology in the United States in the mid-1900s, any "music" outside of so-called Western art music or the "classical" traditions of Western Europe, was largely viewed by the academy as being substandard, savage, or at best, "exotic." Ethnomusicology challenged, deconstructed, and replaced that notion with a new and expanded conceptual frame, emphasizing the importance of considering music from within the

culture that created it, and included in its purview *all* music and people, of any place and any time period from the ancient past to the present. So, for example, the timbral aspect of a Seneca lullaby, the healing methods of a Lakota medicine woman, the musical life of a Kyrgyz itinerant musician, the rhythmic variations of an Inuit vocal game performer, the improvisations of an Indian sitar master, the intoned prayer of a lamenting mother, Tibetan Buddhist chant; the musical life of a child with autism, that of Itzhak Perlman, or John Coltrane; the role of music in the creation of identity, the neurological and cognitive correlates of musical or sonic affect, the bodily, physiological, emotional, or psychoneuroimmunological response to music and sound; music and healing, advocacy, human rights, religion, social development and transformation, politics, economics, or the cocreation of culture, as well as countless other musical expressions, interests, or concerns, *all* fall within the purview of ethnomusicology. Additionally, ethnomusicology shifted the old paradigm of music research by showing the centrality of culture in understanding music and all its potential meanings, representations, powers, purposes, and functions. Ethnomusicology has ever been focused on music and the human condition; and the ways that ethnomusicologists research music and apply our learnings in education and practice are multiple.

Notably, in this great expansion of thought to include all the world's music and peoples, as well as its meanings, purposes, and functions as its area of inquiry, ethnomusicology did not seek to lessen the importance of so-called Western "classical" music, nor to say that the "music" of diverse cultures is the same "music" as that of the classic traditions of Western European countries. Rather, ethnomusicology frankly and unapologetically, clarified that not only is there an incredible diversity of expressions that are "music," which demand cultural sensitivity, understanding, and even fluency on the part of the researcher to approach music and human life with intellectual integrity, but also that the diverse musics of the world are central to the lives of the people that perform and listen to them, that they are worthy of academic study, and indeed, an openness to include them is essential to a just system of education and unbiased research.

Similarly, "medical anthropology" expanded the notion and understanding of "medicine" and "medical" beyond their conscription in conventional mechanistic biomedicine, embracing views from cultures throughout the world. Like the term "music," the terms "medicine" and "medical," as well as the terms "health," "healing," "disease," and "illness" have a multiplicity of meanings and definitions depending on the individual, culture, and historical period. Medical anthropology's expansion of these and related terms did not seek to lessen their meaning in conventional biomedicine, nor did it seek to say that all

"medicine" is the same but, rather, showed that across world cultures, different kinds of medicine and medical practices exist and should be part of academic discourse.[7] As medical anthropologists are concerned with the multiplicity of issues at the crossroads of medicine and culture, medical ethnomusicologists are concerned with the issues that intersect sound, music and related practices, medicine, health, healing, and culture.

It should also be noted that, whereas it is certainly not the case today that medical science has an ethnocentric view of what music is, there often remains an assumption across many disciplines, even within the music academy and conservatory, that the standard by which any music can be understood, appreciated, judged, analyzed, or deemed worthy of embracing or performing, is a "Western" one.[8] This leads to the thinking that the best music for health and healing would naturally come from "Western" models, which has resulted in a conspicuous absence of diverse cultural considerations in the biomedical and music therapy literature with respect to music's healing and therapeutic potentials. As a result, an area like medicine, which has a long-standing interest in music's ability to promote health, improve function, or facilitate healing, is at risk of inheriting a very narrow view of what music is, thereby stripping it of its potential power. Such a notion has also limited one stream of music therapy research that closely aligned itself with a "Western" musical model in conjunction with a mechanistic biomedical model. However, there are also ongoing developments in music therapy that not only seek to expand conventional theories and models to include the domains of spirituality and religiosity in their research and applications (see Lipe 2002, and Crowe 2004), but also include multicultural issues (Toppazoda 1995), as well as an ethnomusicological approach and recourse to indigenous music healing traditions in clinical practice (e.g., Moreno 1988, Rohrbacher 1993, and Stige 2002).[9]

Considering that there are multiple fields and numerous disciplines that have a direct interest in music, health, and healing, and that each discipline brings a unique and valuable perspective to bear, and further considering that there is a need for a greater appreciation and sophisticated understanding of the roles of culture in musical meaning, as well as its healing power in traditional and clinical contexts the world over, medical ethnomusicology is perhaps best viewed as having emerged at the nexus of current developments in the interdiscipline. Ensuring that all our disciplines, and the interdiscipline, develop in healthy ways and serve to benefit more people more effectively and efficiently, is in part, dependent on our willingness as researchers, practitioners, performers, healers, students, scholars, and administrators, to think beyond the conventions of our particular disciplines, areas, and established administrative structures—in one sense, to let our greater loyalty be to the broader pursuit

of knowledge and wisdom of which we are all a part, and allow that to inform, indeed, transform our individual disciplines as the requirements of our current time period demand. What these requirements are, and how they might influence our work at the disciplinary and interdisciplinary levels of academic discourse, research, and applied practice can perhaps only be revealed through a borderless and frank consultative process that includes a broad diversity of voices within a shared vision oriented toward benefiting humanity.

While there are multiple and diverse contributions that ethnomusicology brings to this discourse, one of the most potent, which is also of great interest to many within and without the academy, but which also remains elusive, is music's power to *heal*—that is, nearly a century of ethnomusicological research into music and healing shows how culturally diverse practices of specialized music not only function as tools for therapy, but also that music is most often practiced as a means of *healing* or *cure*—a way for a person or patient to transform from illness or disease to health, homeostasis, and wholeness. Such specialized music almost always emerges from a spiritual or religious ontology, a ritual or ceremonial practice. Moreover, such healing music is often combined with or functions as prayer or meditation, and constitutes a preventive and/or curative practice within a broader complex of local medical practices. These practices often include a combination of biomedical, naturopathic, and traditional approaches.

Medical, Cognitive, and Applied Ethnomusicology

This book draws from a wide-ranging, ongoing research program begun in 1998 positioned within the burgeoning area of medical ethnomusicology. As a point of departure, we can briefly define Medical Ethnomusicology as a holistic field of research and applied practice concerned with music, medicine, health, healing, and culture, including the diverse beliefs and conceptualizations that people have about health, healing, illness, and disease, as well as the multiplicity of integrative, complementary, and alternative approaches and performative practices that people employ to create health, healing, wellbeing, and wholeness.[10]

Music here is taken in its broadest sense, including all aspects ranging from the invisible and evanescent subatomic fluctuations of music's soundwaves, to the myriad religious, spiritual, and metaphysical beliefs and conceptualizations about music and sound, to all the tangible aspects of material music-culture, to music's countless purposes, functions, and associated behaviors and actions that are expressed with infinite diversity throughout the

world. While closely related to and drawing from several disciplines across the sciences, humanities, and the arts, medical ethnomusicology is centrally concerned with music and sound phenomena, related praxes, accompanying beliefs, underlying ontologies, and the roles they all play in any context of healing, while also taking into account the individual, group, and global cultural dynamics that frame and influence our experiences of health and healing, illness and disease, life and death. Broadly, such phenomena and roles can be described as having physical, psychological, social, emotional, and spiritual aspects, which also comprise five domains of human existence and experience that are expressed in diverse ways across cultures, and which have strong corollaries both in numerous traditional models of health, healing, and etiology, as well as in emerging biomedical models.

Medical ethnomusicology explores music, health, and healing anew, which often demand collaborative, integrative models and approaches for field and lab research. In my own endeavors, medical ethnomusicology is foremost, a vehicle of service, an approach for discovering and applying new knowledge to benefit people, a way to build bridges across disciplines that share a concern for human and societal health, well-being, and prosperity; and it is a way to research, learn, and translate knowledge from culture-specific contexts of musical healing to more universal applications where the power of music and related practices can be more deeply engaged by more people.

As both an approach and a practice, medical ethnomusicology not only researches the roles that music, sound, culture, and belief can play in health and healing, but seeks to apply that knowledge in practical service to individuals and the broader spheres of society progressively extending to the whole of humanity.[11] Notably, my work is intimately linked to the area of cognitive ethnomusicology, which developed as an extension of cognitive science with a particular emphasis on the psychological, neurobiological, and anthropological approaches to research, and is primarily concerned with exploring and understanding more deeply the relationships between music, sound, the brain, culture, and consciousness.

In many traditional practices of musical healing, specific processes of cognition are central to achieving the goals of healing and transformation. Building upon this widely expressed dynamic, a central theme throughout this book is described as the process of attaining a certain, bridging state of consciousness referred to here as *cognitive flexibility*. The *cognitive flexible state* facilitates the healing process by allowing a person to transcend a present state of awareness and being, which is characterized by illness or disease, to a specialized state of consciousness, which is characterized by health, and which constitutes a fertile ground of being where healing can occur.

By engaging in practices that build upon and develop one's capacity of cognitive flexibility, the dynamic underlying quality of the brain's *neuroplasticity* is engaged and compelled toward that which the particular practices are directed. Hence, as *ways* or *practices* that can facilitate health and healing by entering a cognitive flexible state, music, prayer, and meditation also have a transformative effect on the brain itself through its inherent capacity of neuroplasticity.

Here I emphasize the roles of music, prayer, and meditation in directed thought and conscious activity, which strengthens a complex interactive dynamic between the physical and metaphysical. That is, the brain certainly influences what is often called the *mind*—senses of being, spiritual sensibilities, emotions, and consciousness itself; but all these also influence the brain, its neural pathways, processes, and functions (see Meymandi and Mathew 1998; Begley 2007, and Doidge 2007). Moreover, the role of culture in the dynamics of neuroplasticity is key and much can be learned from diverse cultural manifestations of cognitive flexibility and neuroplasticity (see, for example, Nisbett 2003, and Doidge 2007). One striking example of survival can be found in the experience of Moken sea nomads who live in the area of the Indian Ocean where the devastating tsunami hit on December 26, 2004. Although hundreds of thousands were killed in that tragedy, it was widely reported that all the Moken survived. Doidge points out that their survival was a result of their particular perceptual capacities, which are a function of their unique neural architecture and networks, which arose from the dynamic of their brains' neuroplasticity, which, in large part, is a function of culture. He goes on to explain that the Moken:

> saw that the sea had begun to recede in a strange way, and this drawing back was followed by an unusually small wave; they saw dolphins begin to swim for deeper water, while the elephants started stampeding to higher ground, and they heard the cicadas fall silent. [They] began telling each other their ancient story about "The Wave That Eats People" saying it had come again. Long before modern science put this all together, they had either fled the sea to the shore, seeking the highest ground, or gone into the very deep waters, where they also survived. What they were able to do, as more [so-called] modern people under the influence of analytical science were not, was put all these unusual events together and see the whole, using an exceptionally wide-angle lens, exceptional even by Eastern standards. (Doidge 2007, 303–04)

He further states that other indigenous boaters "were also at sea when these preternatural events were occurring, but they did not survive. A [Moken] was

asked how it was that the [other boaters], who also knew the sea, all perished. He replied, 'they were looking at squid. They were not looking at anything. They saw nothing, they looked at nothing. They don't know how to look'" (Doidge 2007, 303–04). This last statement is another example of Varela's observation mentioned above in relation to Descartes unmindful reflection, namely, that our questions, thoughts, and perceptions are manifestations of our particular neurocognitive state. What is particularly exciting, inasmuch as it is in harmony with the ontology of oneness, and thereby accords the utmost respect to cross-cultural interaction within a shared world, is that culture-specific capacities can be learned cross-culturally. Nisbett's landmark work, *The Geography of Thought* explores such dynamics, as does Doidge's *The Brain that Changes Itself*.

One example worth noting is also from the Moken and was explored by scientist Anna Gislen. The Moken children are notorious for being great deep-sea divers. Underwater, objects appear blurry as light is refracted and therefore does not fall upon the retina the same as when one is above water. The Moken children have developed the unique ability "to control the shape of their lenses, more significantly [than other children], to control the size of their pupils, constricting them 22 percent. This is a remarkable finding, because human pupils reflexively get larger under water, and pupil adjustment has been thought to be a fixed, innate reflex, controlled by thy brain and nervous system" (Doidge 2007, 289). This ability is not due to Moken genes, however. "Gislen has since taught Swedish children to constrict their pupils to see under water—one more instance of the brain and nervous system showing unexpected training effects that alter what was thought to be a hardwired, unchangeable circuit" (Doidge 2007, 289).

Although Doidge also recognizes particular challenges with adult neuroplasticity and cognitive flexibility, that is, adults progressively seem to become more cognitively rigid, we should be mindful that our current understanding with respect to brain function and capacity, mostly with respect to cognitive and perceptual processes, is progressing at an incredibly fast rate. That is, what was thought to be "hardwired" yesterday, might be "softwired" today, and even more flexible, malleable, or changeable tomorrow, in a manner of speaking.

Yet, inasmuch as cognition and neuroplasticity is intimately interwoven with *mind,* as well as with certain abilities and sensibilities of belief, the possibility for a new vision or understanding with respect to human capacity is not limited to domains of science or of building expertise in a bodily or neurobiological task, but extends to ideas about life and ways of behaving, religious and philosophical beliefs, factors of faith, worldviews, ontologies, as well as individual and social wellbeing. Perhaps the brains of people who are sensitive cultural researchers, lovers of humanity, world citizens, or who have lived in different cultures and experienced diversity as a necessary and beautiful aspect

of life have a particular disposition toward these latter types of flexibilities and potentialities for change—seeing or losing themselves in the whole, perceiving everyone in a shared complex of the human condition, and relishing new knowledge and discoveries—even if that new knowledge will, as a result of intellectual integrity and a reflexivity of being, demand a change in one's current self.

Music facilitates cognitive flexibility[12] and can create a new framework of consciousness where fresh cognitive links can be created that convey specific associations chosen by the individual—links and associations that facilitate a process of transformation from one state of being to another, more desired state of being—for instance, from illness to health. This process, which is intimately related to the brain's capacity for neuroplasticity, is dynamic, highly flexible, and dependent on individual cultural associations and the degree to which the biological, psychological, sociological, emotional, and spiritual domains of a human's being are engaged and connected with the personal cognitive links. I should emphasize here the social implications and potential for change, which follow in tandem with the neuroplasticity-cognitive flexibility dynamic—namely, that which is expressed through the body within the context of social interaction forms a key feature of the potential for cognitive flexibility as it embraces an enactive approach to transformation (see Varela et al. 1991) and a holistic (embodied mind) basis of thought (Seitz 2000). That is, the neurobiological aspect of cognition does not exist in a vacuum—bodily activity, social interaction, and ecology, not only inform and support cognitive flexibility and development, but are interwoven with them, forming a dynamic whole—"we do not simply inhabit our bodies; we literally use them to think with" (ibid., 23). Thus, engaging the thinking body through music, prayer, and meditation can open a pathway of deeper understanding within one's self, and mutual understanding between people and across cultures, creating a spiritually oriented and holistic sociocognitive grounding from which to proceed in individual and collective endeavors of transformation.

The process of engaging music, prayer, and meditation is explored in detail in chapter six, where the culture-transcendent aspects of musical healing that are at the core of this book, and which are uniquely exploited in Pamir and other contexts, are directly applied in a research project where participants learn to hone their meditative skills of attention and intention with music and sound to create the outcomes they desire, including controlling and eliminating stress, anger, impatience and other unwanted emotions and characteristics, healing or preventing illnesses, losing weight, gaining strength, mending, transforming, or healing broken relationships, achieving and maintaining desired emotional and spiritual states, transforming aspects of worldview, and incorporating a host of virtues, skills, and capacities into daily life.

Gazing through a sociocognitive lens at the macro and microcosm of human development and ecology, we might see how the individual and collective state of cognitive flexibility can be a marker of individual and community capacity whereby thoughts, beliefs, and understandings facilitate processes of enacting our shared human experience on the planet. From this vantage point, we can see how important a flexibility of mind becomes in the healthy shaping of our world, which is far more complex today than ever before. Undoubtedly, we can be certain that tomorrow's world will be even more complex than today's, and demand a greater degree of cognitive flexibility from us all (see further Varela et al. 1991; Bradbury and Bushrui 1996; Austin 2001; Begley 2007; Doidge 2007; and Locke and Koen 2008).

I do not believe it is mere happenstance that the confluence of consciousness of researchers, scholars, and practitioners from various disciplines and diverse cultures is now embracing music and healing, integrative and holistic research to a greater degree than ever before. During what might well be considered the most dynamic and tragic, yet hopeful and promising epoch in human history, a deeper and more comprehensive knowledge of music and healing can contribute to our understanding of the human condition, our shared world, and our ability to shape it.

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2

The Five Factors of Music, Prayer, Health, and Healing

Music, Prayer, and Meaning

What is it about music and prayer that can play such a central role in healing the body, mind, and spirit—that can carry a person from one state of being to another—from stress to peace, confusion to clarity, discord to harmony, dis-ease to ease, illness to health? How does music and prayer facilitate a process of individual or group transformation—of literally moving beyond a present form, characterized by imbalance, illness, pain, or suffering, to a new form characterized by balance, homeostasis and health? How are music and prayer categorically different from other modes of communication and expression, which give them a special power to effect change? What compels people to pray in moments of suffering, illness, joy, and pain—and how are prayers offered at these different times—with sound or music, in silent meditation, by singing, chanting, intoning, vocalizing, weeping, wailing, with certitude, doubtfulness, in praise, in stillness, with movement, alone, in groups, in daily action?

The answers to these and related questions fall into two broad categories: answers that are dependent on the cultural context of an individual or group; and answers that are transcendent to culture, and potentially universal. The question of culture is all-important in approaching an understanding of the healing power of music and related practices, inasmuch as music is a cultural phenomenon with associated aesthetics that play a central role in one's experience of

music, facilitating both positive and negative responses in the physiological, psychological, emotional, social, and spiritual domains of a person's being. Additionally, there are transcendent levels of consciousness that can be accessed, especially when healing music is spiritually situated. This potential relates to the dynamism between neuroplasticity and cognitive flexibility where the malleable neural networks and potentialities of the brain feed the cognitive processes of reframing and ascribing meaning within what might be unfamiliar musical territory, and where the new meanings born within that spiritually oriented state of consciousness feed the transformation of the brain's neural networks and the whole of a person's being.

In the context of spiritually oriented or devotional music practice that is employed for healing, there is a pervasive, culturally unique aesthetic, which imbues a participant's consciousness with the musicospiritual meaning that is empowered with healing potential, creating a network of cognitive links between sound, spirit, and transformation. Broadly speaking, the aesthetic quality of devotional music can be viewed as being dependent on its ability to create a rarified, altered state of spiritual consciousness in performers and listeners—whether it is a prayerful, meditative, trance, trancelike, or ecstatic state. Within a newly created consciousness, devotional music facilitates experience beyond the liminal threshold of the physically perceived world. Such experience is directed toward what is often described as unknowable, spiritual, sublime, supernatural, the Divine—expressed in diverse terms across cultures, yet with universal underpinnings (see further, Nettl 1977; Rouget 1985; Gouk 2000; Ralls-Macleod and Harvey 2000; d'Aquili and Newberg 2000; Newberg 2001).

Throughout the process of devotional, musical performance, aesthetic values are ascribed to music's sonic features and the context of performance. Such values are spiritual in nature and cast sound and cultural context in an essentially spiritual light (see, for example, Reckord 1986; Schimmel 2001; During 1991; Safvat 1985; Ralls-Macleod and Harvey 2000). Hence, understanding these specialized features of sound, music, and context, is essential to appreciate the unique aesthetic of any given devotional music performance, and in turn, the power that the performance is believed to convey, especially when such power is used to effect health, healing, and transformation.

From time immemorial, people of diverse cultures have employed music as a medical intervention to heal the body, mind, emotions, and spirit. Overwhelmingly, music's power to promote health and healing is inextricably interwoven with cultural and religious beliefs and devotional practices—the foremost practice being prayer. Over the last decade, multiple ethnographic and biomedical studies have investigated the role of music *or* prayer in healing (see, for

example, Friedson 1996; Laderman and Roseman 1996; Ai et al. 1998; Koenig 1998; Larson et al. 1998; Sicher et al. 1998; Harris et al. 1999; Hinton 1999; Gouk 2000). However, the relationships between music *and* prayer in healing have been little explored in both ethnographic and health science research. An interactive and affective relationship between music and prayer almost always exists in traditional healing ceremonies. Similarly, in clinical studies that investigate the effects of either music *or* prayer on physiological functions or health outcomes, both components are often present, but not acknowledged.

By convention, ethnographic research concerning musical healing seeks to convey the cultural context, meaning, and lived experience of individuals and their particular practices, while biomedical research largely focuses on the decontextualized body and its physiological processes. Numerous ethnographic studies show music at the center of diverse healing practices where belief in a supernatural or spiritual dimension frames performance (see, for example, Janzen 1992; Friedson 1996; Laderman and Roseman1 1996; Cook 1997; During 1997; Larco 1997; Pinto 1997; Hinton 1999; Ralls-Macleod and Harvey 2000; Gouk 2000). Although prayer is often mentioned, its role and relationship to music and healing is not critically examined. On the other hand, in biomedical research concerning prayer and healing, the converse is true (see, for example, Byrd 1988; Ai et al. 1998; Koenig 1998; Larson et al. 1998; Sicher et al. 1998; Harris et al. 1999). That research clinically explores the effects of prayer, spirituality, and religiosity on healing without critically considering the role of sound or music in prayer, or the loaded meanings inherent in different cultural practices and belief systems. When music is performed for or in the context of healing, it often *is* prayer, functions as prayer, or is intimately interwoven with prayer. Prayer, when employed for healing, can often only be rendered in a certain musical, sung, chanted, intoned, vocalized, or instrumental form for it to be efficacious. Hence, for research concerned with either music or prayer in healing, it is important to consider the other component.

Five Factors of Health and Healing

Physical, Psychological, Social, Emotional, Spiritual

That which constitutes health, illness, disease, and healing can differ between cultures and individuals. Broadly, healing is both a process and an event. It is not, however, an isolated event. Sometimes healing seems to be isolated, a surprise, or even an unexplainable miracle as it can be marked by significant points of transition to health or complete cure. Yet these points of change or healing events exist within a broader context and process, one that has created a

healthy environment of being that gives rise to healing. Moreover, many aspects of healing are culturally constructed and can relate to various factors of human life. This book views the human being as dynamic and ever changing—in a constant process of "progression" toward health and "regression" away from health, never static. Progression toward health is viewed as healing, and regression as dis-ease, or a state of imbalance that, if left to progress, can result in illness or disease. Moreover, the ebb and flow of progression and regression is nonlinear and relates to multiple dimensions of human life and individual makeup.

At any given moment, the body is purifying blood, removing toxins, fighting off germs, metabolizing necessary nutrients, taking in oxygen, and performing countless other biochemical and physiological processes not only as part of maintaining homeostasis, but as a process of healing. When enough processes are in dysfunction, healing ceases and a process of imbalance or disease begins. Typically, the physical aspect of illness or disease dominates the attention of physicians and patients alike.[1] Although this is understandable because a focus on the body is so pervasive in culture, and has been the central concern of biomedical science throughout modern history, it is nonetheless only a partial view that most often excludes the psychological, emotional, social, and spiritual factors, all of which can play profound roles in the proper functioning of the body.

Exalting the body and its *physicalness* at the expense of the other four factors is dangerously limiting for the central reason that the body, although certainly important, is best viewed as an aspect of the greater whole that constitutes a human's being. A holistic perspective further includes, along with the physical ebb and flow between health and illness, the psychological, emotional, social, and spiritual factors of humans as following the same dynamic process of progression and regression. In this continuum of progression and regression, the onset of disease occurs before symptoms are manifest and a diagnosis can be made.

In biomedical research, the period between disease onset and diagnosis has been characterized as "The GAP"—the critical time period where an opportunity exists for curing or preventing the further development of disease, which can make a profound difference in the continuity, quality, and duration of life (Malarkey 1999, 16). Building on the biopsychosocial model of health and medicine introduced by the psychiatrist George Engels in the 1970s, and other holistic philosophies of health, most notably those promoted by the medical doctors Larry Dossey and Andrew Weil, William Malarkey's "PIERS Review" models five domains of life, the proper balance of which are central to wellness, healthy aging, and often make the difference between life and death. These five domains, namely the Physical, Intellectual, Emotional, Relational,

and Spiritual, bear important similarities to the Pamiri worldview of health, healing, and etiology.

In the traditional Pamiri model, the *aql-tan-ruh/jân* (mind-body-spirit/soul) constitutes a balanced integration of a healthy person, with a central emphasis on the spiritual aspect. So, while the relational and emotional domains are also embedded in the three-part Pamiri model of a healthful state, these domains, along with the physical and intellectual, can only be healthy when the spiritual domain is healthy. Spiritual health in Pamir can be described in many ways, often by referring to the state of one's heart, mind, soul or spirit. Often, the multivalent terms *hâl* and *bidâr* are used to inquire about or express spiritual health. *Hâl* also refers to overall health and general well being, and can be used for each specific domain. *Bidâr* (lit. "awake," "aware," "alive," "conscious"), when used in relation to spiritual health, means that an individual, who is viewed primarily as a soul or spiritual being, is consciously aware of and connected to its source, the placeless spiritual dimension from which it emanated, namely an ineffable realm of God.

By further building on the biopsychosocial, PIERS, and Pamiri models, I invoke the term the "five factors" to emphasize the importance of the active and dynamic roles that the factors play in health and healing. That is, each of the five factors is more than an aspect, domain, or dimension, but a *factor* that plays an active, functional role in health and healing, interacting with the other factors in varying degrees to achieve an intended outcome. In addition, each of the five must be *factored* into a person's daily life to create the desired state of being. Hence, the *five factors* model has built into it the foundational principle that lived experience imbued and balanced with all the aspects that comprise a human's being is key for the maintenance of health, prevention of illness, and the creation of a potential and rarified state of being from which healing can emerge. In the Pamiri context, as well as from a religious or spiritual perspective in general, the spiritual factor is where music and prayer can exercise their greatest effect, which in turn manifests a change in the other factors, and ultimately all of life.

A key to unlocking the power of music and prayer lies in the fact that they share precisely the same factors as described in the above health models. That is, music and prayer have physical, psychological, social, emotional, and spiritual associations, properties, qualities, meanings, and energies that can have a profound impact on and effect transformations in a person's body, mind, spirit, emotions, and relationships. Moreover, the effects of music and prayer can operate on levels that extend from the individual to the whole of humanity. Importantly, a central point in this book is that by invoking "prayer," I also include "meditation" as an essential component of the prayer process. Hence, meditation also shares these five factors.

By joining the factors of music and prayer with those of health and healing, a holistic model is created that shows the intimate and powerful links between music and healing. The myriad crisscrossing lines of interaction between them reveal a confluence of highly flexible, dynamic forces that suggests a complexity, which must take into account the individual and potentially universal relationships between music, prayer, meditation, and healing to understand how they can effect both positive and negative changes in a person's health.

For instance, on the individual level, the physical factor of music, which in part, is manifest in its sonic attributes, can effect a change in the emotional factor of health and healing in a person. A typical example of this can be seen in how we respond emotionally to different human voices. The tone quality of the voice is best described in terms of timbre, which is the perceived quality of sound expressed in the shape of a sound's physical waveform. Different waveforms, which are literally the forms of sound waves propagated through the air, illustrate the quality of a sound—whether a sound is dark, bright, deep, shallow, breathy, sharp, nasal, open, closed, or any number of other qualities. More important, timbre plays a profound role in whether a voice is pleasing or repulsive, comforting or agitating, consonant or dissonant. Although there is some scientific basis to suggest that the perceptions of consonance and dissonance relate to physical places on the basilar membrane of the inner ear when two or more frequencies are extremely close to each other, the experience of a pleasing versus repulsive sound is, in large part, if not entirely, culturally determined, so much so that the emotional association with a voice can override what a typical physical response might seem to indicate. For example, a voice that sounds rough, ragged, and worn might be perceived as dissonant or unpleasing to someone unfamiliar with the speaker, whereas a family member might be comforted, encouraged, and experience emotions of love and peace when hearing the same voice. Toward the more universal level, a human cry or scream, certain sonic qualities of which are unique, conveys an emotional content where a shared meaning is apparent and less determined by different individual aesthetics. In another example, fingernails scraping and screeching across a chalkboard seem to affect most people in a similar way, causing gooseflesh on the arms and a strange chill to shoot down the spine.

Modeling the Five Factors

To conceptualize the relationships between the five factors of music and prayer and the five factors of health and healing, we can imagine two identical spheres overlaying each other. They are the same size, transparent, and

have the words physical, psychological, social, emotional, and spiritual written on their surface, however, the words float across the surface and through the body of the spheres in a free-flowing way, never being fixed in one place. Additionally, the words (which represent the *five factors*) can transform into other factors. One sphere is the health and healing model, which contains the five factors, the other sphere is the music and prayer model, which contains the same five factors (see figure 2.1).

Now imagine that these two spheres are in your hands and overlay each other in such a way that they form one sphere with two translucent layers, yet because they are exactly the same size, the two seeming layers strangely form one whole. Each sphere rotates, revolves, spins, and swirls independently, yet a complementary relationship can be sensed between the two, because, after all, they are really one. The spheres move in variable tempos and directions, the dynamics of the interaction between and within them illustrating the complex nature of their relationship. Further, imagine that when an effectual relationship is created between individual factors, for instance, between the psychological factor of music and the physical factor of health, a link or thread is illumined where this occurs. Then, according to the power of that relationship and the action of the spheres' rotation and revolution, the illumined link or thread is spun throughout all regions of the model, interweaving itself with all the factors of music and healing. Also, keep in mind that although the initial link was made between the psychological factor of music and the physical factor of health, the model allows the factors to transform into other factors to show their holistic nature. So, as the physical effect in the health and healing sphere rotates, the "physical" factor slowly transforms into one or more of the

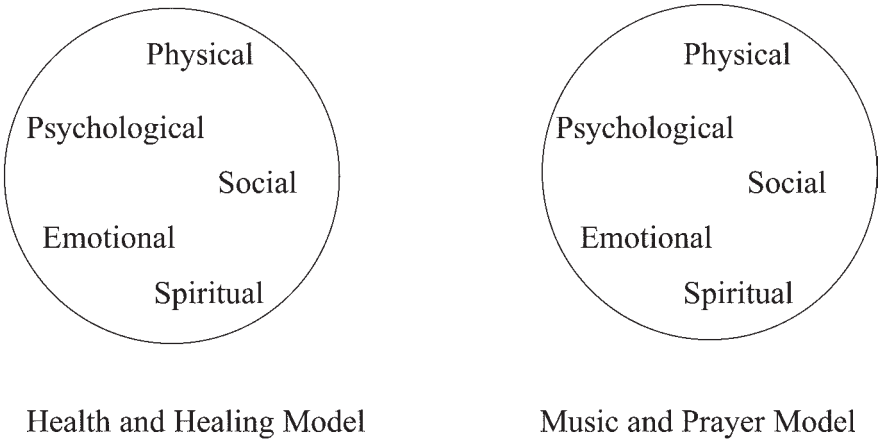

FIGURE 2.1. The five factors.

other factors, each with the potential to create new efficacious links, effecting further transformations in the whole.

Applying this model to "The GAP," it becomes apparent how music and prayer can effect changes in all aspects of health. In relation to the time periods before, during, and after "The GAP," the five factors of health and healing form an underlying framework, which imbues a person's being at all times with qualities and energies that can effect changes in consciousness and health. The qualities and energies can be more deeply engaged and transferred to a person via the practices of music and prayer, because it is the same factors that comprise the five affective energies or ways that music and prayer can effect change. Before "The GAP," the five factors serve to promote health and prevent illness; during "The GAP" (after disease onset but before symptoms are manifest), the factors can function to stop a disease process from further developing, and bring about healing; after "The GAP," where observable symptoms exist, the factors can potentially cure the illness or dysfunction.

Music–Prayer–Meditation Dynamics

The dynamics between music, prayer, and meditation presented in this book suggest an expanded awareness of the laden and transformational potentials that are inherent in them. Each functions as a ladder or bridge that connects one's present state of being with a higher state of consciousness that is imbued with a unique, invisible energy that is often described in spiritual or religious terms. Music, prayer, and meditation can also be viewed as two-way channels that connect multiple dimensions of human reality—a reality that is at once characterized by experience of the extraordinarily solid, tangible, and visceral physicality of life, as well as the metaphysical, spiritual, invisible, immeasurable, intangible, and ineffable sensibilities and experiences that seem to defy the former. Yet, experiences of the supernatural, however fleeting, are commonplace—virtually everyone has had some experience that is linked to an intuitive sense of being able to know something before it actually happens, whether it is as simple as knowing who is on the phone before answering it, or as intimate as knowing that a loved one is having a profound emotion or experience of love, joy, stress, pain, or even death. Another virtually universal example is that of the dream state, which we often experience as metaphysical or as interplay between the physical world of perceived material reality and the fluid illimitable world that is, by definition, non-material. While virtually everyone has had dreams where they can perform feats that are beyond the limits of the physical world, what people attribute the nature and meaning of

dreams to, varies between individuals and cultures, and relies on personal belief, the underlying level of ontology, and the metaphysical dimension to which dreams connect.

In traditional Lakota culture, for instance, dreams are viewed as an aspect of and connection to a greater spiritual reality, and can be a harbinger of meaning for an individual or community. Dreams are often the way that songs are brought forth from the spiritual realm into the manifest world of creation. These dream songs often function as or intertwine with healing songs and express a central aspect of an overarching religious belief that is shared among the indigenous peoples of the Americas—a religious belief that recognizes a pivotal and vital link between the spiritual and the physical. Moreover, the link between the spiritual and physical is a belief that is shared across religious traditions the world over, whether from a localized belief system, or a major world religion. This link, however, is not only of interest to religionists or the spiritually minded, but also to the most critical of scientists, who might or might not invoke a religious term to express what they view as either an aspect of the physical world, or a metaphysical reality that is somehow linked to the physical. Einstein is well known to invoke God and religion in his own philosophical reflections on this theme, saying: "Science without religion is lame. Religion without science is blind" (Einstein 1956, 26); and "The cosmic religious experience is the strongest and noblest mainstream of scientific research" (see Barnett 1979, 108). And the most oft quoted line attributed to Einstein is perhaps the most intriguing: "I want to know the thoughts of God, the rest are details."

One of Einstein's contemporaries, physicist Max Planck, in expressing the nature of the elusive and invisible link between the metaphysical and physical is attributed with this remarkable statement from a 1944 lecture in Florence, Italy:

> As a man who has devoted his whole life to the most clear-headed science, to the study of matter, I can tell you as the result of my research about atoms, this much—there is no matter as such. All matter originates and exists only by virtue of a force, which brings the particles of an atom to vibration and holds this most minute solar system of the atom together. We must assume behind this force the existence of a conscious and intelligent mind. This mind is the matrix of all matter.

At the heart of this statement is a premise from quantum mechanics that was being developed by Planck, Einstein, Neils Bohr, Werner Heisenberg, and other physicists of the time, which views the particles of an atom, not as solid matter, but as fluctuations of waves of energy that are potentially manifest as mate-

rial substance, the location of which is unpredictable and therefore uncertain. Furthermore, this statement, arising from a lifetime of in-depth research concerning the nature of the matter, led Plank, and others, in their clear-headed and scientific attempts to pierce the mysteries of matter, to conclude that there is *something* else that cannot be described by the terms *thing, matter,* or *physical,* but which is, by definition, *meta*physical. Building on this statement, if M = *mind/matrix of all matter,* F = *force,* p = *particles,* A = *atom,* and m = *matter,* then we can represent the process as shown in figure 2.2.

$$M \mid F \overset{(p)A}{\Rightarrow} m$$

FIGURE 2.2. Mind to matter.

If we view the same process with different terms, we can discern aspects of the model to highlight the role of an individual's thought or cognition in the process. Hence, M (mind/matrix of all matter) can also be viewed as the "universal mind," the unified field, the Divine, collective unconscious, or God; and F (force) is a person's thought. Additionally, M can refer to higher consciousness and F to present or lower consciousness, between which, there is a two-way connection—a connection that forms a bridge or ladder whereby energy can be transferred between the two. Moreover, in the context of our discussion, while the ladder can take numerous forms (e.g., dance, movement, stillness, exercise, walking, jogging, biking, rock-climbing, swimming, tai ji, yoga, etc.) we are most concerned here with the ladders of music, prayer, and meditation—ladders that connect the lower consciousness with the higher consciousness, and which can help us understand the nature of the mystical dynamics whereby forming and transforming energy can flow between the metaphysical realm that is the matrix of all matter and the personal mind, from which, projections of energy waves that we call thoughts, play a central role in creating particles of health, well-being, and a specific lived experience.

A constant interplay throughout this book is the highly personal and culture-dependent on the one hand, and the more broadly applicable and culture-transcendent on the other. For example, *maddâh* devotional music is a long-standing tradition of music-prayer dynamics that is effective in facilitating health or healing for certain Pamiris. Although the musical form and meaning of that ritual practice is not likely to be effective for someone of a different culture or religious group, at least not in the same way or to the same degree as the Pamiri practitioners, the overarching culture-transcendent processes that are not bound by the particulars of the local structure, can be

of profound benefit to people of different cultures. The same can be said of countless cultural and religious practices that uniquely engage a human's being and effect change therein.

But why is it that for some, just the thought of performing music, prayer, or meditation in a rarified atmosphere of consciousness is enough to engender a transformation in their state of being, whereas for others, the concept could not be more foreign? I suggest that such extremes, for the most part, relate to the degree of positive experience that a person has had with these practices. Consider, for example, your personal understandings and beliefs about music, prayer, and meditation, and how those relate to your experiences of positive or negative practice. Furthermore, consider how people are trained to expect or not expect certain responses and outcomes from these practices. Whether one is acculturated over a lifetime to perform music, prayer, and meditation in a particular religious tradition; whether one's experience is in the remote mountains of Badakhshan, or in a church, synagogue, mosque, or other house of worship in villages or urban centers throughout the world; or whether one has just started to learn over a brief period of time in a yoga center, a friend's house, an aikido dojo, a bookstore, or college campus—the process that underlies culture-specific experiences of transformation is the same—namely, that people can learn to immerse their personal thought in an ineffable, spiritual energy that is the source of all life and the matrix of all matter, thus becoming empowered with the qualities of that field, and hopefully, extending them into their daily lives.

To recognize, highlight, and investigate the affective relationships between music and prayer in the context of healing, I developed the *music-prayer dynamics* model, which includes meditation as an essential counterpart of prayer (presented in detail in chapter 3). The model is a way to conceptualize the use of music and prayer for healing in ethnographic and health science research and comprises four broad categories: music alone, prayer alone, combined music and prayer, and unified music-prayer. The last category indicates any genre that exists as a unified whole, and which cannot be broken apart into separate categories of music and prayer. In this category, the music *is* prayer, just as the prayer *is* music. Combined music and prayer refers to the combination of recited prayer and music. In this category, the music and prayer can be separated from each other without any qualitative difference resulting in either component—nevertheless, the combination of the two is unique from the performance of either alone.

Broadly, prayer can be viewed as "an expression of the prayor's relationship to a Higher power" (Larson et al. 1998, 108) or a spiritual dialogue or request. Common categories of prayer include spontaneous, free form or colloquial;

formal, written or ritualistic; petitionary, which includes requests for healing, forgiveness, assistance, qualities, virtues and attributes; intercessory, prayer on behalf of another or praying for someone to intercede on one's own behalf; and praise and thanksgiving (see Schimmel 1975; Dossey 1994; Larson et al. 1998; Miller 1999). Two other special categories include: *active,* which Dossey refers to as "being in a state of prayerfulness" or praying "continually" or "unceasingly" (Dossey 1994, 94–97); and *potential*, which can be both latent and active in the subconscious (Dossey 1994, 94–97). Prayer can also be practiced individually or with others, vocalized or unvocalized, with or without movement or dance, as a meditative practice, or as a silent cognitive practice or spiritual experience. The categories of prayer that are most often considered in biomedical literature are petitionary and intercessory. Ethnomusicological literature most often discusses those that fall into the petitionary, intercessory, and active categories.

In the context of devotional music, prayer and poetry are often interchangeable or one and the same. For example, in Pamir, mystical poetry in the context of *maddâh* performance *is* prayer. Moreover, in Pamiri culture, music, prayer, and poetry are performed in individual, combined, and unified forms to achieve specific cultural, social, and medical goals. *Maddâh* devotional music is a unique example of how music, prayer, and poetry can be expressed as a unified whole in the context of healing. For the purposes of healing, *maddâh* participants seek to attain a specialized, prayerful and meditative state of consciousness where healing can occur. In such a state, the confluence of culturally significant sounds, symbols, metaphors, and beliefs forms a powerful medical intervention, effecting change at multiple levels of a participant's being.

Meditation

Meditation can be a separate practice from prayer or a partner to it—an essential component of the process of prayer. In some cases, prayer and meditation are inseparable. For example, in the ritual performance of *maddâh* devotional music in Pamir, prayer and meditation are intimately interwoven and cannot be placed fully into distinct categories. Further, prayer-meditation can be viewed as stages in a dynamic process where the requests of prayer and the insights and answers of meditation, through action, are ultimately manifest into daily life. As one Sufi from the Pamiri village of Shirgin explained his view to me, meditation is that contemplative part of prayer that takes the hopes of prayers into the realm of action. He then said in a matter of fact kind of way: *du'â bedune amal bifâidas,* "prayer without action is useless." He was very happy to hear my response *dorost*

qabul dâram, javâbe du'â dar amal-ast, "true, the answer to prayer lies in action." He smiled and nodded several times, saying *dorost, dorost!* "True, true!"

Multiple and diverse practices of meditation exist. To create a framework that can bridge the culture-dependent and culture-transcendent aspects of *attention* common to all schools of meditation, I summarize meditative practices into three broad categories. The three categories are determined by the focus of one's attention. *Attention* can be focused toward the *inner, outer,* or *nothing*. *Inner* means focusing on or conversing with one's own mind, inner being or soul; *outer* means focusing on a higher power—a sacred text or symbol, the life or person of a saint, a holy person, prophet, a Messenger or Manifestation of God (i.e., the Founders of world religions), or God; *nothing* means the practice of mindfulness awareness, or allowing one's attention to be still and aware in a "natural" state (Varela et al. 1991; Austin 2001). These three categories are not mutually exclusive, but overlapping and interwoven, and individual experiences of different approaches are often similar or the same. For example, Newberg and d'Aquili (2001) report that Buddhist monks practicing mindfulness awareness meditation and Franciscan nuns in meditative prayer, or the *outer* approach, had similar, unique brain activity. This neural activity was characterized by a decreased activity in the posterior superior parietal lobe, what they call the orientation association area. This neural network allows us to understand borders between ourselves and other physical objects in our immediate physical environment. Both the monks and nuns described an experience of loosing their sense of self and feeling that they had become part of something greater than themselves, albeit in culturally specific terms (Newberg et al. 2001, 7). Newberg suggests that as meditation decreases the activity of the orientation association area, one naturally experience a greater sense of oneness and wholeness with all that extends beyond the self.

A central point that cannot be overemphasized, which Newberg implies, is that the meditators, when experiencing this sense of oneness with a greater whole, did not experience oneness as being limited to their particular religious or cultural group. In other words, the Tibetan Buddhists did not reach an apex of meditative bliss where they sensed a greater unity with and love for all Tibetan Buddhists only; and the Franciscan nuns did not embrace other Franciscan nuns only. Quite the contrary, their experience of being part of a greater whole had no boundaries, no borders of separation based on superficial distinctions or labels. Indeed, the aspects of brain architecture responsible for creating a sense of borders were not active when the subjects reached a high point of meditation. Such an experience with its corollary neural response, illuminates a core concept across world religions and offers a powerful challenge to exclusionary religious beliefs, namely, that authentic belief in and love for

God, through whichever religious lens one gazes, must ultimately lead to an all-encompassing love that does not, and cannot exclude and discriminate on any basis, including religious affiliation, culture, ethnic background, gender, social class, or color. Interestingly, a typical experience of advanced meditation is that such distinctions do not exist in one's consciousness during the meditative state. This point is reflected in a well-known couplet from the great mystical poet, Jalâl al-Din Rumi (1207–73), who said: "I, you, he, she, we; In the garden of mystic lovers, these are not true distinctions."

Why Badakhshan?

As already mentioned, this book explores certain culture-transcendent principles and processes of musical healing through the culture-specific lens of Badakhshan, Tajikistan, as well as other diverse cultural examples. By definition, culture-transcendent principles can be applied in a diversity of contexts, if not universally, which might seem to negate the importance of cultural context altogether. However, any investigation of the ideas here must, by their nature, be informed by, if not fully exist within a cultural domain. So why choose Badakhshan as the primary example? The answer is twofold. First, the particular Badakhshani practices explored here are uniquely illustrative of what makes certain principles and processes culturally transcendent, namely, being linked to and expressive of certain beliefs about healing and etiology, spirituality, science, ICAM, music-prayer dynamics, meditation, entrainment, and cognitive flexibility. Second, since there is still a considerable lack of knowledge concerning the peoples and cultures of Central Asia, especially Badakhshan, which has in part contributed to that region's oppression, this book aims to promote a degree of social healing through the expansion of cultural understanding and appreciation of a small group of people in Badakhshan. In addition to the central example of Badakhshan, the book interweaves illustrative vignettes from culturally diverse contexts to give breadth to the investigation of culture-transcendent musical healing processes. First however, a broader background on the culture of Badakhshan is necessary.

A Place of Rubies and Mountains

Situated in the heart of the legendary Silk Road trade routes, the ancient land that comprises the eastern province of Tajikistan is a unique geographic and cultural area that is known by many names—*Pamir* is the name of the specific mountain chain, which connects to the Hindu Kush and Himalayan Mountains;

Badakhshan (lit. "rubies" in Persian) is the geopolitical term for the region; formerly known to some locals as the secret region of *Gorno Badakhshan* (*gorno* meaning "mountainous" in Russian); and poetically known as *kuhestân* and *bâm-e jahân* (lit. "mountainland" and "the roof of the world" respectively in Persian). Within this mountainous region, which constitutes a distinct culture within Tajikistan, people refer to the place as both *Pamir* and *Badakhshan* and themselves as *Pamiri* and *Badakhshani*. Badakhshan shares its borders with Afghanistan to the south, Uzbekistan to the west, Kyrgyzstan to the north, and Xinjiang, China to the east. However, life among the diverse peoples of this vast and ancient region is best described, not by Soviet-era political constructs or national demarcations, but as a rich and dynamic mosaic of cultures, linked by practices and beliefs that transcend geopolitical borders. Indeed, recognizing the interaction and confluence of cultures throughout these and neighboring countries is an essential starting point when considering the music of any region along the Silk Road (see further Levin, 2002, 895–7). Nevertheless, in the case of Tajikistan, two natural borders of particular importance must also be considered. One is the river that forms the major border between Tajikistan and Afghanistan, known as the *Amu darya,* the ancient *Oxus* River, or the River *Panj* (lit. "five" in Persian); the other border is the vast Pamir Mountain range, which defines this semiautonomous eastern region of the country. Throughout this book, Badakhshan and Pamir refer to the specific districts where field research was conducted—these include Shugnon, Roshon, Ishkishim, and the capital city of Khoroq.

People live in villages and towns, as well as isolated mountain or valley dwellings, where the nearest neighbor could be thirty minutes away or more by foot. The rocky and dry terrain allows for little agricultural development, which presents an ongoing problem for sustaining a nutritional diet. In addition, a journey to the capital of Tajikistan, Dushanbe, is a rough journey of at least twenty-four hours by car, or a risky plane ride, which is only sporadically available. This isolation makes attempts to gather foods and supplies from Dushanbe extremely difficult as well. Several months before winter arrives, families start to prepare for the terrible cold, making fruit preserves, dried fruits, and other dried and nonperishable foods that can last through the winter months.

It is generally reported that approximately 85 percent of the country's population is Sunni Muslim and 8 percent Shi'eh, half of whom are Isma'ili and generally live in the Pamir Mountain region. Isma'ilis form a community within Shi'eh Islam that developed from one line of descendants of the sixth Imam Ja'far al-Sadiq, who had one son named Isma'il. In the mid-eleventh century, after becoming Isma'ili, the mystic poet Naser Khosrow (1003–1088),

embarked on a personal spiritual journey (recounted in his *Safarnameh*). Khosrow, who lived in exile in the region for some fifteen years toward the end of his life, and who wrote many important works there, is considered a *pir* (saint, spiritual guide, enlightened being) to the Isma'ilis of Badakhshan. Although there were already Isma'ilis in Badakhshan before Khosrow's arrival, he is so revered in the region that local people often attribute him with the introduction of Isma'ilism to the region and view him as the "founder of their communities" (Daftary 1990, 217; and Daftary 1998, 104). His poetry, like that of other great Persian mystic poets, is celebrated among Sufis and throughout the Persian-speaking world, being known for its affective quality of engendering spiritual sensibilities in listeners. Both Sufism and Isma'ilism developed around the same historical period and share various mystical tendencies.

Language

Tajik-Persian is spoken as a common language throughout Tajikistan, including Badakhshan, where Shughni is also common among most Badakhshanis. For some eighty years, languages in Tajikistan have existed in a constant state of tension and transformation. The hegemonic Soviet program, which began in the late 1920s and was firmly in place by 1940, aimed at replacing local scripts and languages with Cyrillic and Russian (see Menges 1994). Such forced transformation struck at the heart of the Tajik aesthetic, which is intimately linked to classical Persian poetry and literature. After generations of Russian language use and forced utilization of Cyrillic instead of Persian script to write and read their mother tongue, Tajiks have a complex and mixed relationship with both Russian and Persian. Each language has certain associations with powerful cultural forces in Tajik history. In general, Russian is associated with communism and all things "Soviet," whereas Persian is associated with Islam and all things "Persian" or "Iranian," including pre-Islamic Persian culture. In addition, both are living languages in Tajik culture—expressing all the emotions that are part of daily experience.

Although Russian is commonly spoken throughout the country, its future role is uncertain. Efforts are being made by the government, educators, and religious groups to strengthen the learning of Tajik with Persian script in schools, but this is a long process with challenges that link to cultural identity and the sociopolitical structure of the country. In the case of Badakhshan, Persian is central to religious practice and identity and its influence in Tajik and Badakhshani culture cannot be underestimated. Not surprisingly, Persian holds a preeminent position in music, poetry, and prayer, across genres.

The province of Badakhshan is divided into several linguistic groups. Berg (1997) groups Pamiri languages into the following subdivisions: Shughni-Roshoni, consisting of Shughni, Roshoni, Bartangi, Oroshori, and Sariquli (spoken in Xinjiang); Wakhi is spoken in Wakhan; Yazgulami is spoken along the Yazgulam river; Ishkashimi in Ishkashim, also known as Ryni from the name of the village Ryn. In addition, beyond the northeast point of Ishkashim, along the river Panj, in the village of Vrang, a unique dialect known as Vrangi is spoken. Leila Dodykhudoeva (2002) classifies local languages in the following categories: Shughni, Rushani, Khufi, Bartangi, Roshorvi, Sariqoli, Yazgulami, Wakhi, and Ishkashimi.

Healthscape

As a result of the era of Soviet oppression and the subsequent civil war, Tajikistan has remained the poorest of the five former Soviet Republics of Central Asia (also known as one of the CIS states—Commonwealth of Independent States) with Badakhshan being the poorest region of Tajikistan. The consequence for health care has been devastating. Basic health care is at a minimum or often altogether unavailable (see further Keshavjee 1998). Hospitals, of which there are few, lack necessary medical equipment, sterile patient facilities, and proper heaters to heat hospital rooms, which is especially dangerous during winter months when extreme temperatures can reach approximately negative seventy-five degrees Fahrenheit. In addition, every winter brings massive amounts of snow and ice, which block off access to the province and any attempts to enter or leave could be deadly. Basic necessities of life, including regular access to water, are often scarce in Badakhshan, presenting continual psychological distress and a host of other difficulties.

Local etiology views illness and disease as having their roots in the physical, emotional, psychological, or spiritual dimensions of life; health and healing are also viewed as coming from these areas. While a remedy is matched to the diagnosed cause—for instance, a physical illness will be treated with a physical medicine or remedy, such as an herb, pharmaceutical, or naturopathic material approach, all illnesses potentially can be treated through the power of prayer. Prayers that are utilized for healing fall into two broad categories—preventive and curative. For example, the daily Isma'ili, ritualized prayer, known locally as *du'â*[2] or *salât*, forms a regular part of daily worship and constitutes a central aspect of healthy living. Hence, reciting this prayer is regarded as an important preventive practice. By contrast, a specialized written prayer-amulet known as

a *tumâr,* is often used to treat a specific disease or ailment and therefore is more curative in nature. In the case of *maddâh,* when performed for healing purposes, participants state that both types of healing occur.

Although the overarching etiology and beliefs about healing are commonly shared throughout Pamiri culture, the specifics on disease type, origin, and preferred treatment often vary between community members, including patients and healers. "Healers" in Pamir include: religious leaders, *mulla-s* and *khalifa-s*; mystical/spiritual figures or people believed to have a special degree of *baraka* (spiritual power that can bless and heal), including *pir-s, mir-s, dervish-s, maddâhkhân-s,* and local elders who practice traditional medicine; professional and lay herbalists and naturopathic doctors; and biomedical physicians, most of whom are Russian-trained. Patients often utilize a combination of treatments and approaches by seeking out different healers. This depends on the patient's beliefs and resources, the nature of the illness, and which healers are available. Usually, physical disease is treated by naturopathic, herbal, or biomedical approaches. An herbalist, physician, religious leader, or mystical figure can treat psychological and emotional illness; and the religious leader or mystical figure treats spiritual illness. Illnesses of an emotional, psychological, or spiritual nature virtually always have physical symptoms. Hence, diagnosing the cause is of central importance. Diagnosis can often be very similar between healers, relying on interviewing the patient and knowing the patient's medical history. However, for the spiritual healers, spiritual insight and spiritual knowledge is key for a successful diagnosis. This insight and knowledge is an aspect of the same spiritual energy known as *baraka*. Through the healers' spiritual state, they attempt to intuit and diagnose the cause of the illness. For many people who become ill or injured, often no specialized treatment of any kind is available. In such a case, they rely on prayer and their own knowledge of traditional or family remedies.

Another concept that frames some approaches to healing in Badakhshan, as well as other parts of Central Asia is known as *mizaj*, which is the "knowledge of hot and cold natures, or temperaments of people, animals, and foods" (Levin 1996, 212–15). Healing occurs by establishing a balance between the temperaments and is practiced by three different types of healers: "the *baxshi* [mystical figure and performer of oral poetry] healed with a drum, i.e., with sound, the *mulla* healed with books, and the *tabib* healed with herbs" (Levin 1996). Music is also believed to have the capacity to effect changes in the temperaments, and thus be able to heal. The *baxshi* (also *bakhshi*), is part of the region's ancient shamanic practices, and can be known by different names depending on the area. Levin describes *bakhshi* performances as "the recitation of musically heightened poetry [that] was understood to have a magical and potentially

therapeutic effect on listeners ... [which] could be intensified through an individual séance ... that included special incantations to facilitate contact with the spirit world and exorcise evil spirits from the body of a sick person" (Levin 1996, 146). Beyond shamanic practices where music is key to facilitate healing, throughout the Middle East, chanted or sung poetry, prayer, and scriptures, often with their related instrumental music have, since ancient times, held a special place in the lives of people across all religious traditions, serving as a balm to the wounds of the heart, support through the sufferings of life, and a way to tap the healing power of *baraka* from the spiritual realm.

Soundscape

The music culture of Tajikistan is a mosaic of the ancient and modern, spanning local forms of musical expression linked to life-cycle events and processes, religious, devotional, and mystical music, regional pop music, emerging hybrid forms of music, and all sorts of imported music—particularly from bordering countries, as well as Russia, India, Pakistan, Iran, East Africa, Western Europe, and the United States. Throughout the country, one might hear, variously, a wandering dervish chanting prayers in the street, youth blasting cassettes of dubbed Tajik pop music through distorted speakers in their little niche of the bazaar, solo street musicians playing the accordion or the *dombra,*[3] Soviet-era constructed "folkloric" ensembles, performers of the Tajik *sheshmaqam,*[4] which is often referred to as *musiqiye asil* (classical music), the Muslim call to prayer *(adhân/azân*) faintly heard from time to time in the streets, Pamiri, East African and South Asian Isma'ili devotional music, regional styles of Sufi devotional music and other religious musics, Hindi film songs and Russian pop music, the rare performance of symphonic and chamber music, original music composed and performed by local musicians, and a host of other genres representative of the cultural diversity of Tajikistan. In addition to exploring specific practices of devotional music and healing, this book describes related genres of *falak* and the folk genres known as *dargilik, dodoik, bulbulik,* and *lalaik*.

Musiqi

In Pamir, the Persian term *musiqi* "music" is multivalent. It is used alone and in combination with other words to refer to multiple types of music. For example: *musiqiye rohâni* (spiritual/devotional music); *musiqiye tasavofi* or *efâni* (mystical music); *musiqiye dini* (religious music); *musiqiye khalqi* (folk music/music of

the people); *musiqiye asil* (classical music); *musiqiye sunati* (traditional music); *musiqi bâ âvâz* (music with voice); and *musiqi bi âvâz* (music without voice, or instrumental music). Vocal music is also described without the term "music," as in *khândan* (to sing, recite, chant, or intone). The verb *khândan* is used in conjunction with special terms to indicate certain genres of sung, chanted, recited, or intoned vocalizations. For example: *ghazal khândan* (referring to the performance of *ghazal* poetry); *sher khândan* (referring to the performance of poetry in general); *munâjât khândan* (referring to a special genre of prayer, often supplications); *du'â khândan* (referring to prayer in general, or a special genre of prayer); *namâz* or *salât khândan* (referring to a special category of daily, required prayers); *âvâz* or *âhang khândan* (referring to the voice, a song, tune, or melody); and *maddâh khândan* (referring to *maddâh*).[5] In addition, the context in which a term is used determines its meaning. For instance, *monâjat* usually refers to the use of the voice alone, however, in the context of *maddâh* performance, refers to a specific section of the vocal and instrumental performance. Moreover, certain terms can encompass other terms and concepts. For instance, the terms for religious, spiritual, devotional, or mystical music, including *maddâh*, can encompass the terms *musiqiye shafâi* (healing music) or *musiqiye darmâni* (music medicine/remedy).

Maddâh

Maddâh is a special term imbued with mystical, historical, and didactic meaning. Literally, *maddâh* means "praise" and generally refers to a genre of sung, panegyric poetry found throughout history in Persian-, Arabic-, and Turkic-speaking cultures. The genres that are referred to as *maddâh* in this vast region have similarities in poetic content and in the family of instruments used for performance. However, the music itself and vocal style are highly varied. Moreover, while there are strong relationships between the diverse cultural groups along the Silk Road, the Pamir Mountain range that largely isolates Badakhshan has forced Pamiri culture to develop with considerable independence, being less influenced by other cultures.

Throughout the Middle East and Central Asia, depending on local language conventions, the term *maddâh* and its variants (*madâ*, *maddoh*, *meddah*, *madh*, *maddai*, *madih*) can have multiple meanings—referring to one or more aspects of performance, including the music itself, the prayer/poetry text, a section of the performance, the genre as a whole, the master musician/panegyrist, or the regular, often weekly ceremony in which maddâh is performed. In Tajikistan, maddâh typically refers to the foremost genre of religious music among the

Isma'ilis of Badakhshan; *maddâhkhâni* specifically refers to the ceremony or devotional gathering where maddâh is performed; and *maddâhkhân* refers to the master singer/performer of maddâh.[6] All of the *maddâhkhân*-s with whom I worked were men, which is a typical aspect of this genre. However, there is a woman who is a legendary, older *maddâhkhân*, who has lived in the capital city Khoroq. Two of my Pamiri friends and field research associates, Samandar and Davlatnazar, did hear her on one occasion many years ago and stated *maddâhyesh besyâr khubast, pore baraka* "her maddâh is very good, full of spiritual power." Unfortunately, they had not seen her for years and did not know her location.

The meaning ascribed to *maddâh* poetry and prayer is central to its efficacy in healing. The sung prayer/poetry of *maddâh* is predominantly from the "classic" period of Persian mystical poetry, roughly from the tenth to the late fifteenth centuries. *Maddâh* draws from the works of such poets as Shams-e Tabrizi, Sanai, Khosrow, Sa'di, Rudaki, Hafez, Jami, Hilali, and others.[7] The vast majority however, is from Molana Jalal al-Din Rumi.

Maddâh performance consists of multiple, often overlapping poetic forms, including *ghazal, rubâiyât, qasida, masnavi, mukhammas*, as well as the prayer forms of *munâjât* and *du'â*. Passages from the Qur'an and Hadith are also employed in *maddâh* performance, as are spontaneous, inspired poems, prayers, and vocalizations of the *maddâhkhân*, accompanying musicians, and other community members who attend a *maddâh* ceremony. In addition, the related genre of music-lament known as *falak*, which draws its textual base primarily from the oral tradition of folk poetry, and secondarily from classic Persian mystical poetry, can function as a kind of interlude within the context of *maddâh* performance. All of these forms and expressions are interwoven and linked together in flexible ways, allowing for the inspiration of the moment to guide performance.

Although Badakhshani *maddâh* shares some ceremonial aspects with *samâ'*, *zekr*, *qawwali*, and other religious/devotional musics of the region, which can also be viewed as facilitating healing in varying degrees of intensity and specificity, *maddâh* is also unique in its musical forms, as well as its cultural, religious, and medical functions. Musically, the rhythm, melody, harmony, and form of *maddâh* bear no resemblance to the aforementioned genres (*samâ'*, *zekr*, *qawwali*) in all their diverse expressions throughout the Middle East, North Africa, or South Asia (see further Kasmai 1992; Berg and Belle 1993–95, 1994; Berg 1997; During and Levin 2002). Poetically, *maddâh* is also distinct. For instance, although a subsection of *maddâh* might include a complete *ghazal* of Hafez, which could be found in a South Asian *qawwali* or classical Persian *radif* performance, *maddâh's* rhythm, melody, harmony, and form are entirely unique, nor does it follow the same performance practice as the other genres (see, for

example, Manuel 1988–89; Nettl 1992; Querishi 1995; Talai 2000). Moreover, in addition to the flexible mixing of multiple forms of poetry and prayer, Berg (1997) shows that in the context of *maddâh*, certain poems (*ghazals* for example) are often transformed into the five-lined *mukhammas*. Furthermore, by comparing scholarly editions of published poems with field recordings, or with the handwritten notebooks (*daftar* or *tumâr)* of *maddâh* performers, which contain local versions of orally transmitted Sufi poetry and other prayers, a process of textual interpolation becomes evident, which has resulted in local versions of poems maintaining differences unique to Pamir.

During the era of Soviet control that lasted until 1992, the traditional practice of *maddâh* was forced underground. Since then, it has emerged as a symbol of cultural and religious identity, as well as a means of individual and community healing. Recently, it has been employed as an adjunctive medical treatment and supplement to anesthesia during surgery in the Khoroq hospital. *Maddâh* is regularly performed on Thursday or Friday evenings, and can last up to several hours—at times extending to the dawn of the following day. It serves multiple functions in Pamiri culture, being performed for devotion, worship, education, at funerals, memorials, rituals of mourning, on certain religious occasions or commemorations, and as a healing ceremony. These functions are not mutually exclusive. Thus, at any given *maddâh* ceremony, one or more of these functions might be the specific reason an individual chooses to participate.

For a traditional funeral ceremony, *maddâh* and *falak* can be performed in an interwoven and continuous manner for up to three days and nights—men performing *maddâh,* and both women and men performing *falak*. The duration and intensity of performance is dependent upon the social status of the deceased. The more important the social position of the deceased, the more involved the ceremony, including longer performances of *maddâh* and *falak,* a greater diversity of musicians and singers participating, and a greater expression of spiritual power or *baraka,* which lies at the heart of *maddâh*. If the deceased were a child for example, *maddâh* would usually not be performed. There would however, still be *falak* performance, as well as prayers of mourning and intercession offered on behalf of the child, for the family, and the community.

Maddâh is typically performed in the largest, main room of the Pamiri home. The room is considered sacred and a special degree of reverence is accorded to it—one sign of this being that shoes are not worn on the main floor/seating area. The main floor is typically raised, providing an underneath section that can be heated with coals or embers during the dangerously cold winter months. During *maddâh* performance, the room is transformed into the sacred, ceremonial space known as the *maddâhkhâne* (*khâne* = house/home/room), which literally means "praise house/room." During the oppressive Soviet period, when local

beliefs, practices, and expressions of Pamiri and Islamic culture were forbidden and systematically squelched, the *maddâhkhâne*, which, to the uninitiated, appears to be just a large room, enabled the Pamiri home to secretly function as a family or local mosque. Thus, within the physical structure of the Pamiri home, two central institutions of local belief, the *maddâhkhâne* and the mosque, were quietly kept alive during much of the twentieth century. Due to this dual function, the physical room that comprises the sacred place of the *maddâhkhâne* is perhaps the most important built structure in Badakhshan.

Healing through *Maddâh*

As a healing ceremony, *maddâh* exists within a web of diverse healing praxes, including multiple forms of music and prayer, as well as traditional, herbal, and biomedical treatments.[8] While there is an underlying aspect of *maddâh* performance that relates to overall health and general well-being, there is also the potential for a specific healing effect to occur, or to cure a specific illness or disease. With respect to a curative effect, much is attributed to and depends on an individual's intention and attention, and the healing energy of *baraka* that emanates from God and imbues the ceremony with transformational potential. In discussing healing experiences with participants, they always mentioned that they hoped, wanted, or intended for healing to occur, and that their thoughts were focused on God, a spiritual dimension, or a kind of nothingness—allowing the music and words to penetrate deeply into their minds, which in turn would create a healing effect.

Elaborating on this theme, one traditional healer and religious leader, who primarily communicated through his apprentice, and whose specialty was the application of specific prayers to heal specific ailments, explained that "*maddâh* has a special power to heal the mind and spirit because of the *power of sound* (*qodrate sedâ)* [both of the voice and instruments]—the sound making the spiritual power greater, but it does not affect everyone the same." In his own practice, which did not include *maddâh*, he reserved singing or chanting prayers in a loud voice *(khândan bâ sedâye/âvâze boland)*, either by himself or a patient, for only certain, advanced stages of treatment, saying "if patients are not ready for the power of sound, they might be harmed psychologically." He believed that *maddâh* was an example of sound power that can effect healing. If he thought it beneficial, he might send a patient to a *maddâh* ceremony, but he did not do this as a regular practice. In addition, he believed that patients could help themselves to heal by "learning, memorizing, wearing, and chanting the empowered words of certain prayers," in their own voices and styles.

He would often assign a patient to read and memorize a specific prayer and then meditate upon it. The apprentice explained that this also underlies the practice of *maddâh*, which "itself is for worship, and because it is a form of prayer, meditation, and music, is especially powerful and can heal specific ailments." *Maddâh's* potential to heal "specific ailments" in large part lies in the cognitive-spiritual domain of intention and attention—intending to heal and attending to words, symbols, metaphors, and dimensions that range from the highly specific to the infinitely expansive and nonspecific, facilitating a kind of flexibility of consciousness necessary to bring about a transformation in a patient. Simultaneously, certain rhythmic aspects of the music of *maddâh* also encourage a similar flexibility of consciousness, which direct a patient's mind toward healing, and create openness to the healing energy of *baraka*.

Samâ' and *Zekr:* The State of Spiritual Hearing and Remembrance

To better understand and appreciate the aesthetic of *maddâh* devotional music, the spiritual framework of *samâ'* and *zekr*[9] must be considered. The term *samâ'* relates to the sense of hearing; as a ceremony, it is related to the Qur'an and Islamic mysticism (see During 1997). *Samâ'* more specifically refers to a spiritual state or capacity of hearing and listening with one's entire being—with the soul and heart to understand and be affected by the *bâten,* or inner meaning of the words, sounds, and music of the ceremony. The meaning also extends to "hearing" in a meta-auditory sense, that which is beyond the pale of sound, music, and words (ibid.). Here, the Pamiri holistic construction of the self, comprising the mind, body, and spirit/soul emphasizes the manner of listening with all aspects of one's being.

Zekr refers to remembrance, mentioning, or invoking the spiritual realm, God, or holy figures. In these senses, the *maddâh* ceremony is both *samâ'* and *zekr*. As ceremonies, *samâ'* and *zekr* have unique forms that can vary between cultures and Sufi orders. Here, it is important to note that in spirit rather than form, the *maddâh* ceremony can be considered a type of *samâ'* and *zekr* ceremony. There are, of course, important differences. For instance, *samâ'* and *zekr* have traditionally been part of a so-called Sufi hierarchy that links an adept to a line of sheikhs and eventually to Muhammad; *zekr* often uses pronounced rhythmic breathing; and *samâ'* often includes dance, none of which are part of *maddâh*.

In explaining the way one must listen to and participate in *maddâh*, the local *khalifa* (religious leader) at Imam Dar Gah, a local Isma'ili holy place,

stated that *chun maddâh du'â hast, hamun mohite qalb o ruh vo fekr ke dârad dar du'â . . . ham dar maddâh bâyad dâshte bâshad* "since *maddâh* is prayer the same intention and spiritual atmosphere of the heart and spirit and mind that one has in prayer must be brought to *maddâh*." Continuing, he emphasized that *doroste ke hame chi dar daste khodâs . . . va mâ dele pâk bâyad dâshte bâshim agar hamun du'â ta'sir dâshte bâshad . . . bâ dele pâk, barakat dârad hamun du'â* "it is true that everything is in God's hands . . . yet we must have a pure heart when praying for the affect of prayer to be there . . . with a pure heart that prayer will have *barakat*." Through ritual performance, *maddâh* facilitates experience of the *bâten* (inner spiritual realities) by focusing one's attention toward the web of symbols and meanings that are at the heart of the genre, the local belief, and the natural and built environment.[10] Chapter 4 explores such symbols, metaphors, musical and poetic structures that provide links to the *bâten*, creating and emphasizing a spiritual aesthetic central to attaining the bridging state of cognitive flexibility where a heightened potential for healing exists.

In the context of *maddâh*, to *move* the mind across the bridge of transformative consciousness, *stillness* is key. Stillness is the starting point of *maddâh*. Participants begin by making their bodies generally still, usually sitting cross-legged in a loosely constructed circle type of formation in the *maddâhkhâne*. Some individuals face the musicians; others lean against a wall, another person, or one of the five structural and symbolic pillars that frame the sacred performance space; others might even lie down with their gaze directed upward toward the heavens. Participants direct their attention to an individualized, mystical, indefinable dimension, preparing themselves for the ritual performance. As sacred thoughts and prayers emerge in the consciousness of the individual, they might be whispered or mumbled to one's self, or stay in a state of silent, introspective communion. Often, the master musician, the *maddâhkhân*, quietly utters a prayer to help gather his thoughts and focus his attention before the first note is plucked on the *rubâb* (long-necked lute), formally announcing the beginning of the performance. Then, musical prayers commence, being sung and chanted in flowing melodies, at times in a gentle, soft voice, at times in a rough, dry, and raspy voice, but always a sincere voice—the performative act and mystical conversation between the *maddâhkhân* and the *rubâb* being a metaphor for communication between the Divine and the world of creation. Lines of poetry and prayer build from verse to verse, section to section, until they are wailed out from the depths of the *maddâhkhân's* heart, in a booming voice that further draws the attention of participants into a meditative, mystical vortex of music and prayer from which healing can emerge.

Baraka and the Self

For the *maddâh* participants with whom I worked, two aspects of Pamiri belief and worldview stand out as being central to the potential for healing through *maddâh*, as well as related healing practices of music and prayer—namely, the view of the self and the belief in *baraka*. The self is viewed as being essentially spiritual, with a soul that is eternal, living beyond the death of the physical body. The lower self or *nafs*, is the self (or that aspect of self) from which one should detach, and to which, one should not give attention, which is a kind of cognitive food that engenders action. The true or higher self is viewed as a three-part whole known as *aql-tan-ruh/jân*. *Aql* refers to the mind and intellect; *tan* refers to the body and the physical aspect of life; and *ruh/jân,* refers to spirit/soul and the spiritual or metaphysical aspect of life. Notably, *jân* also refers to "life," and is often used as term of endearment, meaning "beloved," or "dear." It is important to note that *tan* (body) is intimately linked to the mind and soul in this three-part whole. The body (*tan*) can be viewed as a kind of link between the lower and higher aspects of self—being the primary vehicle of action in life and always having the potential to facilitate progression or regression of the self (i.e., perform acts that imbue an individual with *ruh/jân* or *nafs*). Furthermore, the body can be seen as the last stage in the journey of a thought that emerges from a precognitive dimension, into the consciousness of an individual, then enacts experience of itself through the body.

Although the *tan,* or physical aspect of the self is not denied, there is a preference for the spiritual/mystical aspect. In part, this is a result of the physical body being transitory and dependent on the physical world for life, and thus more prone to qualities of the lower self. The local tendency toward the spiritual is perhaps best understood by the concept of *bâten/zâher,* which is current among *maddâh* participants, as well as Pamiris and Sufis in general (see further Schimmel 1975, 2001; Lapidus 1992). *Bâten* refers to that which is inner, mystical, spiritual, invisible, whereas *zâher* generally refers to the outer, tangible, physical, visible world. *Bâten* and *zâher* also frame the Pamiri Isma'ili approach to religion, which is concerned more with the inner, mystical meaning, rather than outer form and rhetoric. In addition, there is an aspect of local worldview where the border between the *bâten* and *zâher* dissolves and the *zâher* is seen as an extension of the *bâten*, thus emphasizing an essential oneness between the seen and the unseen, the potential and the manifest.

Baraka, a central aspect of local belief, is a spiritual power or energy that can heal, bless, protect, guide, edify, enlighten, and transform people, as well as effect change in the physical and spiritual worlds. *Baraka* emanates from God

and is manifest throughout all of creation. Most often, *baraka* is associated with the founders of world religions, prophets, holy people, saints, religious leaders, and mystical figures. In addition, personal items and places associated with holy figures, as well as other special places in the natural and built environment are believed to possess an especially high degree of *baraka*.

In the context of a *maddâh* ceremony, multiple levels of *baraka* interact, forming overlapping layers of potential healing energy. For instance, the Pamir Mountains, viewed locally as a majestic creation of God, and as a region associated with various holy figures—most importantly with the mystic Naser Khosrow, are believed to contain and emit *baraka*. Within this mountainous region, the *maddâhkhâne* is believed to contain a special degree of *baraka*. In addition, the *maddâhkhân* is believed to embody *baraka* and have the power to facilitate its flow through the performance of *maddâh*. The words of the poems and prayers of *maddâh* are believed to possess *baraka*, and close association with these empowered words can bring about transformation of the self and healing. This association comes in many forms both during and outside of performance: by one meditating on the words—allowing the multiple levels of meaning to penetrate one's being (*aql-tan-ruh/jân*) and effect a change; by singing along with the *maddâhkhân* at certain points of a performance; by reciting or singing a low voice during performance; and by wearing *tumâr* prayer-amulets, which are believed to possess an even greater degree (at times disease-specific form) of *baraka*. Additionally, the *maddâhkhân* and accompanying musicians, by virtue of their role as performers, maintain a unique association with the words of *maddâh*. Finally, in varying degrees, all participants contain *baraka* within themselves.

Through the process of a *maddâh* performance, the *baraka* within an individual joins or intermingles with the external levels of *baraka*. In this regard, a local *khalifa* explained that, during a *maddâh* ceremony, there is an increase and intensification of the flow of *baraka* between the dimensions of *bâten* and *zâher*, allowing *baraka* to be further embodied by participants. However, for *maddâh* participants, embodiment is not limited to "the body," nor does it accept a mind-body dichotomy. Rather, embodiment refers to a process of transformation through which a human being, comprising intellect, body, and spirit/soul, internalizes and manifests virtues, positive ideas and energy. Through *maddâh*, participants seek to enter a purified state of consciousness to transcend the physical world and transform or leave behind the *nafs* (lower self), more fully incorporating *ruh/jân* (spirit/soul) into their *beings*, not just their physical bodies. In this sense, a process of *embeingment* rather than embodiment best describes the levels at which *maddâh* is efficacious—that is, it positively effects change on all levels of the *aql-tan-ruh/jân*, and *nafs*.

In tandem with embeingment, the concepts of emplacement and body ecology help to better understand the role of *place* and *body* in the process of music-prayer healing in Pamir. Emplacement refers to the role of the natural and built environment in Pamir, as well as the physical and ritual space of healing that emplaces and gives meaning to the ceremonial practice of *maddâh*. Body ecology refers to the relationship of bodies to each other, body to environment and place, and the sense of health, ease or unrest in one's body.

Expanding Field Research Methods

In any ethnomusicological study, the kind of materials gathered in the field, how they are collected, analyzed, and interpreted, are of central importance. After all, field methods are a central way that researchers approach a topic, learn, discover, and apply knowledge. A constant challenge is to use methods that best engage the chosen topic and heighten or provide some insight beyond the aural perception of sound—usually through adapting existing approaches to a particular case, borrowing models from related disciplines, or at times, abandoning common techniques and developing new approaches altogether. Today, music researchers often rely upon computer-based methods of sound and time analysis that are capable of representing humanly imperceptible differences of frequency, amplitude, duration, rhythmic organization, and the spectral components of sound.

While such computer-based methods open new vistas for research and enable the researcher to go deeply into multiple physical aspects of sound, it remains of central importance to link the analysis of sound and music to the local meaning and cultural role that music plays in order to illuminate a new or deeper insight, or perhaps to explore another aspect of the music that is cross culturally relevant or otherwise meaningful or beneficial. Especially for medical ethnomusicologists, researching music, health, and healing might require supplemental or altogether different methods of transcription and representation, which help us to visualize, compare, and discuss the multiple issues related to specific practices, as well as build bridges of understanding between different cultural contexts and academic disciplines. For instance, methods might involve correlating physiological, cognitive, emotional, or spiritual states and processes with music's sonic features, changes, processes, and cultural meanings.

Physiological Experiments in the Field

Ethnomusicologists have largely avoided physiological experiments in their field research as a way to gain insight into musical healing. This is not surprising

when one considers that such research in the field is replete with uncontrollable variables and fraught with challenges, raising the question as to whether there is any value in introducing such methodological tools into ethnographic research. I believe there is. Likewise, for health science research and practice that is conducted in a hospital, clinic, laboratory, or in medical fieldwork setting, great value can be gained by including in-depth ethnographic knowledge about an individual, group, and broader sociocultural context and history.

Within a research environment that covers a range of disciplines and concerns, recurrent themes emerge and new directions develop; necessarily, a diversity of approaches will be utilized. Nevertheless, points of unity need to be established regarding the culture transcendent aspects of musical healing. Moreover, to approach a holistic understanding of any healing practice, both the physiological and cultural elements must be considered. This can be viewed as building on a "culture-biology dialectic" (Kleinman 1988, 48) that goes beyond an ethnography or anthropology of the body, which alone cannot speak to the physiological processes completely—some objective measures can be informative. Hence, combining ethnography with physiological experimentation I suggest is one way to help bridge the gap in musical healing research.

Physiological experimentation adds a new aspect to the discourse between researchers by providing structured experimental designs and data. Experimental approaches can then be critically viewed and improved on in other field or laboratory contexts, thus creating a type of *shared experience* between researchers and participants that is not bound by time or place. Moreover, experiments can offer valuable insight into musical healing that is neither mediated by language nor filtered through the mind of the researcher in the same way as ethnography. Neither experimentation nor ethnography alone can hope to provide a comprehensive view of healing. Together, however, I believe that a more holistic, truer understanding can begin to emerge. Given the nature of medical ethnomusicology, its interests and its ability to collaborate across academic disciplines, this burgeoning field is in a unique position to offer new and meaningful approaches to the discourse. Balancing between ethnographic and health science methods I suggest is but one of the next steps in carrying the discourse of musical healing forward.

A unique aspect of the present study was the employment of physiological experiments in field research to measure specific indices of bodily response in the context of ceremonial healing. Physiological data were collected with a digital blood pressure/heart-rate monitor, and a portable electrocardiogram. These data aim to measure changes in stress levels and provide insight into the bodily experience that is not solely dependent on language, nor accessible through ethnographic research alone. It was hypothesized that *maddâh* would lower participants' stress levels through the downward modulation of

blood pressure and heart rate. The experimental aspect of this project provides one approach toward bridging the gap between ethnographic and health science methodologies that explore the roles of music and/or prayer in healing (see chapter six for the data and discussion). Together, data from both the ethnographic research and physiological experimentation show how cognitive flexibility, and a spiritually integrated emotional/bodily response can work together for health and healing.

Ethics and a Note of Caution

The degree to which any system is effective depends greatly on one's understanding of the operating principles of that system; and understanding the relationships and "modes of action" between components of any given health system is essential to avoid potential health risks. As medical ethnomusicology develops further, a note of caution regarding interactions in the field is needed. A research interest in music and healing can be concerned with various areas, each demanding a different base of knowledge. Some knowledge is culture-specific, whereas other knowledge can be more universal, in particular, aspects of biology and physiology. When confronted with sickness in the field, researchers must be cautious not to act outside of their areas of expertise. A mistake that some researchers make, which compels me to mention it here, is to dispense aspirin or other medications without understanding the multiple potential effects. For example, the mistake of innocently giving aspirin (a salicylate [anti-inflammatory chemical] compound) to a child with a fever could be tragic. It is known that aspirin reduces pain and inflammation, and lowers fever. However, if a person is unaware of one of the operating principles within the overall system, giving a simple aspirin for flu symptoms or the chicken pox, especially in children, can result in Reye's syndrome and even lead to death (PDR 1998, 2784). Death can also occur by mixing certain aspirin compounds that react negatively with other drugs or by giving them to patients that are suicidal or addiction-prone (PDR 1998, 1446).[11]

Creating a Research Group

To holistically approach music-prayer dynamics in healing, I assembled an interdisciplinary group of Pamiri researchers and practitioners in Badakhshan, comprising a medical doctor/surgeon/naturopath/herbalist, a nurse, and specialists in local languages, culture, music, and education. In addition, I worked with several master musicians, traditional healers, physicians, local religious leaders and spiritual figures, and community members.

Once my wife, Saba, and I arrived in Dushanbe, the capital of Tajikistan, we quickly discovered that somehow we had to get to Badakhshan—a dangerous trip that few Tajiks ever make for a host of reasons. Often the weather is not suitable, clouds might obscure the precariously situated mountain peaks, which makes flying impossible, and an experienced pilot who is familiar with the specific route from Dushanbe to Khoroq is not always available. The airway into Pamir requires the pilot to thread the plane through a narrow passage of potentially deadly mountaintops, which seem close enough to touch as one looks out the window, and which add to the unpredictability of the powerful air currents that cut across and between the mountains. After many warnings from friends and associates, and repeated questioning to ensure that we had evacuation insurance, we were scheduled on what was to be an eventful, but successful flight within a few days—usually flights are sporadic at best, never guaranteed even if you have a ticket, and it can take several weeks for a ticketed person to actually make it to the region for all the starts and stops that are part of the process.

Before making arrangements however, while in Dushanbe, a local friend mentioned that there was someone named Samandar who was an accomplished musician and could perhaps introduce me to local healers and *maddâh* performers. When I first heard the name "Samandar," I immediately felt a sense of brotherhood with this unknown person. When I arrived in Badakhshan and met him, this feeling was confirmed. Shortly thereafter, without me sharing my story, Samandar told Saba and I that some two weeks prior to our arrival, and without having heard of our intended visit to Tajikistan, he had a vision that we were coming. His vision did not clearly depict our faces, but "a special energy" as he described it. He continued saying, "the first day I came to your apartment and you opened the door, I knew."

Samandar Pulodov is a young *ostad* (master musician) in his own right and is best known for his innovative approach in composition and performance, dedicating all his efforts to *musiqiye erfâni* or *musiqiye rohâni* (mystical or spiritual/devotional music). He blends traditional instruments, including the Pamiri and Afghan *rubâb-s, tanbur, ghizhak, dâyere, chang,* and *ney* with acoustic, electric and bass guitars, keyboards and synthesizers, and utilizes traditional dress and dance. He focuses on new compositions and lyrics that can be viewed as both poems and personal prayers. Samandar's music is perhaps best understood as part of a living tradition of Pamiri devotional music that is mystical in nature and seeks to reach people beyond the range of the surrounding Pamir Mountains and Tajikistan.

After Samandar agreed to be part of the research group, the other people serendipitously appeared. First, was another innovative and masterful

musician, Davlatnazar, who agreed to be our driver and regular assistant in the field; then nurse Lailo, who after consulting with the director of the Khoroq health clinic, was happy to join our group; next, Dr. Shirinbek joined our group early on and lent his considerable knowledge of quantum physics and biomedicine, the healing arts, history, and local culture to our group consultations in the field.

Finally, many of the experiences discussed in these pages, before, during, and after Pamir, were shared with my wife Saba. As an educator, schoolteacher, and native Persian speaker, Saba rounded out our research group in Pamir. Saba's contribution to the research went far beyond her academic areas of expertise and native language ability—but it also deepened our cultural connection to the Pamiris and Tajiks with whom we worked. Persian culture and "Iran" forms a powerful image in the minds of most Tajiks and Pamiris, who look at *being Iranian* as a noble reality, which is intimately linked to their own *being Tajiki* or *Pamiri*. Without fail, local people, whether in Dushanbe or a Pamiri village, always thought that Saba was Tajiki or Pamiri. Seeing the two of us walking together in the street often drew the gaze of many our way in more than a casual glance. The looks were curious in nature, often with smiles, or a bit of surprise. I was often mistaken for being Russian, German, English, or French on one occasion—until I would begin speaking Persian with a *Tehrâni* accent. Then I would be asked with a smile and somewhat doubtful tone *Irani hastid?* "Are you Iranian?" When I responded "no," at times people would not believe me initially until I would say in a formal manner of speaking *ham dars-e Fârsi mikhunam, ham az khânumam—ke Irani hastand, yâd migiram, ham az doostân-e aziz-e Iran yâd migiram*—"that in addition to studying Persian, I learn from my wife who is Iranian, and from all my dear Iranian friends." Once I stated that my wife is from Iran, a big smile and statements of respect would follow—often saying that *Mâ ham (mesle) Irâni hastim, mesleham—yekim* "We are (like) Iranians, we are the same—we are one!"

Often, if Saba and I were talking with local people in the bazaar, or in friend's home and a new person would enter the conversation, someone would invariably announce on our behalf that *Ishân Irâni hastand!*—"she is Iranian!" This announcement never failed to bring a positive response and welcome. More important, Saba's bright and joyful nature, innocent sense of humor, and her gentle, yet strong and respectful approach to meeting new people always helped to create an atmosphere of fellowship, which sustained and nurtured the initial positive feelings that we usually experienced when meeting new people. As an educator, working as a teacher of English as a Second Language with diverse groups of international students from elementary to junior high school age, Saba's experience in connecting with children and youth was another asset

in the field. This helped us to make friends with the children and female members of a household or community in ways that would not have been possible for me to do alone. In addition, Saba is an excellent research assistant and conscientious translator.

Concluding Thoughts

Music, prayer, meditation, and healing deal with a universe of ideas, beliefs, and practices that can change the way we view ourselves, the world, and each other. As the myriad illnesses and diseases afflicting humanity increase daily, reaching unimaginable degrees—far too horrific and well known to recount here,[12] music and healing takes on a deeper meaning for me, leaving behind conventional understandings of "music," "medicine," "health," and "healing." There is a desperate need for individual *and* societal healing far beyond the façade of the body and the material dimension of life—allowing transformations in ways that recognize and support unity in diversity, foster a greater realization of the oneness of humanity, and create wholeness. For me, there is a service-centered impetus underlying my interest, which arises from what I see as foundational to any scholarly endeavor, inasmuch as the core concept of philosophy, which undergirds and frames the study of science, the arts, and religion is, alas, with few exceptions, a fading ideal, and one that is all too often lacking in our academic institutions of higher learning—namely, that love (*philo*) and wisdom (*sophos*), and all the interdependent virtues that they imply, not only become central to the academy and conservatory, guiding research, training, and education, but that our works, applications, practices, and performances facilitate further manifestations of these qualities in the world. It is in this spirit, and with this hope, that the present book is humbly offered.

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3

Music–Prayer Dynamics and Cognitive Flexibility

My son, by prayers shall your incomplete soul become whole,
by carrying them out wholly.[1]

—Naser Khosrow (1003–1088)

Prayer without action is useless.

—Sufi of Shirgin (July, 2001)

"Music and prayer function on the quantum level to heal . . . they effect a change in that invisible part of our being—in our soul!" So said Pamiri physician and naturopath, Dr. Shirinbek, as we made our way down the steep mountain pass. Our fearless and faithful driver, Davlatnazar, could often be heard in the background of our interview, quietly uttering a prayer as we would approach a precarious section of the dirt road, which, depending on how he navigated, would lead either to our intended destination or our demise over the cliff's edge. He would always say such prayers with a gentle and knowing smile on his face, as though he was certain we would make it through unscathed, and thankfully, we always did. The ancient Oxus River, poetically known as the river *Panj*, roared beneath us at the foot of the mountain, marking the border between Tajikistan and Afghanistan. The border checkpoints were guarded by a few young men, probably in their early twenties, each with a machine gun slung across his back and comporting himself in a manner that seemed to convey a complex emotion of power, evanescence, hope, and fear.

Approaching the checkpoints was another occasion where prayers were whispered for a safe passage—after more than a generation of Soviet oppression and the subsequent, tragic civil war of Tajikistan, there was still much suspicion of any unknown travelers. We were almost to the sacred site of the *maddâhkhâne*.

In the following section, I describe a transformative cognitive process, which underlies *maddâh*, and which frames and facilitates healing during *maddâh*. By extension, this process can also describe culturally diverse practices of devotional music, prayer, and meditation that include the goal of promoting health and healing.

Cognitive Emergence from the Placeless

In the *maddâhkhâne*, prayers begin silently, beyond the recesses of one's mind, beyond observable cognitive processes, in a placeless dimension that is the source of knowing, health, transcendence, ecstasy, and oneness. It is a borderless dimension that is ever-present and never-ending—a kind of generative matrix of spiritual consciousness, which is emergent in the human psyche and manifest there from the exact moment that the human mind is still, and thus aware of its connection to a greater whole, its source. This dimension is beyond the quantum level mentioned above by Dr. Shirinbek. When unexplored, this dimension seems to act in mystical, radical, or even miraculous ways. But when visited often, in this case through the ritual performance of *maddâh*, its actions seem to be more a matter of fact and expectation than happenstance. Dr. Shirinbek described this level as a potential and emergent dimension of *qodrat* (power/energy), *ruh* (spirit), *fekr* (thought), and *baraka* (spiritual power/blessings). It is ever-present, all encompassing, self-subsistent, and is emergent in daily life via the quantum level, which is expressive of the underlying interconnectedness of all things, visible and invisible. He further described the individual's role in drawing on this level or dimension as *khâstan,* (to want, to desire, to will, or to intend), *tavajoh kardan* (to give attention or focused thought), *tafakol kardan* (to meditate, to reflect, or to think deeply), and *du'â khândan* (to pray). Depending on the quality of attention or desire that is introduced into that subtle dimension, via the quantum level, there can be both positive and negative effects in health. He also stated that devotional music and prayer were unique in the potential they had to access the quantum level and effect change there, which is a critical stage in a process of energy transfer from the placeless dimension of the invisible to the emplaced dimension of daily life. He continued, saying:

> Both [music and prayer] have a power (*qodrat* and *baraka*) that reaches a patient on multiple levels—primarily effecting change in the mind, emotions, and spirit, via the quantum field, which is then manifest as a healing change in the body. We don't know how this works exactly, this is not a science anymore, although it used to be, and I believe will be again—there used to be a greater understanding in ancient times. We also know that the great Ibn Abu Ali Sina [Avecina] was aware of the power of music and prayer. His detailed knowledge regarding this subject, and the knowledge of those before him is now forgotten. You must continue your work and help many people—maybe you can return and work with me. Your research will bring great results and can be used to heal in many different ways, sometimes alone, as well as in conjunction with other modalities . . . but at times they are just for comfort—this is also important and helps in the healing process—but . . . for example, if I have to do surgery, prayer and music can help bring comfort, but healing comes through the operation . . . and all healing comes from the mercy and grace of God.

He repeated similar statements and encouragements to me often, saying that I should endeavor to "to revive this ancient knowledge and teach it to people in a practical way." Our discussions and explorations of the potential efficacy of music and prayer were themselves a kind of mystical experience within our minds and between each other. The recurrent and central theme was that of a transformative *process*, which music and prayer are uniquely suited to facilitate. The process of transformation relates to three major levels or stages, which culminate in a transformation from illness to health. The three levels can be described as *rohâni* (spiritual/metaphysical), *tasavofi* (mystical/quanta), and *jesmâni* (physical/bodily), the latter of which can also refer to a person's psychological state. Furthermore, these levels relate to the local formulation and juxtaposition of the *bâten* (hidden, unseen, spiritual) and *zâher* (manifest, seen, physical), and that mystical, in-between stage, or quantum level that bridges the two in the context of human experience.

This quantum stage is an invisible dimension between the tangible and intangible, between that which is manifest as matter and that which is its source—a source that is non-physical and unmanifest. The quantum level can also be viewed as a kind of mystical vortex that contextualizes the process of transition from the formless to the formed, from waves to particles. For instance, before a particle of matter is manifest in the physical world, it was a potentiality in the matrix of life beyond the quantum level. As the potential is emergent in the matrix, when it becomes manifest, it moves from the placeless, unseen dimension

of the spiritual realm, through the mystical vortex of the quantum field, into the emplaced dimension of the physically appearing realm. In this sense, the quantum field is viewed as a kind of mediating level that is neither fully here (*zâher*) nor there (*bâten*), but a mystical bridge of potentiality. To traverse this bridge through *maddâh* performance, the power of thought, attention, and intention is central. In particular, directed thought, prayer, and meditation are key components of *maddâh's* efficacy as a healing ceremony.

To explain this in another way, before specific neural impulses emerge in the mind as a particular thought, they are a potentiality beyond the quantum level, in a spiritual or metaphysical dimension. Before potential thoughts emerge in human cognition, they pass through the quantum field. This transformation of a potentiality into a physical manifestation looks to us like neural activity, which we experience as thought, and which is subsequently expressed in any multitude of communicative forms and behaviors. This cycle or process is a key component of *maddâh*, the goal of which is to extend the edifying experience of devotional music practice into daily life. In *maddâh*, the emergent thought, which is ultimately expressed in action, is a response to the quality of attention and intention that a participant introduces into the spiritual-cognitive process of ceremonial performance. So, what qualities of attention and intention does *maddâh* encourage? At one level, *maddâh* conveys universal qualities and virtues common throughout diverse religions and beliefs, which encourage practitioners to surrender the lower self, *nafs* or ego, to the higher, spiritual, or more God-like self. At another level, culture-specific, power-laden symbols, metaphors, language, and music convey these and other local qualities central to *maddâh*. Before exploring these cultural factors, it is necessary to present the music–prayer dynamics model, which will inform the examination of *maddâh*, cognitive flexibility, and transcultural processes that facilitate healing.

Music–Prayer Dynamics

The music–prayer dynamics model presented below emphasizes those aspects that have remained virtually unconsidered in ethnographic or health science literature; namely, the affective relationships between music *and* prayer in the context of healing, as well as their combined or unified expression as a unique phenomenon. For instance, in diverse religious contexts, music is almost always an essential part of worship, which is culturally determined and expressed. Music itself is often a form of prayer, and prayer is often only performed in a specialized sonic or musical form. The role of music or sound can entirely change the experience and potential power of prayer. In some cases, the prayer and its expression

in sound or musical form are one. Hence, when studying the effects of music *or* prayer, both components must be considered to discover why a practice is efficacious. Moreover, one component might make a particular music or prayer intervention efficacious or powerless, depending on the individual cultural associations and beliefs. Consider, a healing prayer might be rendered powerless if the musical form is not suited to an individual's cultural aesthetics; or music could be powerless if it is used in a context devoid of spiritual associations essential for an individual to be affected by its potential healing power. Figure 3.1 shows how ethnographic and health science research have conceptualized the components of music and prayer as distinct, unrelated components in healing. Note that although meditation can stand alone as discussed earlier, the figure views meditation as a practice linked to and interwoven with prayer.

To approach this problem holistically, the *music–prayer dynamics* model (see figure 3.2) can be employed to conceptualize, frame, and investigate the practices of music and prayer in diverse contexts of healing, daily human experience, as well as ethnographic and health science research. Music–prayer dynamics is designed in light of extant ethnographic and health science research, maintaining binary relationships between parameters and adding two new parameters that explore the confluence of music and prayer. Hence, the model considers both the individual and integrated uses of music and prayer for the purpose of healing. The model comprises four parameters: music alone, prayer alone, music and prayer combined, and unified music–prayer. The model is versatile and can be applied in a strict or more open sense. Generally, experimental studies will utilize a strict application, and ethnographic studies

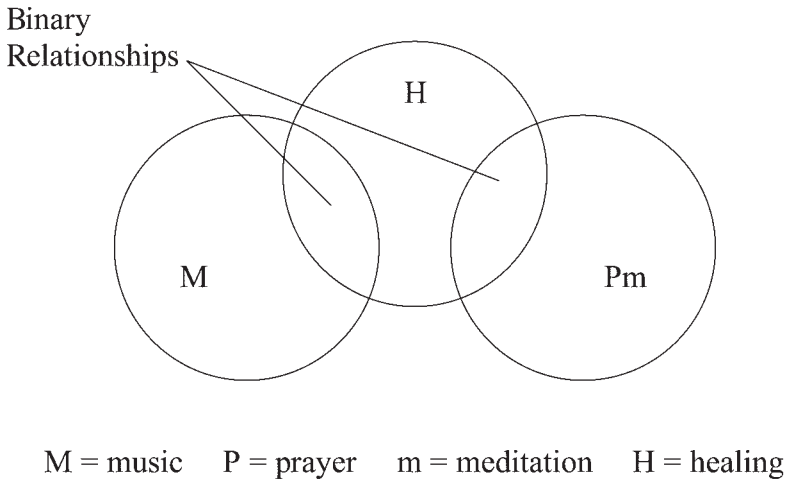

FIGURE 3.1. Typical research conceptualization.

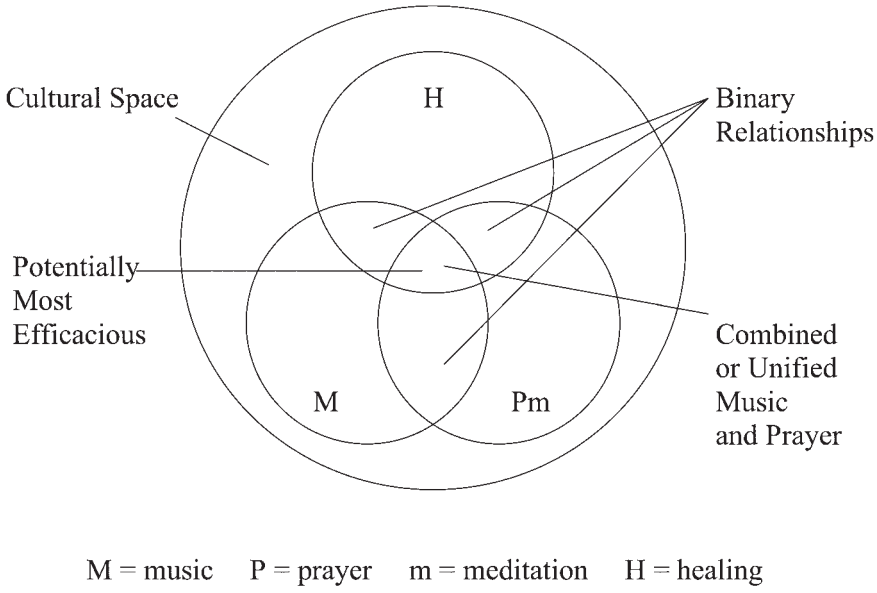

FIGURE 3.2. Music–prayer dynamics.

a more open one. The music–prayer dynamics model is designed to explore the question of efficacy and to investigate the extent to which the effect of the four parameters is culture-dependent or culture-transcendent.

In experimental research, the model can be used as a frame for testing the efficacy of interventions that fall within and across parameters. For example, evidence from three pilot studies conducted to test the model suggests that music and prayer influence each other in dynamic ways, effecting positive and negative changes in psychological and physiological stress; and that these effects are often linked to cultural associations, individual experience, and the quality of attention that an individual brings to the experience. Moreover, the combined or unified parameters are potentially the most efficacious for the downward modulation of stress. The model can also function as a frame for critically viewing experimental research that has not considered cultural factors or the relationships between music and prayer in their designs.

For ethnomusicological field research, the model can serve as a conceptual frame shedding light on the dynamic relationships between music and prayer in diverse cultural contexts of healing. This accommodates a more holistic view of any given healing context or 'sacred clinical reality' where these components are present. The model also facilitates cross-cultural comparison by establishing common ground between research projects. As a flexible framework, the model allows for a diversity of cultural expressions, while conceptually approaching the problem with both culture specific and universal potentials

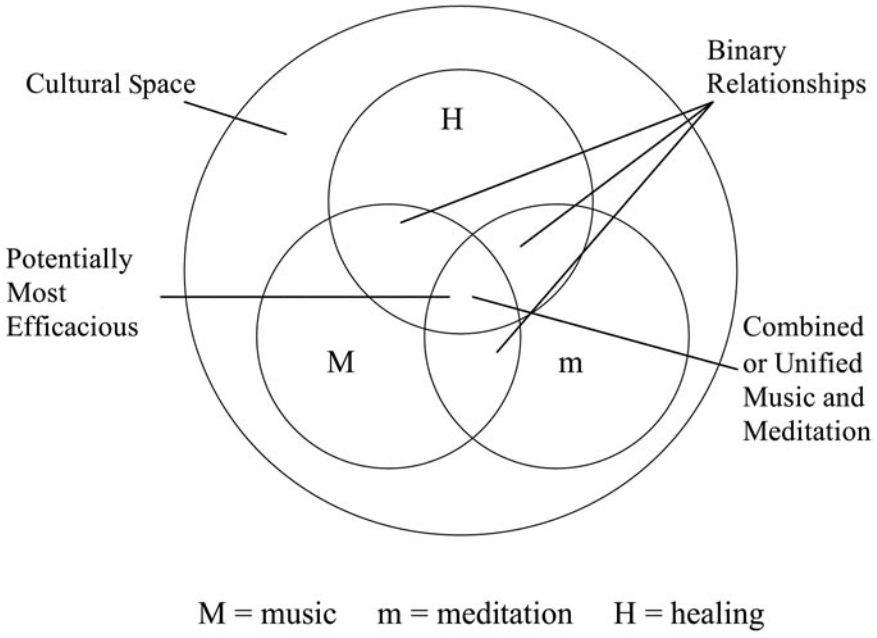

FIGURE 3.3. Music–meditation dynamics.

in mind. The model can also be constructed as a music-meditation dynamics model, which includes meditation as a separate parameter, rather than as a component of prayer (see figure 3.3).

Case Study from the Field

As mentioned earlier, the model can be applied to research in multiple ways, from testing specific variables for statistical significance in an experimental context, to conceptualizing a "sacred clinical reality" in which music and prayer are performed. The case below shows one way in which the music–prayer dynamics model can be utilized and how the parameters interact in a local healing practice. In the specific practice described later in this section, the parameter of recited prayer alone, without music, was the primary treatment. At times, in this particular case, the *khalifa* (religious leader) would chant sacred verses as a spiritual-medical intervention. His treatment mainly consisted of five specific prayer practices:

1. The *khalifa* writing prayer amulets known as *tumâr* that the patient would read, place in his mouth, or wear around his neck. Examples of the *tumâr* are discussed in detail and shown in chapter 5.

2. The patient praying and reciting sacred verses individually, silently and aloud without chanting. These passages were specifically prescribed by the *khalifa*.
3. The *khalifa* praying and reciting sacred verses individually, silently and aloud without chanting. At times he would recite prayers in the style of Qur'anic recitation/chanting.
4. The apprentice praying and reciting sacred verses individually in the same manner as the *khalifa*.
5. All three praying together. In this arrangement, one person would pray silently or aloud and the other two would focus their attention on the words and atmosphere of consciousness, silently joining in the prayer.

Chanting or singing prayers aloud, with an individualized or prescribed form did have its place and specified function in the traditional practice of prayer-healing in Badakhshan, but it was not being applied to this patient. Here, the apprentice was studying the practice of prayer healing with the *khalifa*. He often would treat the patient instead of the *khalifa*. In our interviews the apprentice served as an interpreter between our research group and the *khalifa,* not because of a language barrier, but out of respect for their preestablished mode of communication with visitors. This formality was not common. In all other interviews with religious leaders or healers, we spoke directly to one another in a loving, respectful, and frank manner.

The apprentice explained that chanting *bâ âvâze boland* "with loud singing" was only performed in special cases where the illness was of a spiritual or psychological origin. For the *khalifa* and his apprentice, there is a marked difference between prayers with chanting or singing, "*du'â bâ âvâz khândan,"* and those without chanting, intoning, or musical gesture "*du'â bi âvâz khândan."* Although this patient had a condition of a psychological/spiritual origin, the healer did not prescribe any chanting at the present stage of treatment, but focused on reciting and writing specified verses and prayers. The *khalifa* and apprentice explained that chanting and using music had a special power that could change the psychological and spiritual state of the patient and therefore must be used only at the appropriate time and only with certain patients. The power of spiritually attuned sound (vocal or instrumental) is believed to "penetrate deeply" into the being of the patient and have more impact and affect in the body, mind, and soul. The exact time to utilize such sound or music, and whether it should be vocal or instrumental (or both) could only be determined on a case-by-case basis and the *khalifa* and his apprentice were not certain that it would ever be performed for this particular patient.

The patient was suffering from a condition that was related to a kind of nervous breakdown that he had experienced several months prior to our interviews. The apprentice explained that the patient's ability to communicate verbally was limited as was his general ability to interact with others and his immediate environment. Initially, he had lost his ability to read and write. Over the course of his treatment with the *khalifa,* he had made significant progress, now being able to read and write prayers or passages that were prescribed by the khalifa. However, the patient had not yet returned to his previous capacity—he had been considered an outstanding and aspiring young scholar.

In addition to the psychological condition, he also had a chronic toothache with facial swelling, which they believed was somehow related but primarily of a physical origin. There were no other reported symptoms. He had sought biomedical remedies from physicians in Pakistan and Tajikistan to no avail, as well as herbalists in Badakhahan with limited, temporary relief for his tooth only. The patient was now seeking the help of the local *khalifa* who practiced one kind of spiritual healing that employs prayer and the recitation of sacred verses as described above.

In my interviews with the *khalifa,* his apprentice, and the patient, they attributed the cause of his condition to a psychological injury he experienced from the pursuit of a mystical knowledge to which he had come too close in his intellectual and spiritual quest for enlightenment. The apprentice explained that the knowledge itself was not the problem. Rather, the patient's capacity had not grown to the point to handle the new knowledge when he tried to understand it, similar to athletes who attempt feats beyond their physical capacity and consequently injure themselves. The *khalifa* and apprentice did not know exactly what the specific knowledge was, nor could the patient disclose the circumstances or incidents that led to and caused his injury. This did not seem to matter in terms of treatment, which consisted of a flexible, weekly schedule of reading and transcribing prayers, sacred verses, and other mystical passages from the Qur'an and special books that had been in the *khalifa's* family for many generations.

During the "Soviet period," as it is often called in Tajikistan, most of these books were taken and burned, leaving only a few. Two such published books were briefly shown to me. The first was organized according to illness or injury to a specific part of the body. Under each illness, certain verses and prayers were written that could be given as a treatment for that specific condition. Sometimes the illness or body part was mentioned in the prayer, but not always. For example, the instructions for a prayer that was being used for the patient's toothache directed the *khalifa* to write the specified prayer on a piece

of paper and that it should be placed in the patient's mouth next to the injured tooth. The prayer itself was of a general nature that focused on the power and mercy of God and the patient asking for assistance and healing. In addition, some sections of this book would indicate a specific herb or food that should be consumed. The apprentice expressed the desire to work more closely with herbalists but there were none that lived near their village.

The second book was "from an ancient time" *az zamâne qadim,* and was organized into two sections, *khub va bad*—"good and bad." The first section was *khub* and used for healing, blessings and good fortune. The *bad* section was to curse or cause misfortune. Upon showing this book to me, the apprentice immediately clarified that they only used the good section and that the other section had fallen out of use. He added that it was likely that no other copies even existed. It is important to mention that among healers and community members, there was a diversity of views regarding the notion of cursing or using spiritual practices as a negative force. Although some believed in such notions, Dr. Shirinbek and virtually all of my research associates and informants attributed such ideas to ancient superstition and viewed them as powerless.

In utilizing the prayers and verses from these and other sources, at times the *khalifa* and patient would pray together, at times alone. Certain passages were often selected by the *khalifa* and written in the form of a *tumâr.* The same and other passages would also be prescribed by the *khalifa* for the patient to read, write, recite, and memorize. In answer to my questions regarding the use of the voice in the reading or recitation of the prayers and verses, the apprentice said that usually the patient would perform the prayers and verses silently. This kind of internal cognitive-spiritual practice or dialogue between the patient's mind, soul, and God was viewed to be gentler in nature than if chanting or music were utilized. The apprentice and my local research associates described the patient as being in a fragile mental state that slowly needed to be strengthened. Hence, internal practices were emphasized at this stage of treatment. There was much unknown to the *khalifa* and apprentice regarding this case. In principle, they were certain that chanting and music could be effective agents of healing, but in conditions like this one, they must be introduced and applied gradually.

The apprentice was very interested in collaborating with healers who practiced other modalities. He stated "at times we work and consult with herbalists and physicians from the hospital who sometimes send us their patients." Sometimes the *khalifa* and apprentice serve as counselors to address the psychological conditions of patients. In such cases, healing can be viewed as a process of psychological transformation that is dependent, in part, on the patient's state

of cognitive flexibility. At other times, the *baraka* inherent in the prayer, verse, or healer is viewed as the intervention to effect a healing change.

In explaining the way that prayer functions, the apprentice described two concepts. The first he stated was a difficult system for him to explain fully since it was based upon mathematics and mythology, and since most of the knowledge about the practice had been lost or destroyed. They were in the process of reconstructing components of the practice that remained, and upon which they could build new ideas. The second explanation was an overarching principle that was always involved for any particular treatment to be effective. The apprentice briefly explained the first approach as a "complex mathematical system" based on the Arabic *abjad* system where each letter of the alphabet has an assigned numeric value. In choosing the prayers, the names of the patient and the patient's mother were calculated in terms of their numeric value. Each letter's value as well as the cumulative value of each name has certain linguistic, cultural and astrological associations. Other associations relate to the time and place of birth, each of which has a particular esoteric meaning. Based on these numbers and their relationships, certain prayers are chosen. "If the names of the patient, the mother, or the star, day, week, month, and year under which the patient was born, and the relationships between all these are not properly calculated, then it [the prayer] won't work." This is one of the practices that the apprentice was learning from the *khalifa* and he could not explain more, nor would the *khalifa* discuss the subject further.

In the second approach they emphasized that more important than the details of the numeric system or the use of music or chanting, or which prayers and verses were chosen, was the spiritual state and intention of the healer and patient. Specifically, he said *agar i'teqât bâshad bâ hamin kas, du'â ke man dar nevesht man sâz misham, va yak cheezi vasil hast beine khodâ va mâ . . . va ta'sirât migirim;* "if there is trust and belief in the person, the prayer that I transcribed becomes an instrument, a tool between God and us . . . and we are then influenced by that power." He further explained that *hame chi dar daste khodâs* "everything is in God's hands" and the instrument or treatment is secondary and dependent on purity of heart—*agar dele pâk nabâshad, âdam pâk nabâshad, hich du'â hich ta'sir nadârad,* [he repeats] *hich ta'sir nadârad, in moshkele in ilm dar hamin ast—bâyad dele pâk bâshad, az dele sâf . . . mâ bâyad du'â bokonim ke mostejâb shavad. Ya'ani hamun du'â barâye kasali tabâbat shavad;* "if you don't have a pure heart, if a person himself is not pure, no prayer can have any effect, [he repeats] no prayer can have any effect, the difficulty in the knowledge (or science of prayer) is just that—you must have a pure heart, only with a pure heart should we pray, then it will be accepted. In other words, such prayer becomes a healing treatment for the sick one." He continued to say that their

practice, utilizing this second approach, has been very successful and even cured his wife's a bone disease, as well as many other patients with a number of different illnesses.

Meaning and Baraka in Music and Place

Ma'ani (literally "meaning") is a word that is often found throughout a discussion of the healing power of *maddâh*. The meanings conveyed through performance are believed to be efficacious and relate to the five factors introduced in chapter 1—the physical, psychological, social, emotional, and spiritual. In addition, participants' belief in the healing power of *maddâh's* prayers and ceremonial practices forms an underlying fabric within which meaning is assigned. Through metaphors and symbols, cognitive links or associations with locally ascribed meaning facilitate the flow, increase, or manifestation of *baraka*, thereby creating the efficacy of *maddâh* as a medical intervention, and by extension, other genres of prayer that might occur during or outside of the ceremony.

For *maddâh* performance, a key figure is the local religious leader (a *khalifa* or *mulla*), whose role it is to explain *maddâh's* multiple levels of meaning—specifically its textual, didactic, and mystical meaning. This role is regarded as a sacred duty and honor. As one *khalifa* explained, "Through thoughts and remembrance/mentioning we can better understand the meanings of *maddâh*; through thoughts and remembrance/mentioning we become closer to God . . . and this is healing." The Persian words for "thought" (*fekr*) and "remembrance/mentioning" (*zekr*) are very often used together as in *"fekr o zekr,"*[2] which not only has a particular poetic aesthetic with respect to the sound and rhythm of the phrase but also shows a linguistic connection between thought (*fekr*) and action (*zekr*), or the unsounded and the sounded, the unseen and the manifest. Most important, in this context, *fekr o zekr* relates to the role of *fekr* being a way to become immersed in and imbued with God's *baraka*, then through *zekr,* allowing that energy to enact a new reality. In the context of *maddâh* performance, *fekr* and *zekr* can indicate broad and universal concepts of spirituality found across religious traditions, as well as specific topics that guide activities of daily life for participants. For instance, in one performance in Ishkishim, the *maddâhkhân* advised listeners to "avoid forbidden foods, thoughts, lustful desires and actions," while explaining the spiritual consequences of not following such guidance, specifically that "physical and spiritual illness would ensue and the individual would fall out of God's favor."

Figure 3.4 shows an interview with the *khalifa*[3] after a performance of *maddâh*. The *maddâhkhân,* Sultan Nazar, is pictured between us against the

FIGURE 3.4. Interview with a young *khalifa*.

back wall, and Davlatnazar is on the far right. In the context of this interview, the *khalifa* conveyed his personal experience of the healing effects of *maddâh* within the broader discussion of music, prayer, and healing, saying:

> There is something special I feel if there is any problem or illness that I have, after hearing or listening [to *maddâh*], all the problems disappear. The particular problem that I felt, and every problem, they all disappear . . . this is what happens to me . . . in all respects, the soul, mind, body—in whatever way I am ill, from that perspective, be it soul or mind, I get a kind of feeling, a special condition, and to the degree of illness, I listen to maddâh to that degree. The healing is different each time. Depending on the illness and my feeling, the illness feels like it just disappears, or I feel something else, it is not one way, the healing happens in multiple ways. Sometimes it's stronger or weaker, the feeling or special atmosphere varies.

As a symbol of their attention to the sacred nature of *maddâh,* performers, especially the *maddâhkhâns*, insist on donning the traditional hat, *toqi*, worn out of respect for the genre and what it represents. They exist in various styles and are the essential article of clothing for the *maddâhkhân*. In Badakhshan, not once did I observe a performance of *maddâh* where the *maddâhkhân* did not wear a *toqi*. They are also worn by local religious leaders, healers, elders

FIGURE 3.5. *Toqi.*

and respected individuals in the community as a sign of religious or cultural association with Pamir (see figure 3.5).

The interview went on for about half an hour, then we paused for a moment, smiling, and it seemed that our interview had concluded for the time being. Then he turned to the *maddâhkhân*, then to the rest of those gathered, and said with a smile and joyful tone in his voice, "Okay, now he (the *maddâhkhân*) can perform a *munâjât*!" and he did.

Afterward, the *khalifa* went on to discuss the preventive aspect of *maddâh* as it relates to a person's daily actions. As is often the case in Pamir, he began with a poem to explain the essence of meaning: *Az to harakat, Az khodâ barakat*, "From you action, from God blessings/spiritual power." He continued, "This couplet [often invoked in daily life in Pamir] shows a connection between the individual and *baraka*. So you see, an individual's actions form one path through which *baraka* gives healing." He described this healing potential as a mystical process or bounty that "is in God's hands." Following in this line of thought, he continued to discuss the didactic aspect of *maddâh*, stating that it gives counsel to individuals as to what is *halâl* and *harâm* (allowed and forbidden) in life, what are an individual's spiritual duties, as well as what constitutes healthy living. That which constitutes healthy living, or that which can bring about illness or healing, might pertain more to one or more aspects of the

tripartite whole of *aql-tan-ruh/jân* (mind-body-spirit/soul), yet will have an impact on the whole. He concluded by saying,

> So, I think deeply, meditate on the meaning, on the words of God, and something happens, a change, I become well—in my body, my thoughts, my being, my spirit . . . it's mystical, a thing that is spiritual, but effects everything. . . . Sometimes people have a serious physical or mental illness and they become healed too—not always, as I said, everything is in the hands of God, but I have witnessed it.

Baraka and the Poetry of *Maddâh*

Internalizing *baraka* through participating in a *maddâhkhâne* is viewed as a normal aspect of healthy living, as a preventive practice (if one is healthy), and as a curative practice if one is ill. In the poetry of *maddâh*, words that imply healing and transformation are often related to God or to the *panjtan* (lit. "five holy people"), which refers to the holy family of Islam: Muhammad, Ali, Fatimih, Hasan, and Husayn. For example: *âbe dân* (the water of God/pure knowledge); *shafâ* and *darmân* (healing/cure/remedy/medicine); *bakhs* (forgiveness); *qovat* (power/strength); *ruh* (spirit); *jân* (soul); *pâk* (pure), *qaraz* (transformation/purification); and *baraka* all convey aspects or degrees of healing energy. In the following lines from a *maddâh* performance by *ostad* Akbarshah, many important relationships between belief, symbols, metaphors, and the *maddâhkhâne* are emphasized in the words. Most importantly, the meanings among these relationships are explicitly directed toward healing. Thus, the excerpt below provides one example where the words of *maddâh*, enter the cognitive-spiritual domain as a participant attends to the words and their multiple levels of meaning, and intends to achieve a healing transformation. Moreover, these are common themes in *maddâh*, often conveyed in general terms, as specific didactic counsels, or in the form of stories (see, for example, Berg 1997, 228–33).

1. âbe dân ke asl hame kâyenâte in panjand
2. Sotune khâneye in, shesh jihât in panjand
3. Qabule haje siam, salâte in panjand
4. Shafiye in jomleye Ali nejâte in panjand
5. Va az in fitrat arz o samâ, lab o qalam
6. Bâ har chi labe khiâlam, nâme panjtan râ did
7. Qaraze fitrat ze âtesh sharife khod fahmid
8. Ay najâte bakhs bânui nabinad dargah tafâ'ul

9. Shafâ keande Aiyub dâfi‘ kermân
10. Darmâne âteshe suzân negahe be khalil

1. The life-giving water of God that is the essence of all things is the panjtan
2. The pillars of this house—the panjtan [encompass] all directions
3. Acceptance of pilgrimage, fasting, and prayer (salât), depends on them (the panjtan)
4. Our intercessor from this group is Ali, our helper
5. And from this power of God [baraka] come the earth and heaven utterance and the revealed word
6. Whatever I say or think, the names of the panjtan are seen
7. Transformation/purification by the fire of God's power reveals the noble self
8. O forgiving Lord, protect all from the door of evil
9. Healing was given to Job by the protector of Kerman
10. The burning fire of healing/cure comes from seeing the friend of God

These lines were transcribed from the opening seven minutes of a *maddâh* performance. I have omitted some lines that were repetitive and included numbers for ease of reference, not to indicate any formal structure. Line 1 sets the stage of belief within which healing can occur—specifically a belief that the *panjtan* embody the power of creation. Line 2 symbolically and metaphorically links the five pillars of the *maddâhkhâne* to a kind of immersion in the mystical space that the pillars and the *panjtan* preserve. Line 3 then mentions three of the five central practices of Islam, indicating that the true performance of these acts is dependent on the acceptance of the *panjtan*. Moreover, this implies that acceptance of an act is not necessarily dependent of the specific form of a practice; rather, acceptance is dependent on the purity of heart in which an act is performed. Line 4 emphasizes the special position of Ali among the Pamiri Isma‘ilis and his role as their intercessor. Line 5 recalls the meaning of line 1, further emphasizing the creative power in the *panjtan* and adding that the power is also in the *lab o qalam* (lit. "lip and pen"). *Lab* implies the power of utterance, and *qalam* the power of writing. Moreover, both of these terms can refer to divine revelation in general, and specifically to Muhammad as a channel for God's revelation through utterance or sayings/traditions (hadith) and writing (Qur'an). Notably, the Pamiri Isma‘ilis generally recognize divine revelation as not limited to Islam, but include other religions as well, which in part can be attributed to their reverence for Jalâl al-Din Rumi, whose poetry is well known to express the utmost reverence for all of God's revelations. Line 6 then connects all of this to the individual, implying that one's words and thoughts

should be pure and see the *panjtan* at all times. Line 7 builds on line 6, suggesting that through pure words and thoughts (and all that this implies), a transformation of self can occur. Specifically, this line draws on a common theme in Sufism, which is that through the fire of the love of God, the lower self (*nafs*) can be burned away and replaced by the higher self, which is closer to God, and that thinks and sees only good (line 6). Line 8 is an invocation, asking that God protect all people form the "door of evil," which is the evil of the lower self. This line further highlights a common Isma'ili view that is inclusive, rather than separatist, asking that God protect all people, not just their community. Line 9 gives a historical example of Job's deliverance from suffering, which the poem connects to Shah Nematollah Vali, the fifteenth-century Sufi saint whose tomb lies in the vicinity of Kerman, Iran, and who is known as the "protector of Kerman." Line 10 again draws on the metaphor of fire as healing (*darmân*). Importantly, healing is linked to an individual's actions and "seeing the friend of God." The "friend" here can indicate two levels, the Prophet Muhammad (and by extension the *panjtan*), as well as those that are in the process of "embeingment" toward a more God-like self regardless of religious association.

Five: The Architectural Embodiment of Meaning

Certain symbols and metaphors stand out as central vehicles of meaning in *maddâh*. [4] The number five represents the most significant and power-laden symbol and metaphor of local belief. Five is a symbol intimately linked to *baraka*, giving sacred meaning to and even defining many elements of Pamiri culture, including the architectural design of the Pamiri home and *maddâhkhâne*, the individual, the Isma'ili community, central religious beliefs, the natural and mystical landscape, poetry/prayer forms, and the music of *maddâh*.

The *maddâhkhâne* within the Pamiri home has a specific architectural design, which embodies central religious beliefs and contributes to its role as a place of healing. Often, various aspects of its built form, which are somewhat flexible in their meaning, are described as originating in the Zoroastrian religion and other ancient, pre-Islamic beliefs. However, several specific meanings are commonly shared among Pamiri Isma'ilis. These relate to the primary structure of the *maddâhkhâne* and the role of *baraka* in healing. Architecturally, the room is supported in part by five structural pillars, which collectively represent the holy family of Islam (the *panjtan*). Each pillar represents one of the *panjtan* and has a specific structural role and symbolic meaning. The pillar that represents Muhammad is centrally located, providing the most structural support and maintaining a preeminent symbolic position. The second and third pillars

represent Ali and Fatimih, whereas the final two pillars represent Hasan and Husayn. These last two pillars are joined by a decorated crossbeam and form the entranceway to the *maddâhkhâne* (see also Keshavjee 1998, 250–55). For the Pamiri Isma'ilis, the *panjtan* are viewed as the primary channels of God's *baraka*. Thus, the pillars symbolically create a *baraka*-laden, sacred place for the mystical experience of *maddâh* performance (see figures 3.6–3.9). Figures 3.6 and 3.7 show entrance pillars to two different *maddâhkhâne-s;* hanging on the left pillar in figure 3.7 is a painting of a saint or *pir*, which has a written prayer request tucked in behind it; on the right is a decorative clock; and on the crossbeam is a box of tea. Paper decorations can be seen hanging in front of the crossbeam. Figure 3.9 shows an artistic design on the pillar itself, as well as on the wall behind it. Both paintings on the wall depict typical nature scenes in Pamiri art—a river or stream flowing from a vast mountain range off in the distance.

In addition, one of the pillars of the *maddâhkhâne* room represents a specific category of daily, required prayer—*salât*. Participants often recite other prayers—*du'â* or *munâjât*—as a preparation for performance. Interestingly, *munâjât* (prayer/supplication) is also the first formal section of a typical *maddâh* performance. The second section, *haidari* (referring to the Imam Ali, who is represented by one of the pillars) draws on examples from the *sunna*[5] and other stories, often recounting historical or legendary examples in which the power of prayer is shown to be efficacious in healing or able to effect a positive change

FIGURE 3.6. Entrance pillars to the *maddâkhâne*.

FIGURE 3.7. Entrance pillars at another *maddâhkhâne*.

FIGURE 3.8. Pamiri girls pose with one of the five *maddâhkhane* pillars.

FIGURE 3.9. Hand-painted *maddâhkhane* pillar.

in general. Finally, the *setâyesh* (praise) is yet another kind of prayer and the third and final section of a typical performance.

Instrumental Embodiment of Meaning

The pivotal instrument of *maddâh* is the long-necked lute known as the Pamiri *rubâb*. The *tanbur* (also a long-necked lute), on rare occasions replaces the *rubâb*, but most often accompanies it during performance. Other accompaniment instruments include the *dâyere* (frame drum), and at times the *ghizhak* or *kamânche* (spike fiddle). There can be more than one of all the above-mentioned instruments for a *maddâh* performance. However, *maddâh* can also be performed solo by the *maddâhkhân*, who both sings and plays the *rubâb*. A typical performance includes one or two *rubâb*-s (or one *rubâb* and one *tanbur*), and one or two *dâyere*-s.

The *rubâb* is a local archetype and metaphor for a human being, which is viewed as being essentially spiritual, and which is expressed in a prominent Pamiri legend. The legend says that the *rubâb* descended from heaven as a gift from God; it was modeled after the human form, most importantly utilizing the skin and gut of a sacrificial lamb for the face and strings of the instrument; the instrument was played by angels and is to be used for singing praises to God. The metaphor shows the *rubâb* as a reflection of the higher self within a

human being. Thus, like the *rubâb*, the human soul is also viewed as emanating from heaven as a gift of God; furthermore, a human should be in a constant state of prayer and of singing praises to God, not only through devotional music performance but also through the daily actions; finally, both the *rubâb* and a human being are instruments of God, through which spiritual energy (*baraka*) can flow (see figures 3.10 and 3.11). The top half of figure 3.10 shows ancient cave wall carvings of cosmological symbols; and the bottom half shows an image of two *rubâb*-s. Although these are two separate photographs, they are placed together in the Khoroq Museum, emphasizing the local associations between the *rubâb*, spiritual dimensions, and the cosmos. Figure 3.11 shows an elaboration on the metaphor and mirroring of the *rubâb* as a human being. To emphasize the human form, two necks are made to give the figure two legs. Although this instrument can and has been used in performance, it was created as a work of art and now resides in the same museum. Each neck has six strings, and one drone string is found in between, stretching from the figure's

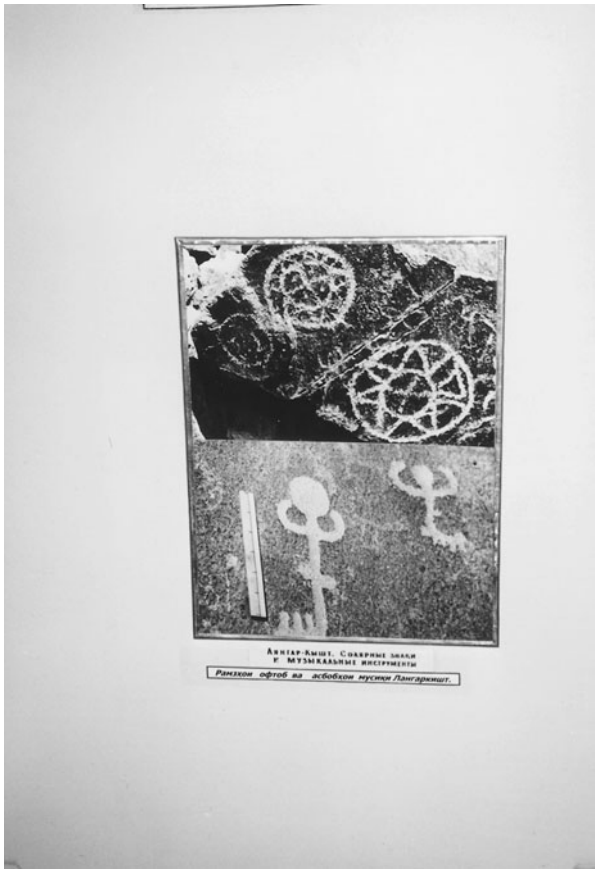

FIGURE 3.10. Ancient cave wall carvings in Badakhshan.

FIGURE 3.11. Human form *rubâb*.

nose to the jacket's first button. The instrument usually has 5 strings and 1 drone string.

The *rubâb* embodies and conveys a web of meanings linked to Pamiri cosmology, mythology, religious belief, and prayer practices. Hence, even when the *rubâb* is used in some folk genres that are not religious or devotional in the same way as *maddâh*, it nevertheless maintains a special position as a sacred instrument and is approached with reverence. The *rubâb* often has prayers carved out of the middle section of the instrument or written on the skin that covers the body or resonance chamber. Similarly, prayers are often written and carved out of the middle section of the tanbur, and written on the skin portions of the *dâyere*. The *ghizhak* can also have prayers written onto or carved into the metal or wooden resonance chamber, as well as the neck of the instrument. In this way, not only is the *maddâhkhân* vocalizing and wailing out mystical poems and prayers, the instruments, especially the *rubâb*, are viewed as being in a perpetual state of prayer and singing their own

FIGURE 3.12. *Rubâb* with prayer.

praises. For example, figure 3.12 shows a prayer for assistance carved out of the body of the *rubâb*. It is in the form of a brief invocation that is often recited by *maddâh* performers: *Yâ Ali madad* ("Oh Ali, divine helper"); figure 3.13 shows a similar prayer carved out of the body of the *tanbur: Yâ Muhammad, Yâ Ali;* and figure 3.14 shows the skin of a *tanbur,* where a longer prayer of praise and assistance can be faintly seen. It has been mostly worn away from years of playing.

Aspects of Musical Form

Maddâh is distinct from other genres in the country and region. It was often mentioned to me by older *maddâhkhân-s,* folk and *sheshmaqam* musicians, as well as young pop musicians, that *maddâh* was "completely different from and unrelated to the sheshmaqam," having its own unique form, rhythms and melodies. Beyond this, the *maddâh* of the Pamir Mountains is unique in its preservation of ancient musical elements and associations, which, in large part, is due to the isolation of the region by the mountains themselves, which makes Pamir an extremely difficult area to access. Although there has certainly been cross-cultural interchange in this area over the centuries, the mountains have greatly limited such exchange, so the music and culture of Pamir reflects a different aspect of the broader region than do Bukhara, Tashkent, Khojand,

FIGURE 3.13. *Tanbur* with prayer.

FIGURE 3.14. *Tanbur* with prayers.

Dushanbe, or other cities where a greater degree of cross-cultural interaction was more of a rule than an exception.

Maddâh consists of three broad sections: *munâjât* (lit. "prayers/supplications"); *haidari* (relating to Ali); and *setâyesh* (lit. "praise"). These major sections can contain many subsections and interludes, which are guided by a flexibility that is inherent in the genre. Nevertheless, a consistent aspect of each section, as well as of the overall form, is a movement from low to high, which seems to reflect metaphorically the spiritual purpose of *maddâh*—to move from the lower self to the higher self. From the beginning to the end, various sonic aspects of the music increase, including the amplitude, frequency, and complexity of waveforms. In addition, the rhythmic structure becomes more complex as the performance progresses, and the tempo increases—at times maintaining a faster pace, or continually increasing in tempo throughout.

The ritual performance of *maddâh* begins in silence, with participants sitting throughout the sacred space, mentally preparing and waiting for the *maddâhkhân* to begin. The *maddâhkhân* might recite a prayer in a low voice for his personal preparation to begin what is considered to be a sacred act. He then enters the first section, or *munâjât,* which consists of prayers, often for forgiveness, and poems testifying to one's lowliness and humility, and which is the calmest and most reserved section of the performance in terms of *baraka,* musical energy and texture. *Munâjât* is most strongly associated with petitionary and intercessory prayer, or *intejâ',* in which one *seeks with the hope of gaining an answer or resolution*. It is in a free musical meter where the *maddâhkhân* accompanies himself on the *rubâb* in a call and response format between the voice and instrument, doubling and alternating unique and repetitive strumming patterns and melodic lines. This act alone is a metaphor for communication between the Divine and the world of creation. During this section, the *maddâhkhân* might loudly call or cry out a brief invocation or admonition from the poem, only to quickly return to the overall quiet tone of the introductory *munâjât*. Throughout this vocal and instrumental interaction, there is a constant interchange between a pulse-structured organization, and a free-rhythmic organization of music. This slowly progresses for a duration ranging from a few minutes to approximately twenty minutes.[6]

The second section is the *haidari,* which consists of invocations and narrative, didactic poems that often recount the *sunna,* and lives and actions of *pirs,* saints, or holy people, most often Ali. The *dâyere* frame drum enters in this section, providing a regular pulse in a strong duple meter. If present, other *rubâb* or *tanbur* lutes enter here as well. In this section, the addition of more performers to the group, the increase in volume and tempo, the introduction of a regular beat and repetitive rhythm, cause the musical energy to be markedly

higher. Moreover, the *haidari* often gradually and significantly increases in tempo, giving a feeling of anticipation, or even urgency to the musical-spiritual experience. At the end of poetic verses, the *dâyere* changes from the duple-meter organization and doubles the melodic rhythm of the *rubâb*, rather than playing a contrasting, supportive rhythmic pattern.

The final section, *setâyesh* (lit. "praise"), is the climax of the performance and the culmination of multiple levels of meaning. It often includes spontaneous vocalizations of the performers and community members. Socially, the community plays an important role during performance by collectively and powerfully vocalizing the word *Ay* (lit. "Oh"), which functions as an invocation to God and facilitates a heightened, shared experience of worship, altered consciousness, and sense of *baraka*. The evocative word is elongated and conveys multiple levels of cultural meaning. One of the most important relates to the special term *maddi bulbul* or "the song of the nightingale (on account of its prolonged notes)" (Steingass 1996, 1199). The relationship to the song of a nightingale is full of mystical meaning and has a clear connection to devotional genres of music throughout the Middle East, but especially in Persian-speaking regions. Perhaps the most common metaphor is that of the nightingale and the rose, which represent the lover and the Beloved. The nightingale (lover), which becomes enchanted by the beauty and fragrance of the rose (beloved), naturally responds by singing its melody of love—while a person (lover), who is enchanted by the beauty of the Beloved (God), naturally responds by singing praises of love, which in this case takes the form of an elongated invocation.

Throughout the last section of *maddâh* performance, at certain points of heightened energy, and as the performance builds up to and reaches ecstatic states, an entire room of people wail out such an elongated note of invocation, which is both laden with emotional meaning unique to each person, and simultaneously weaves a connection between the participants and the objects of their prayers. Each person holds the wailing tone for different durations. It is usually steady until the end where individuals either stop the tone abruptly—often with a strong exhalation, or a fast decay and sweep upward, or a kind a vocalized sigh that descends. The words of the *maddâhkhân* become increasingly difficult to discern as he and others are progressively imbued with mystical feelings, carrying them into altered states of consciousness, often into a spiritual states of ecstasy. In addition, the meaning of the verses sung in this section often becomes increasingly obfuscated.

The rhythmic organization of the *setâyesh* is unique and can be understood in multiple ways. In addition to the multiple meanings assigned to the number five in Pamiri culture, the *setâyesh* section can be viewed as being in a quintuple musical meter, revealing an inherent connection between music, belief,

environment, symbol, and metaphor. Moreover, the juxtaposition of triple and duple meters in the *setâyesh*, which is discussed below, encourages a flexibility of consciousness, which frames and facilitates the experience of healing for participants. It is important to note that *maddâh* is a mystical genre, at the heart of which is a high degree of performance flexibility and allowance for innovation and improvisation.

Although the musical and sonic features progress from *munâjât* to *haidari* to *setâyesh* with great regularity and can be considered as creating a broad formal structure, the *meaning* in the poems and prayers cannot be as strictly categorized. That is to say, all sections might testify to one's humility and God's greatness; all sections can convey moralistic stories, counsels, and didactic subject matter; and all sections can be about praise and love of God. The three sections form a crescendo in both a musical and meditative sense. Although the musical features increase and become more complex and active on all levels throughout the performance—including volume, timbre, tempo, pitch level, and rhythmic organization, the meditative focus of participants becomes deeper, creating a new context of consciousness, where healing transformations can occur.

Cognitive Flexibility

Exploring the unique rhythmic and metric structure of the *setâyesh,* along with its textual meaning and local orientation of belief, reveals a powerful and dynamic interaction among sound, symbol, and metaphor that encourages a certain cognitive flexibility, which engenders an altered, higher state of consciousness, and facilitates healing. Building upon a core concept of cognitive flexibility, which refers to "the ability to spontaneously restructure one's knowledge" by "criss-crossing conceptual landscapes" (see Spiro and Jehng 1990, 165–69), the following section shows a deeply embedded link between the musical structure and the *baraka*-laden cultural symbol of "five."

Cognitive flexibility has often been applied to exploring new techniques in education and psychology. In conjunction with neuroplasticity, it serves as a key conceptual frame in research that explores the underlying dynamics of brain function that relate to multiple levels and aspects of healing and transformation (see, for example, Beversdorf et al. 2002; Walker et al. 2002; Tchanturia et al. 2004; Loh and Deco 2005; Stemme et al. 2005). Hinton (1999) elegantly and effectively applies cognitive flexibility theory to the musical healing practices of the Isan people of Northern Thailand, where symbol and metaphor are key components of ritual healing (see also Kirmayer 1993). Hinton links cognitive flexibility to a process of embodiment and mimesis, where Isan healing

music mirrors and represents aspects of the natural environment and words of the healer, all of which set the stage for effecting healing transformations.[7] Both healer and patient embody the cultural metaphors, movements, shapes, symbols, and sounds in the environment and music to accomplish the goal of healing (Hinton 1999).

Cognitively flexibility can be seen to undergird practices and experiences of musical healing in other works where the theory is not directly invoked, inasmuch as it rests upon the central notion that traversing and integrating conceptual domains is essential to achieve a specific outcome (e.g., healing), or to create a particular effect or experience. For instance, Roseman builds upon Schultz's "provinces of meaning" (Schultz 1967, 232), to describe a type of cognitive flexibility in which "participation in one province of meaning replaces participation in another province of meaning, each respectively contributing to a total frame of reference" (Roseman 1991, 152). She suggests that "the provinces of meaning. . .need not always be finite: participation in one province might overlay or intersect another, rendering 'nonfinite' provinces of meaning" (Roseman 1991, 152). This interplay between provinces is in part one way to understand key aspects of healing transformations among the Temiar. In reference to the musical healing practices of the Tumbuka of Malawi, Steven Friedson cites a *vimbuza* patient who states, "When I listen to the *vimbuza* drums I begin to lose track of whether they are outside or inside my head." In Friedson's personal experience of the *vimbuza* drumming, he describes a shift in his consciousness and the dynamic of listening where "'threes' were becoming 'twos' and vice versa." He suggests a "mirroring" between the shifting rhythmic structure or "metric doubling" of *vimbuza* drumming and the "consciousness-doubling" of the healer's trance-state (Friedson 1996, 158–62). The effect of the music, especially the "shifting" aspect of it, can be seen to focus and alter consciousness to achieve the goals of trance and, ultimately, healing.

In the case of the *maddâhkhani,* since the mind (including cognition and consciousness) is linked to a holistic concept of self, cognitive flexibility can be seen to engage the whole of one's being to describe the meditative, flexible mind-body-soul state of participants. This state of flexibility facilitates the restructuring of the self by integrating the *baraka* conveyed through the music, text, symbols and metaphors of performance. In addition to the above-mentioned musical movement from low to high, the flexible two-against-three type of rhythmic structure of the *setâyesh* (discussed below) encourages cognitive flexibility.

Local musicians most often describe the *setâyesh* in essentially the same terms—as something mystical, spiritual, "for giving thanks," "very unique and wonderful," and "full of *baraka*." When asked about the rhythm of the *setâyesh*,

musicians would simply show the rhythm, without the need of any term other than "*setâyesh*." Musicians, the *khalifa*, and other participants would consistently describe the *setâyesh* section as a "feeling" or "atmosphere"—a time where regular consciousness would change into another consciousness. The young *khalifa* interviewed above, on another occasion said that when listening to *maddâh*, especially the *setâyesh* "My thought changes . . . and becomes a different kind of thought, a mystical, spiritual thought." In discussing the *setâyesh* with multiple performers and participants, the overall meaning was central. The potential to change consciousness was attributed to the confluence of *baraka*, which intensifies during this section, and which, is conveyed through multiple levels of sound and meaning. Musicians emphasize the change in the *dâyere's* rhythm during the *setâyesh* as critical for a successful performance. Whereas cognitive flexibility during ritual performance might occur through diverse means, and is not necessarily dependent on any one element, the rhythmic structure of the *setâyesh* is a defining element and key component for creating the spiritual aesthetic of *maddâh*, and thereby is critical for effecting a change of consciousness.

The distinctive rhythmic structure of the *setâyesh*, combined with the underlying, five evenly-spaced pulses is perhaps best described as an interaction or overlaying of flexible triple and duple meters—or three against two. An excerpt from a performance by *ostad* Sultan Nazar will serve to illustrate (see figure 3.15). This figure presents a transcription of an excerpt in five-line staff notation to provide some sense of what is typical of the *setâyesh*. The poetic phrase translates as "Oh, oh star, oh guiding light, oh light of this gathering! No silence, I shall not be silent."

The melodic material for a complete *maddâh* performance is much more than is presented in this excerpt. Most often, a chromatic scale spanning one and a half to two octaves provides a kind of sound palette from which modes and melodies are built. Usually, the tritone (from the beginning note of the chromatic scale) is omitted. In the performance from which this excerpt comes, the scale is based on d and the range extends to g1, with the note g# being omitted. There are many melodic and rhythmic subtleties in the music, which cannot be exactly represented by staff notation. The trill marks in the voice part indicate a melodic movement more akin to an extended turn, where the voice moves both above and below the written note by an interval of a quarter tone or less. The dashed lines between notes in the *dâyere* indicate a roll that can occur with the left hand. The written notes of the *dâyere* part do not indicate exact pitches. Rather, the lower note indicates a stroke in the middle of the drum, producing the drum's lowest sound, and the upper note indicates a stroke close to the drum's outer edge, producing a higher sound. Notice that the rhythm of

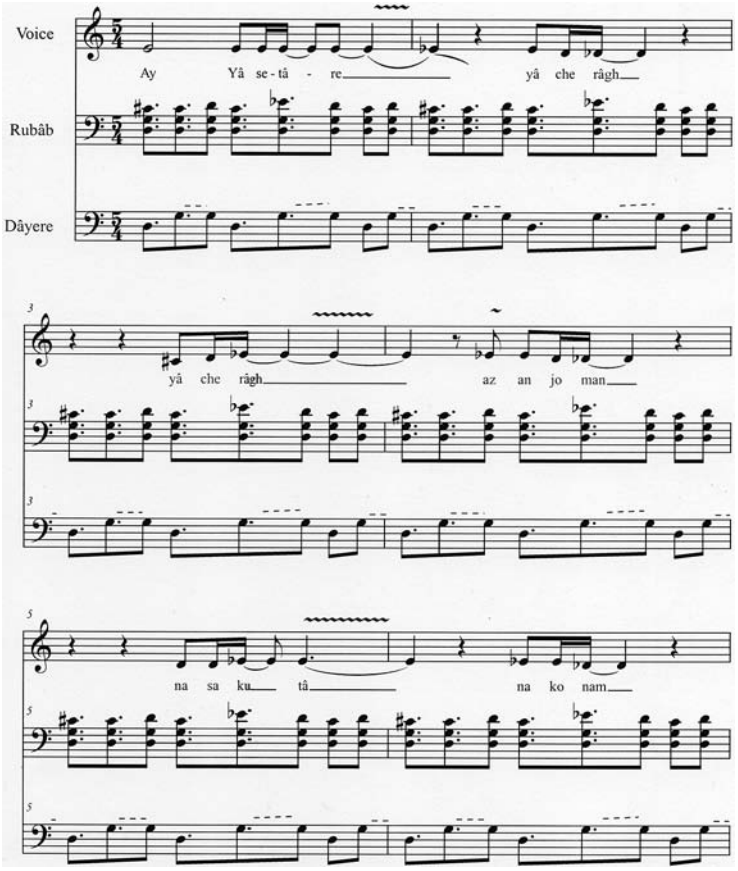

FIGURE 3.15. Setâyesh excerpt from a performance by *ostad* Sultan Nazar.

the *dâyere* and *rubâb* are the same and create a pattern of eight accents across five evenly spaced beats, which in the next figure are discussed as a flexible juxtaposition of duple and triple meters. Also note that the beginning of the poetic phrase coincides with beat one of measure one. While not every poetic phrase begins exactly on beat one, with entrances often being syncopated or delayed, it is clear that poetic phrases and verses correspond to the recurrent rhythmic pattern of eight accents and the 5/4 meter.

Figure 3.16 shows a graphic of a waveform to visually illustrate this rhythmic structure in the sound itself to avoid a certain level of interpretation implicit in staff notation. The word "Triple" on the top left of the graph indicates a triple meter (e.g., 3/4). The word "Duple" on the bottom left indicates a duple meter (e.g., 2/4). Thus, a flexible three against two meter is suggested. Note that before the first marker in the waveform, extending across the middle half of

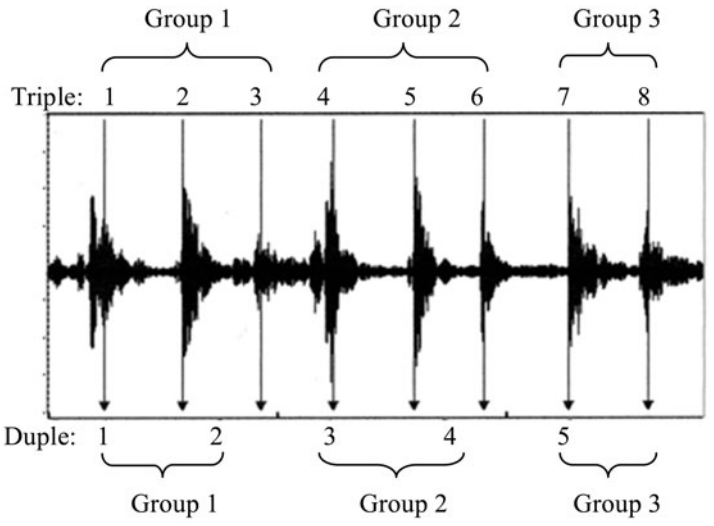

FIGURE 3.16. One cycle (or measure in 5/4 meter) from the *setâyesh*.

the left vertical axis, an amplitude peak can be seen, which is not indicated as pulse 1. This is an upward strum/anticipation on the *rubâb*—the musically strong pulse begins where marker 1 is placed. A similar, but smaller anticipation can be seen before the second number 1 near the middle of the waveform. Vertical markers within the waveform identify eight pulses, or amplitude peaks, which are created by the *rubâb* strums and *dâyere* strokes. The graph represents one cycle of the pattern that repeats throughout the *setâyesh*. The purpose of this analysis is not to prove that the *setâyesh* is constructed in a strict three against two polymeter. Rather, it is to show that a special rhythmic relationship exists between what I have called flexible triple and duple meters, which encourages the process of cognitive flexibility.

Furthermore, a flexible, triple meter is suggested above the graphic with three groups indicated. Groups 1 and 2 each contain three pulses, rendering two complete repetitions of a triple-metered structure (or two measures in 3/4 meter, each group representing a measure). Group 3 comprises only pulses 1 and 2 (not a complete measure in other words). Each of these pulses corresponds to an amplitude peak within the waveform and is numbered 1-8. Below the graphic, the same organization exists, but in a flexible, duple meter. Groups 1 and 2 each contain two pulses, rendering two complete repetitions in a duple-metered structure (or two measures in 2/4 meter). Group 3 contains only one pulse (again, not a complete measure)—together making a total of five evenly spaced pulses, which are indicated at the bottom of the graph and are numbered 1–5. These can be considered more evenly spaced since two of

the pulses fall between the markers within the waveform. These two pulses are most often musically implied, rather than accented.

Within each repetitive, regular cycle, there is an internal fluidity that is consistent throughout the performance. In addition, there is a sense of forward motion created by the final two pulses in the triple meter, and the final pulse in the duple meter. As mentioned above, there are two complete repetitions of each meter. That is: triple—1, 2, 3; 1, 2, 3; and duple—1, 2; 1, 2. Then, rather than another repetition, a shortened structure is presented. In the case of triple meter, only pulses 1 and 2 are presented, and in the duple meter, only pulse 1. Instead of completing the established metric structure, the cycle begins anew, further facilitating cognitive flexibility. When the *setâyesh* is performed in a faster tempo, pulse 2 of groups one and two in the triple meter becomes less in duration, perhaps encouraging even a greater feeling of forward motion inherent in the structure.

Commenting on this analysis, *maddâh* performers, while they could certainly follow the quintuple organization, made it clear that "meter" had nothing to do with how they conceive of or perform the *setâyesh*. In one sense, this makes the phenomenon more interesting since the culturally meaningful symbol of five is found in the sound structure without the conscious intent of the performers. *Maddâh* musicians agreed and many were even quite delighted, saying that five being part of the music of *maddâh* was *besyâr ajab, besyâr jâlebast*, "very wonderful/remarkable, it is very interesting"; one older *maddâhkhân* looked deeply into my eyes as though he was commenting about something more that *maddâh* saying "yes, there are always relationships, sometimes we discover them."

For some participants, the feeling of a cyclic, nonstop, forward motion of the *setâyesh*, in conjunction with the spiraling, mystical verses of prayer/poetry, encourages a kind of movement or further unfolding of consciousness that does not allow one's thoughts to stay in the dimension of the *nafs*. The *baraka* of the music and poetry are increased and further intertwined during the *setâyesh*. Each rhythmic cycle pushes the voice of the *maddâhkhân* to the next poetic verse, at times with a sense of energy and abandon that might be compared to the feeling that one experiences at the borderline between maintaining and losing control while walking down a steep hill. Participants engage in a cognitive-meditative process that seeks to traverse such a borderline—letting go of self control, allowing the hill to carry them forward—only in the case of *maddâh*, the metaphoric hill would carry the thoughts of participants upward, rather than downward.

In viewing *maddâh* as a medical intervention, cognitive flexibility can be a frame to describe and conceptualize the processes, goals, and outcomes of

music–prayer performance. Central to the ritual performance of *maddâh* is the conceptualization of music, prayer, and meditation functioning as a unified whole, rather than separate phenomenon that are oft times joined together. The overlapping components of a *maddâh* ceremony create a unique confluence of symbols and sounds full of cultural meaning and *baraka*. Together, the meaning ascribed to *maddâh*, as well as the *baraka* associated with it, are central to the Pamiri view of potential healing through this genre. In addition, the musical structure of *maddâh*, particularly the *setâyesh*, encourages a state of cognitive flexibility that underlies and facilitates the experience of musical healing.

Participants who seek health or healing through *maddâh* direct their attention toward a dimension where only health exists—a state of consciousness that is characterized by a spiritual aesthetic and is defined, in part, by the nonexistence of illness or disease. The ceremonial performance of *maddâh* facilitates a flexibility of consciousness, allowing a "conceptual landscape" that is associated with illness, to cross over to a "conceptual landscape" that is inherently healthy and beyond illness. Through the *maddâh* ceremony, participants aim to immerse themselves in a new state of consciousness, internalize that consciousness, transfer it into the self—aql-tan-ruh/jân, and thereby bring about health and healing. *Maddâh* functions as a bridge between cognitive domains, linking dimensions of the mind-body self (*aql, tan*), which is subject to illness and disease, to conceptualizations of the spiritual self (*ruh/jân*), the spiritual realm, and God, which lie beyond illness and disease.

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4

Soundscape and Musical–Spiritual Entrainment

kuh be kuh nemiresad (mountains come not together),
âdam be âdam miresad (people always return to one another).
—Traditional Persian aphorism

First Experience of Music and Prayer in Tajikistan

As we made our way through the sea of people in the famous Green Bazaar of Dushanbe, I could discern a faint but powerfeul voice somewhere off in the distance. The voice was obviously live and approaching a closer proximity to our small group of three, which included a research assistant and guide. The timbre and melody of the voice were the first characteristics that I could perceive. The voice seemed to be that of an older gentleman with a worn and dry throat. His melodic prayer consisted of two brief alternating lines, which were repeated with variations in groups that made a tune four phrases. These four phrases comprised what I was to hear as the wandering dervish's prayer.

At the end of each phrase or half-phrase was an accented exhalation, which formed a central sound component of his chanting. The exhalation seemed to function in multiple ways: it gave a punctuation to each phrase, emphasizing the prayer's meaning; drew attention to and magnified the dervish's physical condition and fatigue; gave a certain visceral and sincere quality to the performance, whereby he

seemed to be exerting his last ounce of energy with each phrase; and it created a certain emotional connection between the bazaar goers and the dervish—the patrons seemed to feel and lament the dervish's struggles, while simultaneously admire and perhaps hope to achieve the mystical condition he seemed to embody. Through the sounds created by the throngs of people at the bazaar, I could slowly discern some of the words as they became increasingly audible. The voice seemed to emphasize certain syllables and words—*Khodâvande karim, Yâ nâme kiyâ!* "O God of bounty and grace, O name of God!" was repeated and slowly came to the fore. Other people were looking around to find the dervish with whom they had become somewhat familiar, as he was known to visit the bazaar on rare occasions. The voice became louder, a movement in the crowd started to open a passageway for him as he approached. The dervish moved slowly, bent over, his eyes downcast as he sang, almost hobbling as he balanced his aged and worn body on two oversized crutches that functioned as canes (see figure 4.1). His possessions, which appeared to be no more than a bowl or *kashkul*, some food, perhaps a book and a few other items, were all wrapped up in a white cloth and tied around his waist (see figure 4.3).

He continued chanting: *Khodâvande karim, yâ nâme kiyâ, yek qabul yek bar, na dar jâye digar . . . Yâre tun hamin jâst, qabul karde.* "O God of bounty and grace, O name of God, just once accept me and leave me not disappointed in some other place . . . your lover is right here and believes/accepts/submits."

As he continued walking slowly, his head mostly looking down at the ground, I noticed his heavy, rhythmic breathing mixed in with his chanting—the temperature was very hot and he seemed to be tired. He suddenly stopped chanting and walking and leaned on his crutches—a woman was standing still, her hand holding out a 10 or 20 *somoni* note (Tajik dollar)[1]—her offering to the dervish, which he readily accepted. He then offered a prayer for her, which he recited in an energetic voice that at certain moments of emphasis was a kind of shout:

Khodâvande karim qabul konad Muhammad qabul konad
. . . parvardegâre karim har ruzi . . .
Khodâ khair ke dar khâne, dar taraf, dar jaz, dar nun o dar âb o dar khânetun nazar konad,
Paygambari khodâ dast mâl konid
Haq bache haqiq ke qabul konad
Dar dele giyâ por konid
Har ruz bovar kon be shush va tanesh
Ke haq be dele digar dast dar kâr nist O!
Ba âbe ruhye har che Muhammad biâvarad rahmatast,
Yâ haiy! pedar o mâdar o ahebâ rahmat konad.

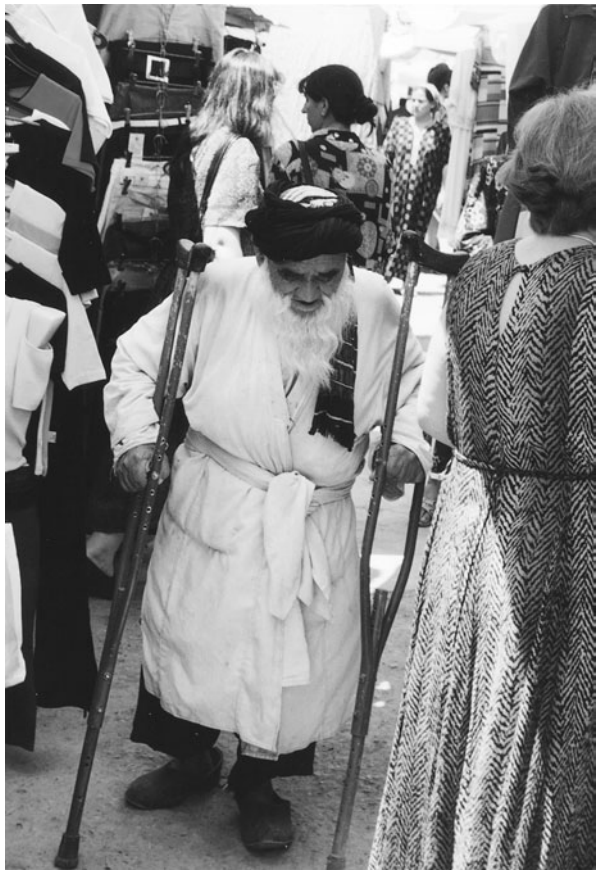

FIGURE 4.1. Dervish approaching—the woman on the right is beginning to turn toward the dervish as he approaches.

God the beneficent accepts you, Muhammad accepts you
. . . God the bounteous, at all times . . .
God, the ever-kind, at home, from the side, on the island, in bread and water, in your home, His glance is upon you,
O prophet of God, purify our hands,
Be true child, in truth he accepts,
Fill and refresh our dry hearts,
Every day believe in the bold one and his body
Busy not yourself with any other heart Oh!
With the water of the spirit, what Muhammad brings is bounty/mercy,
Oh! Grant mercy to her father and mother, and all the people.

She listened with her head slightly bowed and eyes closed. After the dervish finished, she seemed to express thanks by nodding her bowed head once or twice and whispering a few words inaudible to anyone—perhaps it was a personal prayer. He immediately continued walking at his slow pace, singing praises and blessings until the next outstretched hand was seen holding some money. For each new person, he would generally repeat the same prayer with variations in word choice, order, and emphasis. For example, when the prayer was said for a boy that was approximately ten years old, the dervish emphasized the words for father and mother and the prayer was only few lines. In every instance, the prayers were of a greater duration for adults and more brief for children. There seemed to be no difference in the substance of the prayer or its delivery based on the gender of the recipient. The duration might have also been dependent on the amount of money given. For example, the adults always gave more than children in the exchanges that I witnessed.

There were multiple levels of exchange occurring simultaneously between the dervish and the people in the bazaar. In one sense, the exchange of money and prayers was not a business exchange, inasmuch as the dervish was already praying for everyone and no money was needed for him to pray, sing, and offer blessings. People would give money to the dervish for him, not necessarily for prayers and blessings; the dervish then would not stop and pray only because he was given money, but because that was his social role. It is true that the prayers said after accepting money were physically directed toward the person that gave. However, they were not for that person alone, there was also a universal aspect of the prayers, making them both specific and collective. For example, in line 3 of the prayer, the word *khâne* (home) is mentioned first in the universal sense, then in the specific. First referring to all homes, then to "your home," *khânetun*. In another sense, the exchange could be considered a business transaction since this is one way in which the dervish makes money to live, and one way that people can receive specialized prayers from one they consider a mystic, whose prayers are believed to embody a special degree of *baraka*. While it is perhaps misleading to consider such exchanges solely as the buying and selling of prayers, blessings or spiritual energy, it is interesting to note that these interactions occurred in a bazaar—*the* place to buy and sell.

Because I was personally moved by his voice, I ventured to meet the dervish. He greeted me with a smile, a gentle laugh and sparkling eyes saying *Ay bacham, Ay Khoda*—"O my child, O God." We shook hands and I greeted him in Persian, "Dear Sir, may God's blessings and mercy be with you always" (see figure 4.2). I offered an appropriate amount of money to him as was customary and he offered his prayer, at the end of which he said, "*hezâr rahmat, hezâr rahmat!*" In none of the other exchanges between the dervish and local Tajiks did he say this, nor did anyone respond directly to the dervish. In the moment of

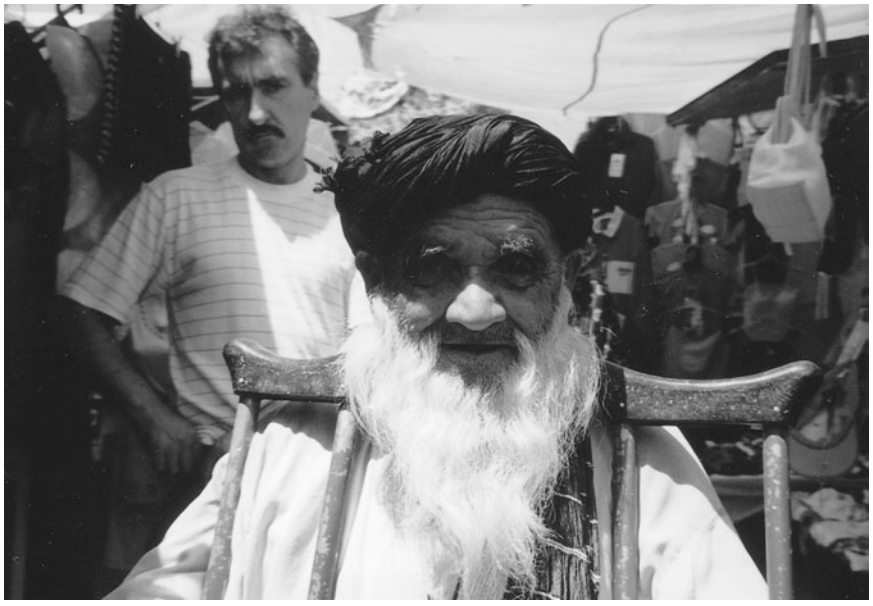

FIGURE 4.2. Dervish portrait.

my experience, I felt connected to him and immediately naturally responded to the prayer he offered for me by saying *"beham chenin,"* which is a way of saying "may the same blessing and prayer be for you too." We looked deeply into each others eyes as our hearts seemed to embrace, he gave a bright smile, as did I, we both gently laughed and he continued on his way, chanting his prayer-tune and disappearing into the crowd.

I went back to my group where the guide and research associate said in excited and intensely interested voices *"hezar rahmat!* you got that?" (i.e., did you understand?)," I responded "a thousand blessings, a thousand mercies." And they both replied with big smiles and a kind of knowing glance and tone in their voices saying quietly, as if we shared some wonderful secret, "yes . . . yes." The importance in this exchange was not that the words were said, but that people believe that certain members of society, including this dervish, have a special capacity to embody and convey *baraka*. While *baraka* is believed to be dispersed throughout creation and, in varying degrees, within all people, the most important aspect in this cultural context is the source of *baraka*. As the oft-quoted couplet indicates *Az to harakat, Az khodâ barakat*, "From you action, from God blessings/spiritual energy," all *barakat* (*baraka*) ultimately comes from God.

On the bus ride home, our guide explained that for the dervish to say "*hezâr rahmat . . .*" was indeed a very special blessing, rarely said, and a blessing that she believed to be very real and effective. As we continued our discussion, I mentioned to our guide that I did not hear anyone talk to the dervish at any

FIGURE 4.3. Dervish departing.

time, neither before nor after his prayer; and that in my brief meeting with him, without thinking it came naturally to me to greet him at the beginning, and at the end it simply came from my heart to say "*beham chenin*" after he had offered his prayer. I asked her if she thought this was inappropriate, or perhaps in some way not showing him respect. Thankfully, she replied with a few nods of her head, and a bright smile, saying "Oh no, I think it's very good," which, to me, was confirmed by his own positive response and smile.

The *Dombra*: Music Alone

After the dervish disappeared into the crowd, the other sounds of the bazaar dominated: *Compote, compote*! announced from one side, then a young man

yelled *Eh, aya*! ("hey look out!")—trying not to hit anyone as he struggled to push a wheel-barrel full of bricks through a muddy pass in the bazaar's crowded dirt path. While we had to leave to check on the status of our visas and conduct other interviews, I was still hearing the melody of the dervish in my head. On the way out, along the perimeter of the bazaar, our group entered a new atmosphere that was wrapped in a different music. We were gradually approaching a new sound, which, like the dervish was somewhere off in the distance and slowly became louder, clearer and more meaningful. Only this time, we were approaching the sound, with each step fulfilling my attraction to what I felt was a gentle but entrancing sound creation. As we drew closer, our eyes were led toward the ground, in the direction of the sound. A musician was seated on a small stool, an old bag and scarf were laid out in front of him to collect money, his left leg twisted 90 degrees inward so it was pointing directly to his right, rather than straight ahead. His right leg seemed disproportionately short, which seemed to indicate this was not from an accident but from birth, or perhaps polio. He played the *dombra,* also known as the *dotar*—the two-stringed, fretless, long-necked, strummed lute. Versions of this lute, like many other instruments in Tajikistan, can be found throughout Central Asia, the Middle East, and along the many trade routes of the Silk Road. Although this *dotar* had just two strings as its name implies (*do* = two; *tar* = string), the name can also refer to a lute with many more strings (see figure 4.4).

FIGURE 4.4. *Dombra* musician in the Dushanbe Green Bazaar.

Historically, the *dombra*[2] has most often been associated with nomads and shaman of Central Asia, as well as the folk poets of Khorasan, Iran. As such, a large and diverse body of music exists, consisting of specialized ritual pieces, melodies and songs from various villages and regions that are often intertwined with music that originated from another, often distant, place along the Silk Road.

On hearing the music of the *dombra* player, I experienced an immediate sense of familiarity and freshness related to his sound. At the same time, there was a certain aesthetic, an intangible ancient quality that caught my heart. Although he was not a shaman, which most all *dombra* players are not, there was a mystical quality to his playing, which evoked a kind of spiritual journey that is typical of shamanic practices. I had a subtle but powerful communicative experience with this musician, although we never had a verbal conversation—I had a sense that we conversed on another meta-communicative level. Perhaps it was my imagination, but we seemed to connect with each other in the silent spaces between us. In my mind I felt that I understood what he was saying with his music, and I answered him without words through a kind of projection of mental energy, which in my mind, was music. In other words, my response to hearing his music was musical—music automatically began to flow in my mind and I felt part of the performance and that he knew that I was a fellow musician. To me, this kind of wordless communication is similar to a multidimensional interchange between musicians during a musical experience. Because I also had experience of playing music on the street, perhaps this formed a common understanding between us; perhaps there is a universal social dynamic between the musician and public that we both felt. Immediately on hearing and seeing him in the midst of his performance, I felt as though I was also playing, already musiking, at once lifted up by the music, above the disinterested passersby, and feeling an emotional mix of longing, joy, and melancholy. These emotions seemed to be reflected in his glances at me, and the brief repetitive melody, which seemed to tell the moral of a story over and over again, each time with a deeper meaning. There was a certain quality of *process* or *journey* in this brief performance. This experience is reflected in the following fieldnotes:

> Perhaps his playing was totally improvised, perhaps part of larger piece. What he played consisted of two alternating sections, a cycle that seemed to naturally turn in on itself in kind of perpetual motion. He played intently as though he were on such a journey, a cycle or spiral that went round and round in the two alternating sections—giving the illusion of repetition, all the while going higher, further along the path. It was as though you would say to yourself "this sounds familiar

> (since this was a repeated section)" but by the time such a thought occurred, you would realize that you were in a new space, another place and although it was familiar, it was indeed new. I immediately felt taken into a kind of vortex that was timeless, placeless—in the crowds and hustle of the bazaar the music seemed to create a center of balance . . . the dombra was soft, active, rhythmic, and with a floating melody that was almost hidden in the mix of the instrument's own sound and rhythm.

Most people in the bazaar walked by without paying any special attention to the musician, although a young boy, selling plastic bags for the equivalent of a few pennies, was very interested in our research group and stopped to study us for a few minutes. The musician's performance was uninterrupted for approximately fifteen minutes. Then, a Tajik mother, probably in her mid-twenties, pushing her child in a stroller, the child's head wrapped in an American flag, stopped in front of the musician, with money already in her hand, quickly went and gently tossed the money in front of him. He stopped playing for a few seconds to prevent the money from blowing away; he then picked up the tune where he had left off. Before we made our way out of the bazaar, I tucked some money into one of the folds in the cloth bag at his feet—he smiled, nodded his head, and kept playing without hesitation.

For weeks, his music and the chant of the dervish permeated my thoughts, whether waking or sleeping. With each new musical experience, I seemed to be carried into a certain meditative state of awareness, where a certain ineffable, internal sense of understanding became a kind of transparent lens of my experience. This sensibility is akin to a kind of clarity of vision I have after certain musical and/or other spiritual, meditative experiences. Little did I know at the time that such a sense would only increase while sojourning through the mountains and valleys of Badakhshan.

Touching the Mountains

Getting to Badakhshan is not an easy trip, and to many Tajiks and Pamiris, it constitutes a rite of passage—because it can be a dangerous, potentially deadly journey, and most Tajiks have not been to the legendary mountainland. Although the plane flight is only forty-five minutes or so, it is not simple. I was repeatedly warned before committing to the journey, "If one of the wings touches the mountain, you're finished!" Of course, I wondered, "Why would the plane's wing be that close to the mountain?" It was explained to me that the

only way the aircraft could make it into the short landing area was by threading itself between close mountain peaks. After being told that planes have hit the mountains in the past, although not recently; and after consulting with Saba, my other research associates and local friends, we decided to make the trip—and how fortunate that we did.

While we were waiting to board the plane, Saba took out the camera to get a photograph of the aircraft. As she innocently took the photo, a man quickly approached and demanded the film. He announced that he was a customs officer and inquired as to who we were, our intended purpose for traveling, and the reason she took the photograph of the plane, since such an action, he claimed, was "forbidden." Once it became clear that we were researching Badakhshani music and healing practices, we were welcomed with the loving hospitality and courtesy that was typical of our experience in Tajikistan. His caution was, in part, a result of the Soviet period, where suspicion and control of information, photographs, writing, music, and other aspects of expressive culture was the norm.

Our fifteen-person capacity plane was overloaded with some twenty-five people, bags, suitcases, and boxes piled in the walkway between seats. That did not seem to faze the pilot—he was confident that we would make it. He walked over passengers' legs, on top of the suitcases and boxes and made his way into the cockpit, after prying open the door that was sandwiched in by cargo in the walkway. Once we were in the air, all seemed well and a few people carried on simple conversations. After some time, about twenty minutes into the flight, everyone became totally silent. The gentleman in front of me finally buckled his seatbelt and bowed his head to pray. He and everyone on the plane was very still and silent—even the young children and one infant. Several people were clearly praying; some with closed eyes; others with bowed heads; still others moving their lips in a whispered recitation. These prayers did not necessarily fall into the *prayer alone* category simply because there was no audible music, vocalization, nor instruments being used. What is important here is to broadly consider how individuals might practice prayer in this or similar circumstances where there is outward silence. For instance, is there internal cognitive intonation, vocalization, chanting, or some other musical context that frames the experience of prayer in one's mind?

The silent, concentrated focus and prayers of the passengers heightened the already palpable feeling that was a mixture of the evanescence of life, exhilaration from the flight, the beauty and majesty of the mountains, the fear of crashing, and the joy of journeying to the legendary place known as *the roof of the world*. As the plane reached its top altitude, we all took a deep breath as we looked toward the mountain peaks that now surrounded us. We had yet to make it through the needle's eye—the narrowest passage where planes have

been known to crash. In the emotion of prayer, a few tears could be seen on one passenger's face, as it seemed she was trying to find a glimpse of sky to look at beyond the mountains, which by this point had seemed to swallow up our little aircraft. As the wind blew snow from off the mountain peaks, it also forced the plane to jog up and down and from side to side several times, each jerky motion being met with gasps and gentle moans from passengers.

The visual field in the midst of the mountains was like a different world, for as far as the eye could see, there were only mountains and valleys. The atmosphere above the mountains was akin to being in the middle of the ocean, dessert, the Grand Canyon, or other natural environments where one is encompassed by a new and unique place in the expanse of nature in such a way that one's field of vision is so completely changed that the world seems to be *another* world. Within this airspace among the mountain peaks, was yet another world—a world of clouds. Entering a formation of clouds was the most disturbing experience for passengers since it was like flying blind. Clouds were often the reason that flights were forced to return to Dushanbe, or the reason for tragic crashes. The cloud world reminded me of two experiences I had several years prior. First was swimming in the Mediterranean Sea off the southeast coast of Spain in the darkest part of the night, where only flashes of moonlight and starlight that danced on surface of the water provided scant light for seeing. Being in the water in the early hours after midnight was like having my vision limited and another sense awakened within me. Deciding to enter the ocean dissolved my sense of self and transformed my desires and concept of time (past-present-future) into a nothingness that was a kind of ecstasy of the present moment—giving myself fully to the water, and letting the ocean carry me wherever it would. Although it was potentially dangerous, I was full of an exhilarating feeling of freedom and detachment, not thinking about the past or future, feeling whole and alive. Being in the cloud world also brought to mind the feeling of the *closed-eye tai ji* and *jan juang* I studied while living in China. In this practice, closing the eyes helps to facilitate an inner sense of balance and awareness of the outside world. Furthermore, one maintains balance and beauty of form through stillness and movement with eyes closed, rather than open; then with eyes open, the previous capacity and sense is maintained. The common thread between these three experiences, the ocean, *tai ji,* and the cloud world above the Pamir mountains, was a sense of certitude in the face of uncertainty, or even potential danger. Prayer and its counterpart meditation facilitate the capacity to be *certain* or have a sense of *knowing*, which I explore in chapter 6. I mention it here because it was during the flight that this pervasive sense of certainty came over me and I knew that we would land safely and learn a great deal while atop the roof of the world, which, thankfully, we did.

The Khoroq Bazaar: Two Accordions and One Macaroni

As we descended into Badakhshan's capital city, Khoroq, passengers clapped, gasped, and shouted out brief prayers praising God for a safe passage. After we settled in and gathered our thoughts, we realized our good fortune in being close to the only bazaar in the city. Since Tajikistan gained independence in 1992, the Khoroq bazaar—indeed, all business and economic exchange—has gone through several stages of development. Initially, acting on the concept of buying and selling for monetary gain was extremely difficult and slow to progress. Simultaneously, previous reliance on Soviet support for much of life's necessities, and a lack of training in the essential skills for economic, infrastructure, and agricultural development, left a gap between the will of a people to provide for themselves and the reality of a war-torn, former Soviet republic. There is still much that needs to be done to create a healthy economic exchange in the bazaar and throughout the country in general.

In this difficult environment and complex social milieu, street musicians play their music as kind of personal and social healing process—to survive financially, to give a voice to the stories and experiences of the past, the present, and convey a vision of hope for the future of Badakhshan. As one of our hosts was fond of often saying, in a big bright voice "BADAKHSHAN KHUB MISHAVAD"!—"Badakhshan will become great again"! (i.e., all of its problems will be resolved).

Some of the first performances that I heard in Badakhshan were in the bazaar. In particular, there were two striking musicians who played for money, both accordion players, both blind. The first performer seemed to be part of the family whose booth he sat beside while he performed. The other musician seemed to be very alone, sitting by himself, never interacting with anyone (see figures 4.5 and 4.6).

The first performer had a much better instrument and could play a range of pieces. The second musician had to struggle with an instrument that was barely functional and perhaps irreparable. The quality of instrument clearly affected the quality of performance, and although bazaar-goers gave more attention to the first musician, both were supported financially. The social role of these musicians in the bazaar seemed to be simply "to play music," the kind and quality was secondary; the role of the patrons was to support them if they could. While the words of both performers, sung in Tajik and Shugni, were practically impossible to understand, in working with local friends and musicians who also listened to the field recordings, we comprehended enough to see how these songs were similar in meaning to other folk genres that do not

FIGURE 4.5. Accordion player in the Khoroq bazaar.

traditionally use the accordion, for example *falak, dargilik, dodoik,* and *lalaik*. In these genres, phrases of supplication to God are often interwoven with stories of familial separation and hopes of reunion, lamentation, and lullabies. Although the accordion performances are of a very different musical style than the folk genres of Badakhshan, they are similar in that they have what might be called "moments of prayer," showing yet another aspect that can be included in the *music-prayer dynamics* model. That is to say, the accordion performances were some variation of an AABA song form, unlike the other genres, but contained phrases that clearly called on Divine assistance to bring about resolution to feelings of pain and suffering.

Nearby, a young boy, sitting at his parents' booth under a large umbrella, was playing a piece of macaroni like a bottle or end blown flute (see figure 4.7). He could get at least two, sometimes three, distinct pitches from the two inch pasta. He also used his finger and hand to create a slide between the pitches for the full range of the macaroni—this seemed to be his favorite sound. As the boy played, he gazed off into the distance, blowing the hollow tube, in his own sound world, paying no attention to his parents or anyone in the bazaar, and intently focused on the sound of his performance. This lasted for a few minutes until his mother loudly called him over to her. After a few minutes, he returned and continued to play.

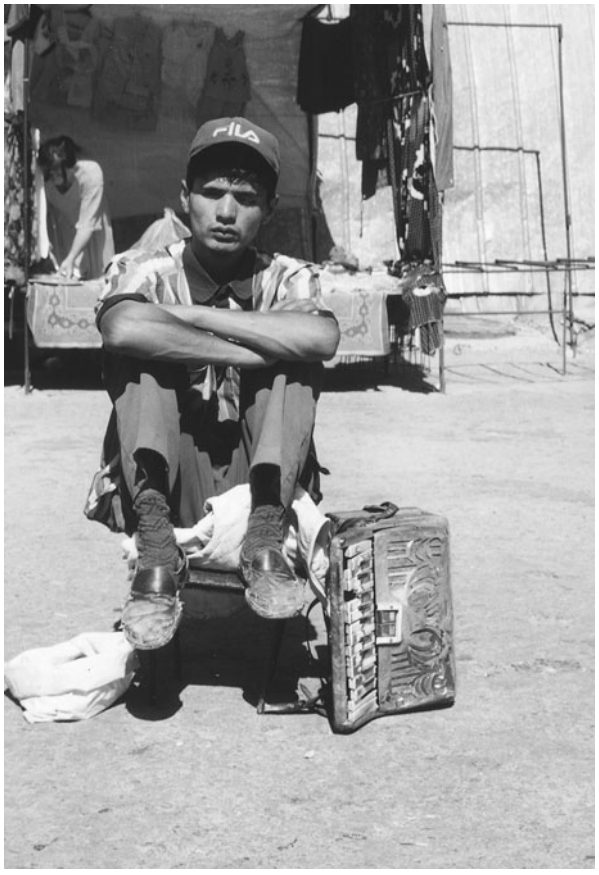

FIGURE 4.6. Second accordion player in the Khoroq bazaar.

Green Mountain in the Pamir Mountains

While living in the northeastern most province of China from 1996 to 1997, close friends there gave me the Chinese name *qing shan* (green mountain) as a way to welcome me into their family. This was an honor and special gift for me, which gave a physical expression to our common ontology that we were *already* family. This view imbued my experiences in Pamir as well with a sense of kinship—and I found that many of the musicians and healers with whom I worked also shared this view, which was expressed in various ways. For instance, older community members would often refer to members of our group as their children; or people around the same age might call us their brothers or sisters; and we would respond in like manner. However, when addressing those older than us or when making a new acquaintance, appropriate titles or

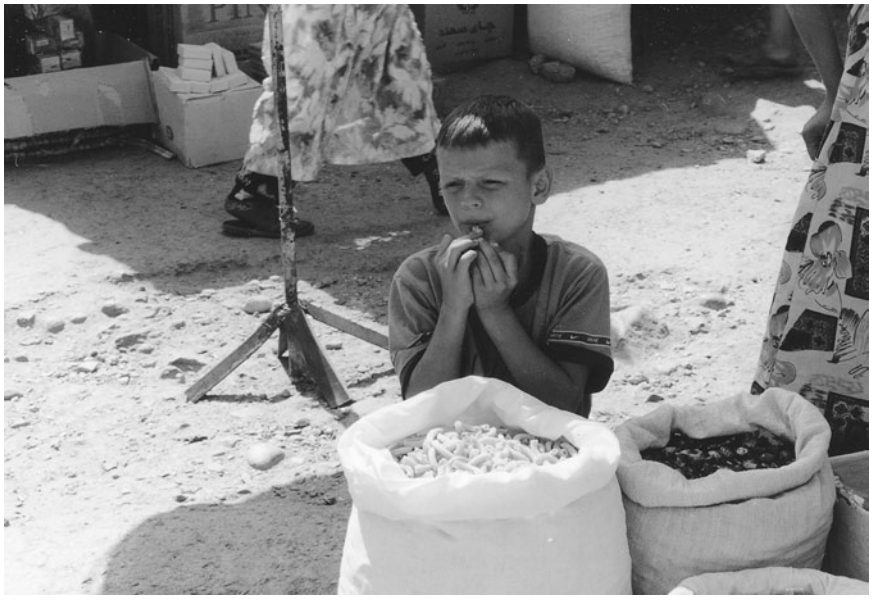

FIGURE 4.7. Boy at the Khoroq bazaar playing a piece of macaroni.

honorifics were always used. In addition, whenever we visited a local individual or family, we were welcomed with loving hospitality, as though we were family returning from a long journey. Figure 4.8 shows such an occasion; Samandar is pictured in the front and center wearing a blue shirt, nurse Lailo is on the far left in the front, beside her is the *maddâhkhân* Sultan-nazar, and Saba can be seen in the far back left, peeking over the heads of a Pamiri girl and young woman.

Before arriving in Tajikistan, through my life experience I had become very familiar with the universe of ideas related to the mystical core of religion, Persian-speaking cultures, Sufism, and how all religions share a common foundation, emanate from one divine source, and have a collective purpose. This provided some common understanding of a spiritual ontology or a religiously based worldview and for a deeper level of shared experience between my informants and me in the field. For instance, walking through the Pamiri mountains and valleys on any given day could easily bring to mind poems and metaphors that are rich with themes of love, nature, mystical sojourning, and spiritual ecstasy. Often times, while on a field excursion, a member of our group might point out a particular mountain peak, river, village, or tree—and without comment encourage reflection on what was pointed out; or recite a line of a poem or tell a personal, historical or legendary story, which related to the natural beauty around us; or share a perspective that related to individual beliefs or hopes. So, being conversant with this dynamic interaction between the natural

FIGURE 4.8. Pamiri family and friends.

environment, mystical themes, poetry, religion, and modes of conveying emotion with sounds and silence, poems and songs, affirmed my sense of being at one with my newly found friends and the place of Pamir.

A mystical or spiritual worldview is not common to all Pamiris. However, my research focused on working with individuals who did have such a worldview, which they understood as being a positive force in life, and which they strived to translate into daily action. The notion of having a positive, even idealistic vision and manifesting that energy throughout one's daily life, to me was very normal and something which I practice in my life. Thus, another common ground was found in the field. In addition, shared aspects of our worldviews allowed the differences of religion, thought, age, culture, and birthplace to create bridges and attraction, rather than cause division and repulsion.

Symbol, Metaphor, and Meaning

The virtues of nobility, humility and service stood out as ideals in the ethical framework of Pamiri culture. Certainly, in any group, individuals embody ethical standards in varying degrees; and some are in the process of disembodiment, or moving away from the value system in a culture, thereby inflicting pain on others. In the following section, I do not propose that all Pamiris embody

the virtues as I describe, nor is it my purpose to generalize the Pamiri people, or essentialize certain personal characteristics. Nor shall I examine the negative aspects of human behavior and society that, as in all cultures also exist in Badakhshan. Rather, I shall examine the relationships between certain local beliefs and the environment, which are poetic by nature, and which in large part framed my experience there.

I was fortunate in my field research that the Pamiri people whom I had the honor to know and to work with overwhelmingly exemplified and embodied nobility, humility and service. The qualities of and relationships between the mountains, valleys and water serve as a metaphor for these human virtues and can be found in the poetry and stories of the region. Moreover, the aesthetic quality and range of meaning, especially in Persian mystical poetry and their related stories, creates a unique state of consciousness that is expressive of such virtues, and in turn gives rise to a peaceful, joyful, positive, and overall healthy state of being—a state of being that is viewed locally as indicative of holistic health.

Mountains and Water: Virtues Embodied and Emplaced

> *Poetics from the field:* The ponderous snow-capped mountains of Badakhshan continuously draw one's vision upward—physically toward the sky, and spiritually to the heavens. Today I realized that every time I looked up to the mountains, I would spontaneously, deeply inhale and experience a feeling that was both reflective and forward reaching, introspective and outwardly embracing. I soon noticed others would often deeply inhale as a regular response to lifting their gaze upward to the mountain peaks. The deep breaths that I experienced were not normal breaths. They were imbued with the grandeur and majesty of the mountains. It was as though I was inhaling the energy of the mountains, becoming one with the qualities that they possessed—stillness, patience, steadfastness, peacefulness, certitude and quiet strength.
>
> Snow and ice cover the highest peaks. Small pools of fresh, ice-cold water from which one can drink rest on the mountainsides. Streams trickle down, finding their way across the rocky terrain, slowly growing in size and speed, cascading further into larger streams and small waterfalls, eventually finding one of the main channels of the river Panj—the ancient Oxus. The river flows gently at times, and at others, it roars through the valley's riverbeds with

> ultimate abandon and fervor, crashing against the colossal mountainsides and carrying away anything that enters upon it. "Be still as a mountain, move like a great river"[3] was my feeling as I walked along the mountainside and through the mystic valleys of Badakhshan. Mountains and streams, dust and water perform a *yin-yang, bâtenzâher* dance from the mountaintops to the deep valleys and riverbeds. The flowing water cleansing what lies in its path, clearing away debris, and nourishing the land and people. I recall the ancient Persian story of the drop of rain and the water of life . . . the conversation with Samandar about the seven valleys and the mystic path to the Beloved . . . the metaphor and meaning in the land of mountains—*kuhestân*, where earth, water, music, poetry and prayer come together to form the mystic concert and devotional gathering of the *maddâhkhâne*.

These field notes arose from a reflexive process in which, through shared experience with my hosts and assistants, the connections between spiritual embodiment, emplacement and body ecology, local beliefs, music, poetry, prayer, meditation and healing began to emerge. For example, the awesome size, solidity, height and beauty of the mountains gives them an air of majesty. As the mountains are the highest formation in the natural environment, they are the first to receive the rain from the sky—the metaphoric water of life from the heavens. Yet, the rain does not stay on the mountain. The mountain only serves as a path to the valleys, which lie at the foot of the mountains, low and humble—the valleys' natural state. Yet, because the valleys are low, they receive and collect the nourishing rain.[4] The parts of the valleys that are even lower become riverbeds. The valleys guide the water to the river and it flows to lower points, eventually making it to the ocean. Metaphorically, the water of life longs for reunion with the ocean—a symbol of the vastness of God's grace, power, bounty and mercy. The mountains, which embody majesty and nobility, are formed over long spans of time, thus patience is requisite of majesty and nobility. Water collects at the lowest point. So, the lower or more humble one becomes, the more one embodies the qualities of water, the river, and the ocean. The majesty of the mountains is embodied as human nobility, the lowness of the valleys is embodied as humility, and the action of the water becomes the virtue of service. Carrying the metaphor further, it becomes clear that the virtues are interdependent, form a greater whole, and cannot exist without each other. Similarly, the words "mountain" and "valley" represent two poles of the same portion of earth, which itself is part of a greater whole. Moreover, without valleys, there are no mountains; without mountains, there is no gathering and direction of water into the rivers, and eventually the ocean. The

natural environment of the mountains, valleys and flowing water encourages a constant awareness (both consciously and subconsciously) of the above virtues since these natural formations are practically always in the field of vision or hearing—even at night when the river can be heard through the window, or the moonlight reveals a portion of the mountains and valleys.

Finally, movement and stillness interact in unique ways during the prayer and meditation of various practices, including *maddâh*, which will be seen to contribute to the process of entrainment described below. For listeners, a general state of bodily stillness accompanies the progressively deepened meditative state—there is no dancing or significant movement during *maddâh*. Performers usually sit on the floor cross-legged to play their instruments and sing. They can become slightly more physically animated as the performance builds and as the spiritually empowered atmosphere influences them. For all participants, as a genre of worship, prayer and devotion, the ideal state is outward stillness, which in turn encourages meditation on the meaning of the sung poems and prayers. Listeners (women, children, and men) usually sit around the perimeter of the room where the performance occurs, or in other open spaces that facilitate relaxation and the directing of ones spiritual capacities toward the Beloved. As the body maintains a general state of stillness throughout a performance, the consciousness likewise becomes still and focused. Yet, while the stillness of the body remains, the stillness/focus of the consciousness promotes a movement of the mind in a highly specific, albeit often ineffable, direction toward the higher self and God.

Spiritual Entrainment

The movement or transformation of the mind, body, or spiritual state from one dimension to another can be described as a process of entrainment. Entrainment is a well-documented physical phenomenon found throughout the natural world whereby two or more autonomous rhythms, processes, or oscillations synchronize with each other when brought into close enough physical proximity. As a physical phenomenon, entrainment is expressed and can be measured in highly varied systems, including mechanical, biological, environmental, and musical systems.[5] I invoke *spiritual entrainment* to express a certain dynamic of transformation in healing when religion or spirituality is central, which embodies the same principle of synchronization, but which is beyond the ken of direct physical measurement. Importantly, in both the physical and spiritual characterizations of entrainment, the stronger rhythm, oscillator, or energy will draw the weaker rhythmic processes to it. In the context of *maddâh*,

this is expressed as participants surrendering the weaker energy of the lower self (*nafs*) to that of the stronger energy of the higher self (*ruh/jân*—spirit/soul), which also has obvious parallels across religious, spiritual, and philosophical traditions.

Central to this process of surrendering the *nafs* is the ontology of participants, who believe that *maddâh*, as well as other prayer practices, has the power to carry them from one state of being to another, higher, more healthy state. Moreover, the intention of participants to surrender their will is a necessary but not sufficient condition of the overall process of transformation—the other necessary condition being God's assistance or grace. Further, "surrendering" ("submitting" or "letting go") implies that participants make a decision to move their mind in the direction of the higher self, which emphasizes the role of the personal will in the process.

Participants often describe a flexible process that is unique with each ritual performance event, whereby a certain cognitive-spiritual dimension or pathway of consciousness accompanies the process of surrendering the lower self to the higher self (i.e., spiritual entrainment). I describe this dimension or path in terms of the cognitive flexibility framework, which, by definition, is flexible and laden with potential to traverse multiple domains of consciousness. Moreover, cognitive flexibility suggests a healing potential where a categorical change in one's state of being, for instance from illness to health, can readily occur. Through the ritual process of the dynamics of *maddâh,* cognitive flexibility and spiritual entrainment can work in harmony to effect healing transformations and function as complementary capacities and abilities that place the agency for change in the hands of participants. This does not deny the local view of reliance on God's *baraka* to bring about transformation—rather, it emphasizes that *baraka* is omnipresent and that one need only access it. Here, cognitive flexibility describes the process of prayer and meditation whereby participants focus their thoughts on the power-laden words, music, sounds, and symbols of *maddâh* with the intention of aligning their thoughts with meaning and the *baraka* contained therein to create the desired change. This process encourages the weakening of the lower self and strengthening of the higher self, which in turn facilitates the natural process of entrainment—the stronger force of the higher self attracting and consuming that of the weaker force of the lower self. By "natural" process, I mean that entrainment operates when certain conditions are present. Just as the physical process of entrainment operates within certain natural, physical conditions, the spiritual entrainment process functions when certain spiritual conditions are present. Although spiritual conditions can be difficult to identify, since by definition they are not bound by the physical realm, they are associated with and can be accessed via a cognitive–

spiritual domain or axis, which describes the links between spiritual thoughts and their corollary linguistic expressions, meanings, emotions, bodily states, and experiences.

An example of how entrainment naturally operates will be instructive at this point. The most well known physical example of entrainment was first noted by the Dutch physicist Christiaan Huygens in the mid-1600s—when two pendulum clocks are placed in close physical proximity they will entrain and synchronize over time, the weaker pulse giving way to or be entrained by the stronger one. The point here is that entrainment is one of the physical laws of the natural world, which simply operates when the right conditions exist—in this case, the primary condition is physical proximity. Spiritual entrainment will also naturally occur when a certain proximity of consciousness is achieved through cognitive flexibility—the personal will surrender to or being entrained by the will of God, or the lower self dissolving into the higher self.

A metaphor that describes the surrendering of the self in the context of devotional music can be seen in a classic example found in Persian mystical poetry and literature—that of the moth and the candle. A moth, which is enchanted and entranced by the light and beauty (stronger rhythmic process) of the candle's flame can only proceed to a certain proximity to the flame before it is encompassed and consumed by it. This metaphor finds great resonance throughout the poetics of the Middle East, where it is often expressed that the fire of the love of God burns away the ego (lower self, *nafs*) of the lover, until nothing remains but the higher self, which is a human's truest reflection of the Beloved within.

Finally, the process can be seen to flow along a cognitive-spiritual axis, where *spiritual cognition*, or thinking spiritually describes the *how to* of using thought to be entrained by the higher self or spiritual realm. Practitioners of *maddâh* enter the ritual ceremony with the intention of focusing their attention on God, spiritual/mystical dimensions, and the higher self of the *ruh/jân*. Throughout the duration of a ceremony, thoughts that are viewed as being spiritual, form steps along the cognitive-spiritual axis, each step taking a person closer to the realization of their spiritual thoughts. The process is a kind of interdimensional journey between cognition and experience—that is, thinking spiritually leads to experiencing the mystical feelings of spirituality that are the result of the cognitive process. The *experience* of mystical feelings deepens a presence of the higher self within a person and further enables that person to extend the corollary human virtues into daily activity, which is, in part, the goal of *maddâh,* and which, again has parallels throughout diverse religious, spiritual, and philosophical traditions.

Holistic Embodiment—Embeingment through Maddâh

Maddâh, like other prayer practices, is believed by many Pamiris to have the *baraka* to effect healing in any domain of one's being, or of the whole self. If *maddâh* is performed with the intention of curing a patient, the healing effect is attributed in part to *baraka*, which is inherent in the words (poems and prayers), the music, the *maddâhkhân*, the higher self of each participant, the ceremony as a whole, and the surrounding natural and built environment. Ultimately, any positive effect is attributed to God, since *maddâh* is, at its heart, a prayer. Nevertheless, individuals play a key role by actively striving to internalize *baraka* through spiritual cognition and action. As a regular, preventive practice, the healing effects of *maddâh* are attributed to the degree that a participant embodies the guidance, principles, and virtues conveyed through the genre. This is associated with a way of life that constitutes holiness and health. Additionally, the effects of *maddâh* are not intended to be restricted to the ritual performance space of the ceremony. Rather, this didactic genre aims to imbue participants with an ethical code and *baraka* to be applied and expressed throughout daily life, and which can also be extended to others. Moreover, the morals and beliefs conveyed through *maddâh* are viewed locally as being essential for total health.

During a *maddâh* ceremony, participants attend to multiple layers of meaning found in the performance. Most participants described their attention as both *pointedly-focused*, for example on specific words or passages in the *maddâh;* and *broadly-focused*, allowing themselves to be immersed in the total sound of the ritual and influenced in a holistic way, being "carried by" or "immersed in" the sound. In both the *pointedly-focused* and *broadly-focused* attentional sets, there is a process of transformation that occurs. It is a process of focusing attention, allowing meaning to be internalized, and manifesting what has been internalized: or *attending—internalizing—manifesting*. Importantly, this process relates to all aspects of the self, including the spiritual aspect, which is often left out of academic conceptualizations of embodiment. Hence, holistic embodiment or *embeingment* is both a process and a goal. The process however, is non-linear, and the goal continually advancing—that is, it is reachable, but once a goal is reached, another goal, or the same goal reinterpreted appears at another level. This is not unlike sojourning through Pamir itself. For instance, while ascending a mountainside that would completely obstruct our view, our goal seemed to be just in front of us (i.e., making it to the top), but when we reached our immediate goal, other peaks and entire mountains were revealed, showing us that, in fact, the journey is ongoing.

Maddâh is also this way. While the goal of transformation might seem to be achievable during the performance, it is only the beginning—the proof of the transformational experience is then tested throughout daily life, where the new consciousness (*aql, fekr, vojdân*), which is enacted through the body (*tan*), creates personal life experience. At one level of experience, *maddâh* is a kind atmosphere, a sacred space along the path of daily life—providing refreshment, hope, and spiritual sustenance for practitioners in a culture that in large part has been oppressed and struggling for well over a generation.

Embeingment then, is a process of absorbing positive energy and disembeingment the absence of that energy—just as darkness is the absence of light. That is, darkness has no energy of its own; it is dependent on the absence of light. In the same way, if one is not in the process of embeingment or progression, one is in the process of disembeingment or retrogression—that is, moving further away from the virtues, thoughts and behaviors that comprise a sound ethical code. For the *maddâhkhân-s* and healers with whom I worked, embeingment is encouraged through the performance of *maddâh*, which integrates practices that facilitate cognitive flexibility—music, poetry, prayer and meditation—which in turn lead to the focusing of one's attention toward the *bâten,* or mystical inner realities, during performance and throughout daily activities.

Maddâh is heavily didactic, dedicating much time to giving counsel, explicating the consequences of specific actions and behaviors by drawing on historical and legendary stories to illustrate the *halâl* and *harâm* in local culture. As mentioned earlier, it also emphasizes the *bâten,* not at the expense of the *zâher,* or outward form but, rather, to sense in that which is physically manifest, a spiritual reality or essence. Applying entrainment to the process of embeingment (or attending-internalizing-manifesting) further describes how *maddâh* functions to create a context of consciousness where healing can occur. The local model of *aql-tan-ruh/jân* serves as a holistic, multidimensional category where biological, musical, and spiritual processes of entrainment can operate.

I should note here that this holistic local model is not strange or necessarily extraordinary when one knows the culture and language. Moreover, this particular holistic model, with all its useful characteristics and elegance, which avoids a disembodied Cartesian duality altogether, is, nevertheless, not unique per se—it has parallels in diverse cultures, and mirrors, in many respects, holistic models that emerged in biomedical science beginning with the biopsychosocial formulation of health by the physician George Engels in the 1970s and related models that have emerged since then.

Like the holistic *aql-tan-ruh/jân,* the multiple levels of entrainment cannot be completely separated and analyzed without reference to the whole. Consider the following, in the cognitive domain, the attention of a listener is focused

on the meaning of the empowered words of *maddâh,* with the intention that the mind will move from its present state to a higher state, represented by the words and their multivalent, multidimensional meanings. The *baraka*-laden words are viewed as spiritual guidance and thereby have the capacity to entrain the consciousness of participants. On another level, the physiology and macroscopic body also respond to the many levels of the sonic and musical expressions, structures, gestures, melodies, and rhythms—each one with a corollary potential process of entrainment. For instance, as a performance moves through the three-part form (*munâjât, haidari, setâyesh*), which builds from lower levels of energy to higher ones, progressively becoming more complex and intense, which culminates in a musical–spiritual resolution, a participant can be engulfed in this musical-emotional-spiritual momentum, and, by the end of the ceremonial process, experience a catharsis that is healing on multiple levels.

Additionally, as discussed in chapter 3, the symbol of "five" is highly prominent and meaningful in several domains of Pamiri culture. The meaning and *baraka* related to the symbol "five" can be seen as a strong force that can entrain the thoughts of participants within and without the performance of *maddâh*. For instance, all of the previously mentioned meanings of "five" (five religious/spiritual practices, five pillars, and the *panjtan*) draw the attention of participants to those symbols and encourage action imbued with their corollary ascribed meanings. Furthermore, "five" plays an important role in the meaning assigned to the *place* of Pamir within the natural environment. "Five" is manifest in the rivers that flow through the region. The *Vanch, Yazgulâm, Bartang, Ghond,* and the *Shakhdari* are known as the "five rivers" or "five waters" that flow into the legendary Oxus river, which is known locally as the river *Panj* (Five). The river *Panj* is the most powerful river in the region and is seen as an attracting (entraining) force, which draws the other rivers to it. The five rivers and the river *Panj* provide the physical water needed for the body, and are a symbol of the spiritual water of life that nourishes a human's being.

This constellation of symbols emphasizes the significance of *place,* as well as the emplacement of the human being within the Pamiri sacred clinical reality. Emplacement and body ecology create context and frame sacred spaces for devotional practices and daily activities; give meaning to poetic symbols and metaphors; and encourage cognitive links and reminders between symbols in the natural and built environment and their direct or metaphoric meaning. Hence, the focusing of one's attention, and the expanding of one's awareness is encouraged through the relationships inherent in this particular locale of emplacement and body ecology. The most prominent and significant expressions of nature in Badakhshan are the massive Pamir Mountains, deep

valleys, powerful rivers, gentle waterfalls, rock, dust, and light, which, along with the Pamiri home and the *maddâhkhâne,* frame the process of embeingment, heightening awareness and encouraging reflection on multiple cognitive and spiritual levels. *Maddâh* serves as powerful vehicle of continuity in this process. It is practiced regularly, musically and linguistically tying together beliefs, intentions, aspirations, expectations, history, people, and the environment.

Falak—Heaven, Fortune, Universe

The genre that ranks second in importance to *maddâh* is known as *falak* (lit. "heaven," "fortune," or "universe"). It is closely related to *maddâh* and is often used in conjunction with it. *Falak* primarily draws its verses from the oral tradition of folk poetry and stories, and secondarily from classic Persian Sufi poetry. The structure of *falak* is most often in one section and can form an interlude within a *maddâh* performance. A *falak* is typically from about two minutes in duration to approximately twenty to thirty minutes and is considered to be *musiqiye khalqi* (a folk genre, music of the people). *Falak* can also function as prayer, is often performed at funerals, for mourning, or during day-to-day activities. When used with the word *dashti* or *biâbân* (desert), as in *falak-e dashti,* it refers to a performance by the voice alone with no instrumental accompaniment. Instrumental *falak,* without voice, also exists. This is often performed on the Badakhshani ney, a six-holed, apricot wood, funnel-shaped flute, 25–30 centimeters in length; or the *ghizhak* spike-fiddle. It can also be performed on one of the lutes of the region—the Pamiri *rubâb, tanbur, dotar,* or *setar. Falak* is most often performed in Tajik-Persian, or in combination with a local Badakhshani language. *Falak* can also be performed exclusively in a local language.

Central themes of *falak,* and *falak-e dashti* that relate to *maddâh* include mystical/Divine love, separation, and reunion. However, *falak* themes most often relate specifically to human love, pain, suffering, familial separation and hope of reunion—between a parent and child, or a lover and beloved. In the following example, *ostad* Abdu'l Sultan Mahmud performs a *falak-e dashti,* but he first describes its pervasive role in Pamiri culture in answer to my inquiry about when one performs *falak* (see figure 4.9). A summary of the text follows:

> *Bi parvâ*[6] *falak miguyim Pamirba, hamin falak eh bi parvâ falak . . . dar yak dashtmi, biâbânmi, dar kojâhi bâshad falak miguid*
> *Unconstrained and fearless, solo Falak we call it in Pamir, the same falak ah just the voice—freely . . . in the plains, the desert, in whatever place, sing falak!*

FIGURE 4.9. *Ostad* Sultan Mahmoud seated with his *rubâb*.

Mâ râ mâ râ kharâb kardi mâ râ
Dar âteshi tes kabâb kardi mâ râ
Dar âteshi tes kabâb hargez Ay napazad
Mâ sang o entekhâb kardi
Âb kardi mâ râ
Ay . . .
Ah we, Ah we, You have destroyed us Ah we,
In the sharp fire's flame, You burned us, Ah we,
In the quick fire's flame, flesh never Ah never burns,
We were as stone, and You chose us,
And melted us
Ah . . .

After he performed this *falak,* Sultan Mahmoud sat in silence for a few profound moments, as did Samandar, Saba, and I—then we all took a deep breath, exhaled, and looked at each other with a renewed sense of oneness. The sheer power of his voice was renowned in the region, and although he claimed, "It's not like when I was young," it was incredible. As he wailed out the extended tones of this mystical love song, my face and arms (places where my skin was fully exposed) seemed to respond in sympathy to the air vibrations he produced. When coupled with the meaning of this brief *falak,* my thoughts were

transformed into a multidimensional sense of love that framed our shared experience.

This poem is a wonderful example of the dual meaning that can be expressed as the love between two people, as well as the love between a person and God. Moreover, it is an example of the transformational experience of burning away the lower self of the *nafs* through love. It is worth noting that the central theme of this poem, love, is not explicitly mentioned, but if one is familiar with the mystical universe of meaning in such poetry, love pervades every line and is heard in every sound of this performance. Throughout this poem, "You" refers to a human beloved, as well as the "Beloved/God," who destroys the *nafs* by "burning" it away through the "fire's flame" of love. Importantly, not only is the higher self of the *ruh/jân* brought to the forefront through this transformational process, but its vehicle of enacting experience, the body/flesh (*tan*), is preserved as well, since "the flesh never burns" through this process.

This point also brings the virtue of service to the center. That is, the reason "the flesh never burns" in this spiritual process is because the body is viewed as a positive vehicle for service when one is spiritualized (i.e., when the higher self is the active force in one's life). If the body were also destroyed, the higher self would have lost a precious opportunity to use the body for its inherent, spiritual purpose. Finally, the *nafs* is likened to "stone," which obscures the true self, the higher self. Once the lover is "chosen," the automatic result for a lover is that the lower/outer self, *persona,* or stone covering will be "melted," again leaving only the spiritual self of the *aql-tan-ruh/jân*. This poetic metaphor emphasizes the spiritual meaning or inner essence (*bâten*) of the words, rather than their literal interpretation, and can be further understood through the lens of spiritual entrainment—that is, when the stone covering, which is hard and material, creating distance between one's self and God, is removed, the resultant proximity facilitates the process of entrainment whereby one draws nearer to the Beloved.

A unique aspect of the experience of listening to such poetry is the cognitive links that enliven memories, emotions, beliefs, expectations, and other latent spiritual capacities in a person's being. Foremost among these cognitive links are the connections to other streams of meaning from the ocean of Persian mystical poetry. For instance, throughout this poem, the lover cries "Ah we" not "Ah I." This is more than a linguistic convention to convey humility or detachment from the ego self. It is an aspect of the ontology of oneness that is expressed in this and countless other poems from the region. For example, one of the most well known verses is from the great Persian mystical poet, Sa'adi, which today decorates the entrance to the United Nations building conveys the idea of the oneness of humanity:

The Children of Adam are limbs of each other,
having been created of one essence.
When the calamity of time afflicts one limb,
the other limbs cannot remain at rest.
If thou hast no sympathy for the troubles of others,
thou art unworthy to be called by the name of a man.

Whereas *falak* draws on Persian mystical poetry, it is sometimes used to refer to various folk genres that can broadly be named laments, and which in my experience, do not use such poetry. These are *dargilik, dodoik, bulbulik,* and *lalaik,* the last being a genre of lullabies. These are often performed by one solo voice, female or male. However, there can be more than one voice and instrumental accompaniment. The melodic content and performance practice of *dargilik, dodoik,* and *bulbulik* are very similar; and the terms are often used interchangeably to refer to the same piece. This is because of the common meaning found across pieces, as well as the performance practice of linking pieces in a row to create a larger performance, collection, or suite.

The same themes of human love, pain and suffering, and familial separation and reunion form the subject matter of *dargilik, dodoik, bulbulik,* and *lalaik,* with the latter specifically on themes love between parent and child, protection of the child, hope and prayer for the child's well being, and humorous and fantastic stories. Theses genres can also often function as prayer. For instance, in the following *dargilik/lalaik* example *"Shirin dono"* "Sweet little one," a parent sings a love song to the child, tells what could happen in the child's life, and prays for reunion with and protection of the child:

My sweet little one, sweet little one
When you go outside, and the rain falls
May God keep you safe and well
May we be together again soon.

In another *dargilik, "Mâ dargilik donyâ qati,"* which literally means "We sing dargilik for the togetherness of the world," the hope expands to embrace the world. In interviews with *ostad* Musavar Minakov,[7] he explained that this is a very old folk song that is a kind of prayer for unity and peace in the world.

Not all *dargilik, dodoik, bulbulik,* and *lalaik* express hopes and prayers, nor are they all necessarily lamentful. For example, *"Ye gol tuti, ye gol maino"*—literally "One flower bird, one lovely flower"—tells a story of a bird that lands on a flower to be close to its exquisite beauty. The bird becomes the flower and embodies its beauty. The flower with its magical beauty is offered to a loved one, perhaps a wife or husband, a sweetheart, or a child. These songs can have multiple versions

that are specific to different regions, families, or performers. For example, a variation of *"Shirin dono"* can be seen in Berg (1997, 382–5), in which the theme is romantic love rather than the love between a parent and child.

Bulbulik literally means "nightingale song," a symbol with a rich history in Persian literature. The thought of a nightingale and its song, immediately bring to mind images and emotions of love and longing, purity, joy, and perhaps melancholy—forming a underlying aesthetic that relies on the art and literature of the region. Two broad categories of *bulbulik* exist: *bulbulik barâye bakhshidan va gham*; *va barâye shâdi—bulbulik* for forgiveness/relief of sadness; and for happiness.

Dodoik builds directly on the image of separation. As ostad Abdu'l Sultan Mahmoud explained to me the meaning of *dodoik: Dodoik . . .dodo manâi 'dur, dur budan' . . . Yek rah bâlâ miravad, râhe digar tarafe pâin miravad . . . hardo râhe durand. Man delgir shodam barâye to. Dur hastid dur hastid dur hastid . . . In hamin tariqa manâi hast.* "*Dodoik . . . dodo* means 'far, to be far away' . . . [e.g.,] One path goes upwards, another goes downward . . . they are far apart from each other. I have become grief stricken longing for you. You are far away, so far, so far away . . . This is exactly what it means."

Following this explanation, *ostad* Sultan Mahmud performed a suite of *bulbulik, lalaik/bulbulik,* and *dargilik/dodoik*. The genre names could be heard in the respective sections and the musical similarities were apparent throughout, as was the aesthetic quality of performance that conveyed a yearning emotion, which hoped to sooth a lonely heart and instill a faith or surety that the pain of separation would end, and reunion with one's desire would be realized.

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5

Healthscape, Mystical Poetry, and Multimodal Healing

Gharib, tabibast!
An unknown visitor is a healer!

—Pamiri aphorism

Within the web of multimodal approaches to healing in Pamir, Persian mystical poetry exercises a unique influence on listeners and performers, especially during *maddâh*—the healing effects of which are in large part ascribed to the *meaning* and *baraka* believed to reside in the words of its poetry and prayer. It is difficult, perhaps, to appreciate fully the profound role and impact of Persian poetry in the psyche of people throughout Persian-speaking cultures if one has limited experience with such cultures in their home countries or the diaspora.

To get a sense of its pervasive influence, we can look to Turkey, India, Pakistan, and most of Uzbekistan, where, although Persian is neither the mother tongue, nor a language for daily communication,[1] Persian Sufi poetry (in Persian) is often essential to express the most weighty and heartfelt beliefs and aesthetic sensibilities that people have. For instance, in recent ritual performances in the United States by the Turkish "Whirling Dervishes of Rumi,"[2] the languages of Turkish, Arabic, and Persian were all vehicles of vocally expressing an impassioned love for God and all people within the context of *sam'â* ceremonies. Notably however, during the most intimate and poignant moments, as well as the most involved and ecstatic sections of this

close to three-hour-long performance, Persian was overwhelmingly employed as the language of choice for spiritual communion and praise.

Throughout Persian-speaking cultures, poetry penetrates all aspects of life, from birth to death, the making and breaking of relationships, religious worship, consultation, conflict-resolution, education, and all manner of daily activities. For instance, two typical experiences in Iran and the Persian-speaking diaspora where poetry is central are the *ghazalkhâne,* and drinking tea. The first refers to a particular form of lyrical poetry known as a *ghazal*. When combined with *khâne* (lit. "home" or "room"), it means an informal gathering for the purpose of reciting poetry (*ghazal* as well as other forms of poetry). Drinking tea is another central aspect of culture, where, although its purpose is not specifically to provide a setting for poetry, it is rare that poetry does not bubble to the surface, knitting relationships, providing social or political commentary, encouraging and instilling faith in the doubtful, or providing the necessary release of stress through laughter, humor and irony. In these and other settings, there are even games that are based on reciting poetry and social interaction. For instance, in one game, a person will begin by reciting a poem from memory and whichever letter of the alphabet ends the poem, the next person must recite another that begins with the same letter. Allworth observes:

> Few places on earth have given literature the importance it has attained in Central Asia, where mighty and meek have for centuries composed, recited, listened to or read, and lived with the poetry which remained their constant companion. Placed at the center rather than the fringes of life by both intellectuals and others, literature entered into every ceremony, it came out of the facets of daily existence and constituted the prime esthetic pleasure of man. (Allworth 1994, 397)

Within the range of literature that forms such an essential part of expressive culture in Central Asia and the Middle East, poetry stands supreme—so much so that religious texts are considered by many to be inherently poetic, and still others consider them to be divine poetry, while simultaneously, the works of great poets often find their way into religious practices, if not forming a central aspect of them. Additionally, some religious scriptures are revealed in poetic forms.

It has often been noted that poetry, sacred texts, and the centrality of "the word" in Middle Eastern and Central Asian cultures emphasizes the vocalization of text whether it is from the written or oral traditions. That is, intoning, reciting, declaiming, chanting, or any specialized manner of audibly saying or *sounding* words or texts holds an important position in these cultures. While this is true, the overlooked counterpart to the *sounded* expression is the *unsounded* cognitive experience of silent performance in the mind, which is perhaps even

more pervasive considering the unique place that poetry and religious texts have in that region. In other words, although vocalization is highly important, the influence of special words, texts, and poetry is not dependent solely on their audible expression—they still live in the consciousness of people when there is silence.

For many Pamiris, the words and sounds of *falak*, *maddâh*, and related genres of music, prayer, and poetry are interwoven throughout cognitive domains, forming an underlying fabric of consciousness that contextualizes experiences of health, illness, and healing. These sounds and words permeate the consciousness with themes of divine and human love, metaphors of spiritual wayfaring, birth, death, and rebirth—a process of transformation and re-creation of the self, and, ultimately, joyful ecstasy. This process underlies a spectrum of states for individuals, from promoting and maintaining a current state of good health, to overcoming a state of illness.

Building on the cases and theories described in previous chapters, this chapter will explore the unique sounds and words that intersect in different contexts of healing in Pamir, where multimodal dynamics are central in achieving a healing transformation. That is, within a person's consciousness, a dynamic relationship exists between the lower and higher aspects of self, which can be affected by multiple healing modalities. Belief, poetry, prayer, song, sound, symbol, metaphor, community, and the environment link to and interlink within the potential state of cognitive flexibility and process of entrainment. To appreciate and unpack the multileveled structure of mystical meaning that is part and parcel of *maddâh* poetry, as well as better understand the context of poetic meaning that frames life in Pamir, the broader context of Sufism and mystical poetry must be briefly considered.

Concepts and Practices in Sufism

Broadly speaking, the term "Sufi" is often used to imply a universal quest, a mystical approach or tendency that can be associated with religious practice in general. Specifically, "Sufism" is Islamic mysticism; it is the quest for union with God through complete submission to and annihilation in God; the search for authentic religious experience based in passionate love for God; and the pursuit of spiritual transcendence that springs from the Qur'an and the life of Muhammad. Like Persian Sufi poetry, Islamic mysticism began in Khorasân, in the northeast of Iran.

Two main religious experiences are generally considered in Sufism, the "sober" and the "ecstatic." To these, Lapidus (1992) lists a third, the "gnostic" approach. All three have at their center a quest for spiritual transcendence and oneness with God—the approach or lifestyle varies however. For example, the "sober" approach,

sometimes called the "Baghdad School," is characterized by striving to balance the inner and outer aspects of religious life. The "sober" Sufi practices inner detachment and moral rectitude while observing the explicit laws of Islam—being in the world, but not of the world. Al-Ghazzali (1058–1111) is considered to be among the highest exponents of the sober approach. This is explicated in his treatise *The Revivification of the Science of Religion,* which discusses how the inner and outer life can be unified. First, through the devotion and steadfastness in religious rituals and daily obligations; second, through the submission of the qualities of the lower nature (*nafs)* to that of the higher nature *ruh, aql, qalb*—spirit, intellect, and heart; third, through the acquisition of knowledge through study of the Qur'an and through daily pious actions and behaviors, which, leave impressions on the heart and thereby transform one's life (see, further, Lapidus 1992).

The gnostic approach focuses on metaphysical understanding through contemplation and ecstatic vision rather than worldly activity and piety. Ibn al-Arabi (1165–1240) from Murcia, Spain, is viewed as one of the great gnostic Sufis. His central teaching was *wahdat al-wujud* (Arabic) or *vahdate vojud* (Persian), (lit. "unity of being" or "oneness of creation")—that God is manifest everywhere and in everything, yet all things can be veils to God. The acquisition of knowledge through contemplation is at the heart of gnostic Sufism. This approach also emphasizes individual contemplative ecstasy as opposed to experiences mediated by *shari'a* (religious law).

The ecstatic Sufism is characterized by a search for miraculous experiences of ecstasy that draw one closer to God. The image of the wandering dervish, lost in the love of God falls into this category. In my field research, I encountered all three of these approaches to religious experience. It is important to note each of the three categories is highly varied from within and overlaps with the others. In the strict sense, Lapidus refers to the three kinds of Sufis as "worldly but pious gentlemen, aloof ascetic contemplatives, and ragged wandering holy men" (Lapidus 1992, 16). These three streams developed various institutions: religious schools, convents, orders, and brotherhoods that were based on the various approaches of specific *sheikhs* (spiritual leaders), saints, or holy men. Veneration of such saints and holy men was a central feature of Sufi fraternities. Actions were often carried out with the expectation that the disciple would receive a special blessing, energy, or *baraka* from the leader that would aid the student in his quest. Varying degrees of allegiance and service to a sheikh existed, as did the strictness or flexibility of the order's rules and practices. The sheikh was the object of great adoration and, in varying degrees, viewed as a reflection of God. Hence, the master-disciple relationship became a significant difference between Sufism and orthodox practices.

The mystical path in Islam is often said to consist of *shari'a* (religious law), *tariqa* (path, acts, and behaviors), and *haqiqa* (Truth, God's will). The

tauba	repentance
wara	abstinence
zuhd	asceticism
tawahhul	trust
faqr	poverty
sabr	patience
shukr	thankfulness
khauf	fear
raja	hope
ma'rifa	gnosis
mahabba	love
fana	annihilation

FIGURE 5.1. Typical stages in Sufi wayfaring.

relationship between the elements of this tripartite way to God that can be understood through a tradition attributed to Muhammad: "The *sharia* are my words, the *tariqa* are my actions, and the *haqiqa* is my interior states" (Schimmel 1975, 99). In the path toward oneness, there are multiple stations, or *maqams* that characterize the wayfarer's journey to the Beloved. There is no canon that applies here. Indeed, Sufis often have their own variations on the overarching theme of separation and reunion; and the mystical stages in of wayfaring are often described as seven or twelve cities, or valleys. Figure 5.1 shows the stages that are common in the literature and practice.

These stations are neither necessarily linear, nor finite. They can be compared to a caravansari where the traveler temporarily stops along a journey. The traveler might never return to that resting place and even forget about it, or the traveler might return once or many times to the same station. The path might also be compared to an upward spiral where all the stages form one unbroken chain. At times, stages are repeated in different forms, at times they are left behind. In the context of Sufi worship, the primary vehicles for this journey are mystical poetry and music, both of which function as prayer.

Mystical Poetry

Classic Persian Sufi poetry (roughly from the tenth to late fifteenth centuries) holds a preeminent position in the spiritual life of the Pamiri people. Sufi poetry

Bâten	*Zâher*
inner	outer
meaning	form
spirit	body
embodied	disembodied
action/deed	word/rhetoric
pure motive	ulterior motive

FIGURE 5.2. Comparison of *bâten* and *zâher.*

from this period developed after the seventh century Arab-Islamic conquest of Persia, and the subsequent "two centuries of silence." The efflorescence of Sufi poetry can be considered to revolve around Jalâl al-Din Rumi (1207–1273), the mystic poet around whom developed the Sufi order known as the Whirling Dervishes. The period is generally considered to have ended with the death of poet Adb ar-Rahman Jâmi in 1492, who was perhaps the first to call Rumi's *Masnavi* "The Persian Qur'an."

A point of emphasis in this poetry, which makes a strong connection between Pamiri religious belief and Sufism, is the focus on the mystical or esoteric *(bâten),* as opposed to the orthodox, and exoteric *(zâher).* In one sense, *zâher* can be understood as the outward form of religion and its practices, whereas *bâten* refers to the inner meaning that is beyond the physical senses. Figure 5.2 shows the typical mystical emphasis, or preference in Sufism for the *bâten* over the *zâher.*

Although this might be a common view, it is important to note that *zâher* is not always in opposition to *bâten,* nor is it always "physical" in a "despiritualized" sense of the word, nor is it necessarily negative as in "ulterior motive." It can also refer to the physical that is a manifestation or embodiment of that which is spiritual, as well as the spiritual dimension itself, which emphasizes the primacy of a spiritual ontology at the core of Sufi belief. That is, the only true (or eternal) existence is that which is spiritual.

Although Sufi poetry has its roots in ancient religious and mystical expression, it also has a connection to secular panegyrics (praise-poetry) of the Persian courts of the Khorasân region. In that secular, political milieu, poets would elaborately praise the local leader, dramatically raise the station of the leader and make their own level very low. This style of poetic composition can be viewed as having parallels with the Sufi orders where Persian mystical poetry

developed. Roughly, the courts consisted of a leader, lesser-ranking deputies, and subjects; the Sufi orders also had a spiritual leader or sheikh, adepts or disciples who were spiritually advanced and close to the sheikh, and the rest of the students. In both cases, the leader (secular or spiritual) was the subject of praise, adoration, and love. Davis (1997, 15–16) also makes this comparison and adds that the differences between the secular and mystical panegyrics "were often indistinguishable." The outstanding reason that this transfer from the secular to the mystical was so easily made is that the poems' subject was intentionally ambiguous. For example, when the word "beloved/Beloved" is used in such poetry (there are no upper- or lowercase letters in Persian writing), the subject can easily be God, a king, leader, or other person. Moreover, in light of the Sufi principle *wahdat al-wujud* or *tawhid* (unity of being and oneness), the ambiguity dissolves since the true mystic will see the face of the Beloved in all things.

The major forms of mystical poetry can be categorized as the *ruba'i (*pl. *rubaiyat), qasida, masnavi,* and *ghazal.* Traditionally, the forms are considered to be different in length, rhyme scheme, meter, and content. The *ruba'i* is a quatrain *(do-bayti)* with a particular meter often of a serious nature and sometimes rendered as an epigram; the *masnavi*, a poem of rhyming couplets of varied length, used for epic, narrative, and didactic expression; the *ghazal*, a lyric poem from four to sixteen couplets which has its roots in love poetry—later transformed into mystic odes of love; and the *qasida*, a long poem in monorhyme of didactic or panegyric content. The *ghazal* often presents the *takhallus* (pen name) in the last couplet.

Themes of Love in Sufi Poetry

Love can be viewed as the central theme of Sufi poetry. Other typical themes, for example, transcendence, ecstasy, detachment, passionate union, and annihilation, can be understood as aspects of or dependent on love. A brief overview of the story of Jalâl al-Din Rumi and Shams-e Tabrizi is relevant here and provides an initial background to the poem examined in chapter six.

Rumi came from a tradition of Islamic theologians and was himself renowned for his vast knowledge of the Qur'an and Islam. When Rumi was in his twenties, his father, a prominent *mujtahid* (learned theologian), died, leaving Rumi at the head of his theological school. When Rumi reached his forties, Shams, a wandering dervish from Tabriz appeared, preaching a mystic love for God as the true religion of Islam. One legend mentions that when Shams first whispered a mystic word into Rumi's ear, it changed his life and

he became entranced. Referring to his own account recorded in his *Maqlamat* (see Lewis 2000, 155), Shams indicates that in their first meeting, he posed a question that "made him [Rumi] inebriated on account of his purity of spirit." Shams's message enraptured Rumi and he abandoned the letter (form) of religion for the spirit of love that religion intends to convey. In other words, he moved from a *zâher*-centered religious path to a *bâten*-centered religious ontology.

For Rumi, the reality of Shams grew to become a direct vehicle for God's message. Rumi then so embodied the spirit of Shams that he claimed his poetry was not his own, but Shams's—Rumi achieved a kind of mystical unity with Shams where he claimed that Shams's voice would speak through him. Just as he considered Shams a vessel of God, Rumi considered himself a vessel of Shams. At the same time, after Shams's mysterious departure from Konya, Rumi's grief and yearning for reunion knew no bounds. This shows the central theme of the love of God and longing for spiritual reunion embodied in the human condition of mystic wayfaring.

The poetry from Rumi's *Divan-e Shams-e Tabrizi* repeats this theme throughout. A *divan* (collection of poems by one author) normally bears the name of the poet (e.g., "the divan of Hafez" is a collection of Hafez's poetry). However, in the case of Rumi's *Divan,* he felt that the poems, which he outwardly penned, were in actuality the poems of Shams, hence the title.

Shams taught that passionate love for God was the *only* way to have an authentic religious experience. Shams claimed that the union with God was to be found in actions of life, not in writings and knowledge of books: "that which will free you is the servant of God, not abstract writings. He who follows words on a page is lost"; . . . and "the meaning of the Book of God is not the text, it is the man who guides. He is the Book of God, he is its verses, he is scripture" (quoted in Lewis 2000, 136). This sentiment reflects a kind of "sober" mystical approach to Islam practiced in Pamir. In this way, the religious/spiritual life is directly tied to action. In principle, spiritual life or spirituality is an embodiment of virtues expressed through daily actions—for the mystic, spiritual life *is* life, not a separate area of one's life that is compartmentalized to a specific day of the week, or to the outward form of ritual practices.

These notions form an important thread between Sufism and Pamiri worldview, both historically and in the contemporary performance of traditional healing practices that engage multiple modes of treatment. From *maddâh* to other forms of individual and group prayer and meditation, to traditional, naturopathic, and biomedical healing approaches, the themes of Persian Sufi poetry are interwoven in the mind and experience of people throughout the

Pamir region, giving context to processes of healing and a mystical orientation to life.

Multimodal Naturopathy: Hot Springs, Herbs, and the Water of Life

There is an ancient tradition of naturopathic medicine in Badakhshan, which seemingly approaches health maintenance and treating patients in primarily a physical or material way, utilizing special herbs, foods, and water. However, a critical component of this tradition is the inclusion of the spiritual dimension when treating a patient, who is viewed as an integrated whole, comprising the *aql-tan-ruh/jân*. Moreover, the material components of the naturopathic system, since they come from nature, are viewed as an expression of God's will, each with a particular purpose, and each endowed with a degree of *baraka*. Additionally, whereas the naturopathic tradition in Badakhshan can embrace prayer and other spiritual practices, these are usually left to the individual or religious/spiritual figures. A case in point is Dr. Shirinbek, who is also a conventionally trained surgeon and the leading naturopath in the region. While he believes in and personally engages the power of prayer as a preventive practice and curative agent, utilizing prayer in the treatment of patients falls outside of his clinic's practice and into the domain of local religious/spiritual leaders.

Shirinbek's *Garm Chesma*, "Hot Springs"

After certain excursions in the field, friends in Khoroq would often ask me with a certain excitement and anticipation, *Garm chema raftid?* "Did you go to the hot spring?" In the enveloping stone and dust of the mountains, coupled with the all too common experience of not having any water to drink or to cook and clean with, just the news that someone made it to a spring and was fully immersed in water seemed to quench a kind of thirst that was not only in the throat, but all over the skin, from head to toe, and fulfill some degree of desire to bring water to any other place where it was needed.

There are some seventy-two natural hot springs in Badakhshan. Historically, these springs have been viewed as wells of *baraka* healing energy. The location of fifty-seven of these springs can be seen below in a photograph which was taken in Dr. Shirinbek's office, the others are unknown or buried underground (see figure 5.3). Not all of the springs are accessible and only three of them are currently functional, one of which is under the care and direction of

FIGURE 5.3. Map of the known hot springs in Badakhshan.

Dr. Shirinbek. His spring and naturopathic clinic is located in the village of *Auj*, between Khoroq and Ishkashim.

People both immerse themselves in this water and drink it for healing, on one hand believing that the physical components of the water promote healing, and on the other, because the water contains *baraka*, drinking it can bring about vitality or healing via a spiritual channel. Patients are prescribed a specific duration of time to remain in the water, how often to visit the spring, and how much if any of the water they should drink. People who are not ill also come for general relaxation and rejuvenation. Clothes are not worn in the water and the bathhouses are cleaned after each use.

Dr. Shirinbek utilizes the spring for its physical properties, prescribing varying durations for patients to be immersed in the water, as well as varying amounts for consumption. He has analyzed the mineral content and

FIGURE 5.4. Hot spring water formula.

temperature of the water and has written the formula on the outside of one of the bath houses (see figures 5.4 and 5.5).

The physical properties of the water are viewed as a kind of balancer of the physical body, entering the patient through the largest organ, the skin, as well as through the digestive system. Patients also often drink some of the water before it and they enter the pool area. This is mainly to prevent any contamination, although some also drink the water while immersed in the pool. Dr. Shirinbek described the water as being charged with physical, measurable energy that is a physical expression of the underlying and encompassing spiritual energy of *baraka*. As the patient's body is also charged with energy, when it comes into contact with the hot water of the spring, the body's charge and state of imbalance immediately begins to change and move towards a balance point. The water, which bubbles up from a deep unknown source in the earth, passes through countless layers of energized elements that empower it with physical healing energy. Carrying the power of the earth's charge within it, the water is viewed as a stronger force or oscillator when compared to the weak energy or oscillation of an illness within a patient. In this relationship, then, between the water and a patient, we can again see the process of entrainment underlying the balancing or modulation of the physical body.

In combination with the spring water prescriptions, Dr. Shirinbek prescribes a wide array of herbal medicaments, most of which he cultivates on the land

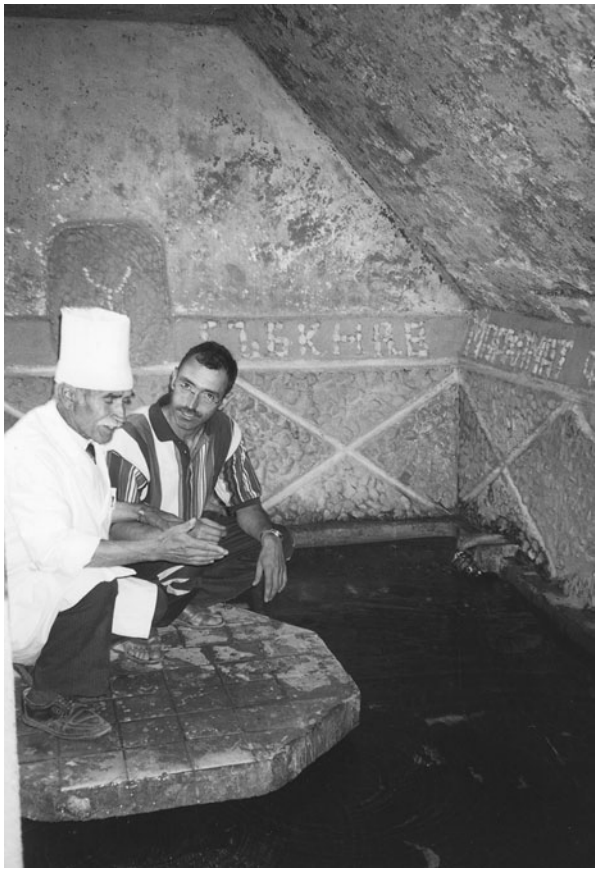

FIGURE 5.5. Inside the hot spring pool.

around the spring, and all of which he and his wife harvest and prepare by hand. They regularly travel throughout the region to collect known herbs and flowers and discover new ones. These are then transplanted to his garden in Auj. Some plants and flowers however only grow in the high mountain ranges, which cannot be transplanted and therefore must be collected seasonally. Figure 5.6 shows Dr. Shirinbek explaining to Davlatnazar (center) and Samandar (right) the properties and uses of various herbs and the process of making an herbal tincture.

In addition to the material aspect of the water and herbal prescriptions, there are also other physiological, psychological, emotional, and spiritual associations with and responses to contact with the spring and eating of herbs. Beyond the physical components of both, which have a conventionally understood material effect, the drinking of and being immersed in this special water and eating herbs is seen as consuming or incorporating a part of nature with its component God-given *baraka*. Furthermore, there is a physiological,

FIGURE 5.6. Medicinal herbs.

psychological and emotional healing response experienced by patients when they come into contact with the water and when they ingest herbs. This is especially true in the case of the water, with its rich history of metaphor and transformational power throughout the literature and stories of the region.

Setting up this healing response can be seen to start from the moment one makes a decision to go to the spring, the moment when expectation and anticipation begin to frame one's experience in the context of the local "sacred clinical reality." After the decision is made, several points along the journey to the spring stand out as significant markers, engendering anticipation of a healing experience. In particular, visitors will imagine the spring in their mind, further encouraging an emotion of expectation, longing, and the anticipated healing response. This imagined experience can happen several times along the way, each time providing relief from a difficult journey. Before arriving at Dr. Shirinbek's hot spring and clinic, one has usually been walking (rarely driving) for a considerable time on a long, hard, very dry and dusty, dirt road, often scattered with fallen rocks of various sizes—some large enough to crush a car. The clinic is like an oasis in the desert, separated from the road and outside world by two gates large enough for a car to pass through. When we passed through the gate, we seemed to enter another dimension, unlike the road and the place that was now at our backs and no longer visible from behind the gate. There were apricot and *toot* (berry) fruit trees, other blossoming

and healthy trees, flowers, herbs, wheat, potatoes and other vegetables—in general, fantastic and lush vegetation for the region.

At first, I noticed it was significantly cooler from the shade and that my field of vision was limited by the trees overhead, whose branches were full of big, healthy green leaves and bright blossoms. This natural canopy blocked the view of the vast mountain range all around and quenched the sun's sweltering heat, which had been our constant companion throughout the day. Pathways had been made through the tall grass by the footsteps of many people over the years. Following the different paths would lead us either to the clinic, the hot springs, or simply through the garden area. Seeing and inhaling the fragrance of the herbs, flowers, trees and soil, and hearing the sounds of the breeze blowing through the trees, tall grass and vegetation, as well as the flowing water from the nearby stream all progressively contributed to a more relaxed state—physically, emotionally and psychologically.

By the time that patients would reach the hot springs, the doctor or his wife might have already given them an herbal remedy to treat a specific illness, or perhaps for further relaxation to prepare them for the water experience. They might have also eaten a fruit or had a cup of tea after entering the grounds. At times, the medicament would be given after a visit to the springs. Although most patients would normally reach a somewhat calm, if not very relaxed condition before reaching the springs, some would still be nervous, stressed, or in a doubtful state that they might be healed. The final stage before entering the healing water is to disrobe, men and women in separate bathhouses. Taking off the clothes is like removing the outer garment of the *persona*/self, symbolically leaving behind all physical attachments and veils to the true self—the self that never dies, the self that cannot become ill. Then, while totally naked, one must walk alone on narrow boards or the ground itself before making contact with the water. From the disrobing room to the spring is not far, about twenty steps, but during this time the senses are alive with expectation—the water can be heard gushing into the pool, splashing against the smooth stone interior, the fragrance of the minerals in the water slowly permeate the air, the nostrils, and can even be tasted through the thick humidity within the pool area. The air is mostly warm with a few small cool breezes as the water pressure pushes out old air and balances the room temperature. Finally, one sees the water and the imagined experience is near to becoming manifest. Then, with a final step, one is immersed in the water, relaxing more and more, perhaps even entering a specialized state of consciousness that assists in or brings about healing.

For me, before entering the water, it was almost as though there was nothing that separated me from it and I felt a strange and exhilarating simplex state of being with the air all around me, already encompassing me, leading me into

the pool where the experience will have come full circle, and I would become one with the water. Once immersed, the smooth stone underfoot encouraged me to stretch out and float or rest against the perimeter with body fully extended. The water was hot, smooth, and thick. I had expected the heat, which was wonderful, opening the pores in the skin and bringing blood to every part of my body, but the substance of the water was distinctive—smooth, enriching, cleansing, and it facilitated an overall bodily flexibility that increased my relaxed state. As I was not seeking healing from the spring, my experience was more akin to a visitor who comes for cleansing, relaxation, or increased vitality or *baraka,* all of which I experienced. I was in the pool for perhaps a bit less than an hour and traversed several states of consciousness, from the initial adjustment to the new water environment, to entering a meditative state of quiet peace where I experienced a significant increase in physical energy and strength, as well as mental focus and a feeling I can only describe as spiritual awareness. As I left the pool, put on my clothes and went outside, my field of vision had changed, everything was more vivid and alive, and a renewed sense of perception seemed to accompany my conscious thinking. As was often the case after a special event or moment like this, the dervish's song or the music of *maddâh* from the previous days would gently enter my mind. I looked out across surrounding meadows, my eyes following the path into the foothills, up the mountainside, and to the sky, breathing deeply and experiencing a sense of connectedness and understanding between myself and my companions in the field, the land, and the music.

While the experience is admittedly different for everyone, Dr. Shirinbek believed that in addition to the physical components of the water, which can be measured and correlated with benefits experienced by many visitors, the transformation of a patients' energy through the process of treatment is often where the curative powers of the hot springs exist. The patients' energy can be understood as their personal *baraka,* or *that which promotes healing and sustains life within them*, which exists along a continuum of energy states from the quantum to the gross level. Their current energy states are formed and affected by their physical, emotional, psychological, and spiritual conditions. These conditions and energy states are in turn affected by the experience of being in and perhaps drinking the spring water. The herbal medicaments intend to effect change in the same manner—by influencing the energy states via the channels of the physical, emotional, psychological, and spiritual conditions or aspects. The overarching principle or goal is to restore balance within the patient. An illness that is manifest in the body can be due to an imbalance in the psychological, emotional, relational, and/or spiritual aspect of the person. Likewise, a disease that manifests itself as an emotional problem might have its roots in

the physical, psychological, relational, or spiritual dimension. The key point then in diagnosis and treatment is awareness of the interrelationships between all aspects of the whole person.

Beyond the physical properties of the Auj hot spring, some patients only come for the water's *baraka*. There are smaller springs, both hot and cold, throughout Badakhshan that most local people believe have such a power. The healing energy associated with those springs is attributed to a holy person having visited them, perhaps drinking from them, or performing their ablutions with the spring's water. People often visit those springs for healing, to honor a holy person or saint, to drink from them, perform ablutions and offer special prayers, or to meditate and reflect. Although there is no specific person or figure associated with the *Auj* hot spring, legends often exist in a way that can link a holy figure to almost any place that one desires. Hence, some patients might believe in such an association without it being historically accurate.

There is, however, an important cultural association that is not dependent on the association with a holy person, which applies to Auj and indeed all uses of water for healing; namely, the metaphor of physical water representing the *baraka* associated with the spiritual "water of life" that functions as a potent and affective agent for healing. *Water as/is healing* is not unique to Badakhshani healing practices or religious belief; nor is the metaphor of water and life. Water is perhaps the most important natural resource on the earth and is held by many cultures to be sacred. Moreover, water is often a metaphor for the word of God, the flowing of which is a divine action that cleanses, purifies, gives life and heals. In Pamir, a region where potable water is not always available, where it must be collected daily and carried by buckets from community fountains that operate for only a couple of precious hours a day, or from springs if they are nearby, water is precious and always on the minds of people. Water is also mentioned symbolically throughout the prayer and poetry of the region, providing a constant reminder and metaphor of water's healing effects and spiritual associations.

Consider, for example, an excerpt from the dervish's prayer from chapter 4: "God, the ever-kind, at home, from the side, on the island, in bread and water, in your home. . . . With the water of the spirit, what Muhammad brings is bounty/mercy." Here, water is directly associated with God, the Prophet of Islam, and with the means of providing bounty and mercy. In the Pamiri sacred clinical reality, when one physically immerses in or drinks water in the context of a healing practice, these symbols are present in the consciousness and part of the healing process. Moreover, while the first reference is to physical water—one of the infinite places where God dwells, and the second reference to a symbolic water, physical water need not be present in either case for the metaphor to be effective. In "water of the spirit," physical water is not the bringer of bounty and

mercy; rather, spiritual water is the vehicle. By reading, reciting, mentioning and remembering (*zekr*), praying (*du'â khândan*), and listening with heart and soul (*samâ'*); one is spiritually *drinking* and *immersing* in the *water of the spirit,* which is healing on all levels.

Saying Prayers, Wearing Prayers, Eating Prayers

As mentioned earlier in this chapter, healing prayers come in sounded and silent forms—vocalized, musical, cognitive, and written; each form having unique characteristics. Vocalized or musical prayers seem to have a particular evanescence and intangible quality that can fade away after the physical sound has decayed. This is, of course, a matter of attention—one can mentally attend to the same prayer after its sound has completely dispersed and thereby keep it alive so to speak. However, since not all people can mentally attend to a prayer with ease, and no one can always be consciously attending to a silent cognitive prayer, written prayer amulets known as *tumâr* are utilized. Written prayers in contrast to sounded prayers perhaps have a more sustained or eternal quality, especially if they are worn on the body, as are the *tumâr. Tumâr* function in two ways: as an attention focuser, and as a prayer that has an autonomous power separate from the attention of the patient who wears it. The *tumâr* is an individualized amulet made of paper upon which a religious leader or spiritual figure has written a prayer or sacred verse particular to the patient and illness. The *tumâr* hangs on a string and is often worn around the part of the body that is diseased or injured. It can also be worn around the neck, close to the heart for treating any specific body part, for illnesses of unknown origin, or for preservation of health and protection against disease. Hence, the *tumâr* is both curative and preventive in nature. The prayers written in this form usually come from the Qur'an, Hadith, or other spiritual verses collected in special books, which also contain directions regarding specific illnesses. Figure 5.7 shows a *khalifa* (left), Mr. Ma'ruf (center), and the apprentice (right). In this figure, the various texts utilized for prayer treatment, including the Qur'an, compilations of Hadiths and other mystical writings, and an ancient book categorized by illnesses, each with particular prayers to be used for healing, can be seen on the table.

There is no overarching principle involved to determine if a patient will know the contents of the *tumâr* prayer or not. Each practitioner is unique and each patient is treated individually. In the case of Mr. Ma'ruf, he was at times part of the diagnostic process. For example, in the course of reading different prayers chosen by the practitioner, one would stand out as particularly

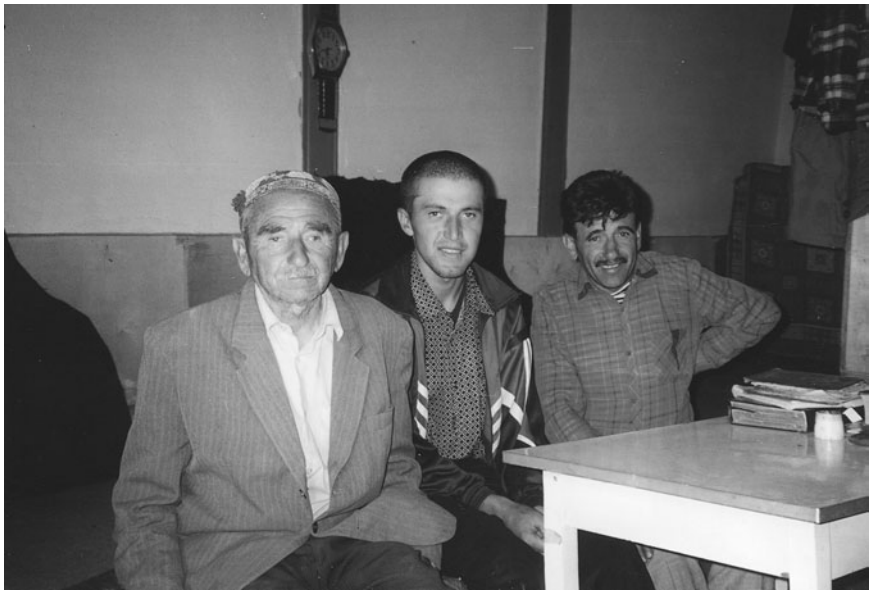

FIGURE 5.7. Prayer–healing.

meaningful or effective. The same prayer would then be copied onto a piece of paper by the practitioner, folded into the form of a *tumâr,* and then worn around Mr. Ma'ruf's neck, head, or placed inside his mouth, letting it stay toward the back of his mouth between the inner cheek and gum, ultimately ingesting it after variable lengths of time. At other times, the practitioner might choose the prayer and make the *tumâr* without the participation of the patient who might or might not read the prayer before wearing it.

Praying with and for Mr. Ma'ruf

From the moment that I met Mr. Ma'ruf, as a kind of natural response, I said an internal prayer for his healing. We met in the main room of his home, which also served as a prayer room where he was treated by the *khalifa*. After our interviews and being permitted to share in what is both a sacred and intimate practice of prayer healing, I requested permission to pray for Mr. Ma'ruf together with all those present—Samandar, Davlatnazar, the *khalifa* and his apprentice, and Mr. Ma'ruf. Everyone agreed and felt like it was a very good idea. Later, Samandar and Davlatnazar said they had felt the same inclination to pray together but were a bit shy to bring it up and they were very happy that it was mentioned. People moved around a bit to get into a comfortable and

reverent position—cross-legged or kneeling is the usual position. On this occasion, everyone was seated cross-legged. The upper arms naturally hung at the sides; the forearms extending in front; the elbows pushed forward making the forearms push upward slightly; the palms facing upward; the hands angled toward each other, perhaps touching at the fingers and forming a triangle between the forearms and body; or the hands might be apart with the palms still turned upward in a position ready to receive. The position of the hands is like the beginning of performing ablutions (or *wuzu*). Then, after the final prayer is said, the participants raise their hands and pass them over their faces as though they were rinsing their faces with water. On many occasions, it was explained to me that the hands are turned upward to receive God's blessings, the spiritual water of life, and the metaphoric sun of bounty. This position is found throughout Central Asia during prayer.

Eyes were closed and all was silent. I chanted and recited the prayers for healing in Arabic that I had learned by heart. For Samandar and Davlatnazar, the meaning of the prayer could be easily understood since many of the words were common to both Persian and Arabic. The *khalifa,* apprentice, and the patient knew Arabic well. The prayers lasted about ten minutes and then we all sat in silent meditation for what seemed like quite a long time, but was likely only another few minutes or so.

It seemed that on one level we were praying together. There was certain condition, an ineffable atmosphere that I experienced during and after the prayers. What I can describe however is a sense of oneness with those present; and which extended beyond our immediate surroundings. This feeling of oneness was also aligned toward a common goal that was both specific and universal. We were at once praying for Mr. Ma'ruf and for all people. The most intense moments for me came after the chanted prayer had ended and we all sat in silent meditation, letting the prayers sink deeply into and surround our beings—bodies-minds-souls. The silence was precious, beautiful, laden with healing energy that seemed to increase as the silence had room to express its encompassing presence. With its corollary stillness and apparent sixth sense of spiritual awareness, silence became the sacred arena where the potential healing energy that emerges from prayer could be accessed. This energy in silence, which is ever-present, manifests itself from the very instant that the inner and outer ear is attuned to its unsounded, gentle power. In brief or extended moments in between musical sounds, words, phrases, verses, or whole prayers, silence became a kind of meeting place of the universal *baraka,* and that *baraka* that is embodied in prayer, itself being a combination of sound and silence. This dance between sound and silence further emphasized the intimate relationship between prayer and meditation for me—prayer most often being expressed in sound, and meditation in

silence. Yet, in meditation, silent prayers often emerge in the consciousness, and even further into the sounded realm, spiraling another stage of mystical experience, meditation, internalization, and hopefully, manifestation.

As we sat together and I slowly returned to a normal waking state, a string of prayers rose to the surface of my mind and were gently whispered in the silence of my heart. After some time, I opened my eyes to discover the eyes of everyone else still closed, their faces showing a focused attention and calm engagement with what Samandar often called "a special condition," or *ye mohite erfâni, rohâni,* or *tasavofi*—"an atmosphere of knowing and true understanding," or "a spiritual, mystical atmosphere." Once everyone opened his eyes, we remained in silence for several moments. Samandar asked Mr. Ma'ruf how he felt after the prayers and he said "much better," he thanked me and we gazed into each other's eyes for several moments—I felt a longing, and sorrow that seemed to be slowly dissipating from his heart. Samandar spoke with him for a few more minutes and he expressed that his heart felt "lighter" and "better," which was also often said by participants of *maddâh* or *falak*. To me, he seemed more relaxed and energetic—he even arose and served tea so we could spend a bit more time together before concluding our meeting. The rarified feeling of prayer that we shared continued to fill the room with a sense of love, clarity, and energy. After tea, we said our parting farewells and exchanged the customary blessings—"may God bestow mercy upon you and guide and protect you on your journey."

Ms. T.'s Prayer Amulet and Other Modalities

In a less severe but chronic case, Ms. T. had decided to enlist the power of prayer, utilizing personal prayers (sounded and silent), prayers of family members, and spiritual healers who would pray and write *tumâr-s* for her. She had never read the prayers that she wore, nor did she know the specific content of them, since the healers who wrote them never divulged the information they contained. For her, knowing the specific content was unimportant, she believed in their power, and that was enough for her.

Ms. T had a gastrointestinal problem for several years and had recently developed ulcers. She had been to various doctors, biomedical and traditional, but none could cure her. She had recently begun to wear a *tumâr* around her neck in hopes that it would effect a change in her condition. In addition, at her request, our research group facilitated her consultation with naturopathic and homeopathic doctors, who gave several dietary recommendations and specific homeopathic remedies, which she followed. After a period of several months, all her symptoms disappeared and have not recurred.

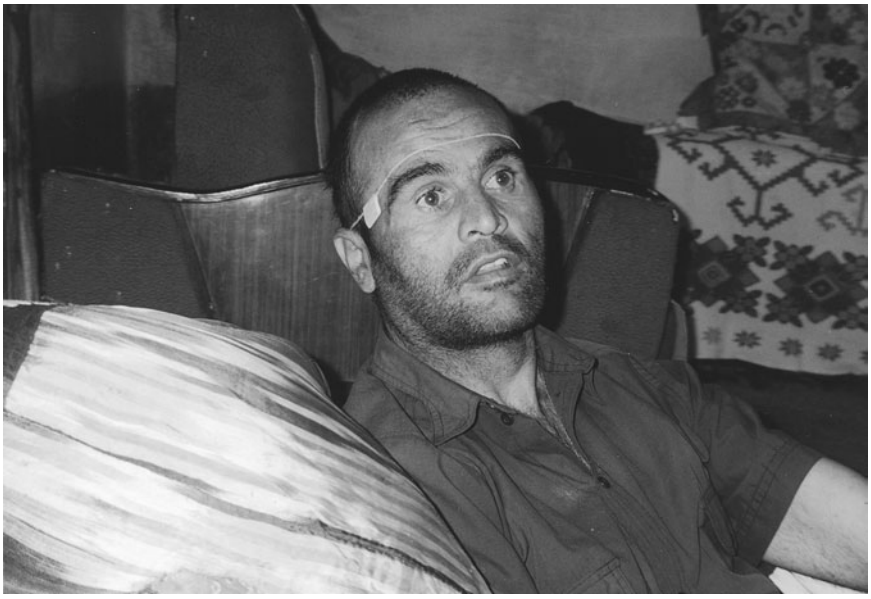

FIGURE 5.8. Mr. J. wearing a *tumâr*.

Meeting and Praying with Mr. J.

In a severe case of an unknown degenerative disease, Mr. J. had progressively lost most of his motor control and ability to communicate over the past year. He had visited different allopathic and naturopathic doctors who could make no clear diagnosis nor provide effective treatment. His family had a special *tumâr* made for him, which was tied around his head (see figure 5.8). In such cases, and for psychological illnesses in general, the amulet is usually worn around the head where the source of the problem is believed to be. I met Mr. J. by chance, while on a field expedition to record *maddâh*.

As I was setting up microphones to record a *maddâh* performance, I was talking with the *maddâhkhân* about my research interests and experiences. Once he knew that they concerned music, prayer, the mind, and healing, he requested that I visit Mr. J. and pray for him. I explained "*man pezeshk ya mulla nistam*" "I am neither a medical doctor nor a clergyman." He replied *"hich gap nist, hich gap nist biârid, mailash?"* "It doesn't matter, never mind, let's go, alright." I again refused and he insisted repeatedly. I finally responded affirmatively saying *"dar khedmatetoam—beseyar khub bud ke âshnâ bâshim; enshahallah khodâ qabul mikonad du'âye mâ"* "I am at your service—it would be wonderful to meet him; God willing, our prayers will be accepted." The *maddâhkhân* was happy

and told Samandar that he would take me to Mr. J's home nearby and that we would return after I had prayed for him. Samandar agreed and we were off.

We began to walk to his house, which was on the lower slope of a foothill. The landscape was beautiful; green meadows of tall wheat leaning gently to one side as the breeze would blow; tall trees along the edge of the meadows, and an occasional small stream underfoot stretching across the grassy terrain. The *maddâhkhân,* another musician, and the patient's father explained his current condition and asked a few questions of me—where I was from, had I visited Badakhahan previously, and how did I learn Persian. I asked a few question about their daily lives, water and agriculture, music, prayer, and *maddâh*. Then we all became silent as we finished the brief journey. We entered the home, went through a dark corridor and then into the main room where natural light was again visible. The room functioned as the main living room and *maddâhkhâne;* its size was approximately eight hundred square feet, much larger than any I had previously seen. Mr. J. was lying in bed against the north wall. He was in a restful state but not fully asleep. He was wearing his clothes and covered with one blanket tucked all the way around his neck so just his head was exposed, showing the *tumâr* tied around his head.

The *maddâhkhân* woke him and introduced us to each other. Mr. J. was unable to verbally communicate. He made some sounds in an effort to speak but it seemed to make him tired and frustrated. We shook hands and then sat together for several minutes. We looked at each other eye to eye and had some form of meta-communicative interchange that I can only describe as a soul or heart connection. In such instances, it is perhaps impossible to know and understand what another person was "saying" in any given meta-communication. Yet, I have experienced this dynamic interchange in various aspects of life to such a degree, that I believe it to be a certain human capacity that is a meaningful form of communication. It shares some aspects with the communication I have experienced with fellow musicians while performing, especially improvised music. During performance, a certain level of communication between musicians can be achieved that transcends the grammar of a musical language. It is an intuitive communication that would only be encumbered by the use of words. It is neither better nor worse; neither necessarily more nor less complete; it is simply another mode of communication that has its special time and place, while simultaneously giving an aesthetic quality of timelessness and placelessness to the experience. From my earliest childhood memories, I can recall a certain feeling that was more than empathy—a kind of sense of knowing the heart of a person. I can best describe it as a kind of listening, where a person's heart would speak without words and my heart and soul would understand and feel their presence, emotions, and inner voice, which I would

understand as the core meaning behind the worded surface of language. This was also my sense and experience with Mr. J. as we met and joined hands.

Our hands did not release from one another for some time while this wordless communication occurred. The other people in the room were silent during this time. Since a few other people had come into the room, I explained again to everyone that I was not a physician or clergyman, but a brother who had traveled a long distance to learn from them about their music, culture, and healing practices, particularly those that involve music and prayer. I spoke in general about the potential power of prayer and that *enshahallah* (God willing), our prayers together would be acceptable and provide healing.

After a moment of silence I chanted and recited a few prayers for healing in Arabic and Persian. As the first prayer word was released into the air, I felt my consciousness focus on the sound in such a way that the walls of the large room and the house itself seemed to fall away or become invisible and I found myself among the tall grass that surrounded the house—I became an observer of myself and Mr. J, somehow outside of my *self* and connected to us both. The sound I perceived from my voice seemed to fill our immediate airspace, spiraling around the area where the room was, reflecting back to us the sound of the prayer in real time, without delay or echo—as though I was immersed in a sound that did not come from me, that I was a listener, but a listener that was one with the chanter. The sound was not loud or harsh, but light and gentle, and seemed to be empowered by the feeling of the moment, which was resolution and peace—healing. When the sounded prayer ended, we again joined hands and we prayed silently, with a few whispers finding their way into the audible realm of sound. Then we sat in silence, hand in hand for some time. *Barâdare aziz, barâdare azizam,* "dear brother, my dear brother" finally came out of my mouth as we looked into each other's eyes. His hand squeezed mine tightly and his gaze became more engaging—my thoughts moved into an unexplainable dimension where I believe we were at a deeper level of oneness and all seemed well for a brief moment of eternity—more than this I cannot say.

Afterward, we briefly sat in silent meditation and then Mr. J.'s father came to our side and translated his son's speech. He said, "My son says thank you and mercy be upon you." I extended my loving thanks to him and his family and we said our final farewells. As we made our way back the same path, the *maddâhkhân* and father expressed their satisfaction and said that that they felt the power of the prayers and their positive effect. When I inquired as to the potential for Mr. J. to be healed by any modality, his father simply said "God willing, he will become well ... we will do all we can." When we returned to the *maddâhkhâne,* Samandar and I recommended that they visit Dr. Shirinbek, who might be able to help Mr. J. They had never met him and agreed that this was a good idea.

Music–Prayer Dynamics in the Hospital

Music and prayer have recently been used in the Khoroq hospital for pain management and as a supplement to anesthesia. A local physician who learned a simple, effective music intervention while visiting Norway introduced the practice. For the application, patients listened to self-selected music during surgery. Dr. Faiz, the head anesthesiologist, indicated that patients most often chose music of a devotional nature, *maddâh* and *falak,* being the most typically selected local genres. Other genres of music that patients utilized included "classical Indian music, European classical music, *qawwali* music from India and Pakistan, and classical and spiritual music from Afghanistan and Iran." He could not give any further details regarding the genres of music, but described the process as a "supplement to anesthesia"—that patients would use a cassette player and headphones to listen to their music during surgery while he would administer the anesthetic. Dr. Faiz stated that with the music intervention, he was able to decrease doses of anesthetic by up to 20 percent. The music intervention was most often used in spinal surgery cases, since these surgeries required the most anesthetic. Before the music intervention was introduced and regularly employed, anesthesia alone often was not sufficient and any higher levels would be dangerous, which in part was a result of the particular drug that was available, a lack of sufficient monitoring equipment, the patients' drug sensitivity, and the severity of the conditions. The music intervention provided an effective adjunctive treatment in such cases.

Since Dr. Faiz had positive outcomes with the music intervention, which often combined music with some form of personalized prayer, the hospital had a direct interest in the applied aspect of my research—specifically, employing the music–prayer dynamics model in a surgical or other hospital context. Dr. Faiz introduced us to the head of surgery and we consulted about the potential benefit of applying a music–prayer program for patients. They were quite enthusiastic and invited Saba and I to perform such a program during surgery. Although we made several attempts, the opportunity never arose to assist during surgery. In lieu of this project, we were invited and able to meet with three patients post-treatment and two visitors (see figure 5.9) and perform an arrangement of music and prayer within the context of the model. The following parameters were used:

Music Alone—consisting of solo *xiao* (endblown Chinese bamboo flute)
Prayer Alone—consisting of healing prayers recited in Persian and Arabic
Music and Prayer Combined—consisting of the above two parameters
Unified Music–Prayer—consisting of the same prayers from the Prayer Alone parameter, but in a traditional Persian style of chanting

FIGURE 5.9. Hospital music-prayer dynamics.

We were all gathered into one of the hospital's recovery rooms. There were three patients and two visitors. Saba and I directed our attention toward the patient in the most severe condition, a gentleman who had been in an automobile accident and was suffering extreme pain. The other two patients had minor arm and shoulder injuries, were mobile, and were experiencing minor to moderate pain. The older patient with the cast was only in the hospital for the day and the young boy for a few days.

The patient in traction was visibly in pain, trying to rest silently but having no success. His neck was put into traction by a piece of torn cloth that was wrapped around the bed's headboard and tied to a piece of wood that was tied to another cloth, which was then wrapped around his head and chin. The bed was propped up on a wooden crate to give him a bit more elevation than the bed alone could provide. Both arms and legs were injured and he was virtually immobile. Insects were constantly flying around and landing on his face and body. This, coupled with the noise from workers outside the hospital and the hot temperature of the room, allowed him little rest, absolutely no comfort, and perhaps even struck at his sense of dignity. Samandar and Davlatnazar kept the insects away and offered emotional support to the patient as Dr. Faiz introduced us to each other. In this setting, we performed music and prayer consisting of the above parameters. The following fieldnotes are a combination of the

experience of the music alone parameter (solo *xiao* Chinese bamboo flute) and the combined music and prayer parameter:

> As I brought the *xiao* to my lips, I realized how dry my mouth had become, and simultaneously noticed the dry and cracked skin on the face of the gentleman that lay before us. I inhaled deeply and exhaled through the *xiao*, the patient closed his eyes, as did I. I began to play, chanting the prayer in my mind along with the *xiao*—starting low and soft, gently rising for several minutes. I swayed from side to side gently sweeping the *xiao* through the airspace and it felt infused with a healing sound energy. Saba's voice was clear, pure, gentle, and loving—the delicacy of her pronunciation when heard in the context of the transformative words of prayer conveyed a kind of effortless perfection that bespoke and engendered health. I envisioned that these empowered sounds slowly and lightly fell upon him, covering his wounds, his brow, his eyes and mouth, gently seeping through his skin, into his body, every organ, his emotional heart and soul, conveying divine love and quieting his pain. The melody grew for a few more minutes to a peak [or *auj* as is typical in Persian classical music], and then it made its way back down the ladder of music and prayer, returning to its place of origin, which, although it was the same melodic and sonic content (i.e., the ending melody was like the beginning melody) it was in a different space of awareness that was more balanced and without pain.

After the performance of all the parameters, we interviewed all of the patients and visitors to understand how they experienced the parameters. Whereas all of the participants indicated that they preferred the combined music and prayer parameter, it seems that individuals had different reasons for the same response, which had to do with individual aesthetics. For example, the patient in traction said, "When I heard the music, I immediately felt a sense of calm and my attention went to the sound and away from the noise outside . . . all my pain went away while you were playing. . . . I wish you could stay and perform for everyone at the hospital, and for me as well." He continued to indicate that he liked each section/parameter of the performance, but that the music and prayer together was simply stronger, "more powerful." For this patient, there was also a masking effect and a change of mental focus that was positive for him. That is, the sound of the flute and voice masked other sounds of the hospital and outside workers and helped him to relax in a way that he had not experienced throughout many long days on his back in traction. The masking

effect related primarily to two features of the sound, the volume and the timbre, the combined parameter in this case being louder than the other individual parameters. Also, the waveform of the sound is more complex and broader in its spectrum, which allowed it to mask more of the bothersome noise. In addition, the patient experienced a shift in mental focus. He described images of nature and a sense of a nonspecific focus that drew him *into* the sound, wherein the words of the prayer went deeper into his mind. "When I focused on the sound, I had no pain" he stated.

There are of course other formulations that could be employed, for example, the flute and voice could perform the melodies of the prayers together rather than the prayers being recited over the flute music. Another important point to mention is that the parameters have numerous formulations and can be mixed together to meet the needs of a particular patient, keeping in mind that one aim of the model is to better understand the dynamics of any formulation that is performed in relation to a particular patient.

After our interview concluded, we had a debriefing session with Dr. Faiz and we discussed possibilities for future collaborations in creating a live musical anesthesia supplement during surgery and a pain reducing music–prayer dynamics program for patients in recovery. We took a brief tour to other parts of the hospital and left soon thereafter so we could make it to the next *maddâh* performance just outside the city. On our way, Samandar and I discussed what might be the best way to overcome the difficulty of paying *maddâh* performers, who would customarily refuse to accept any money for performing and sharing their sacred music.

Maddâh Performance and Money

Finding an appropriate and respectful way to pay musicians and hosts was always eventful. The challenge I faced was to somehow financially compensate the musicians who would never think of being paid for a performance of *maddâh*, yet who could definitely use the money, if not for themselves, then for others in the community, since even physicians, teachers, professors, and other professionals who were fortunate enough to have employment, often only made a few dollars each month. In consultation with Samandar, and through initial experiences in the field, a few guiding principles emerged. First, leave any discussion of money until after performances, and just prior to leaving. Second, at the time of payment, it might be more appropriate and easier to give money to the wife or another family member, rather than the *maddâhkhân,* and this was considered on a case by case basis—sometimes a *maddâhkhân* would be more

inclined to accept money if he did not personally receive it. Third, framing money in a spiritual light is important. Fourth, combining payment with the signing of release forms might encourage acceptance of the money since it can be seen how the recordings and experience would benefit the research project. At times it was better to sign forms separately so it might not seem like a formal exchange of money for *maddâh,* which is opposite to the spirit of the practice. The main principle here is open, honest, and frank consultation.

As an example of these principles, one occasion is particularly instructive. We arrived at a village between Khoroq and Roshon, prepared to record a *maddâh* performance. After the performance, we spent the afternoon with our hosts and were shown warm Pamiri hospitality. Then, I was asked to visit and pray for a young woman who was having severe migraines with vomiting, loss of appetite, stress and nervousness. I responded in a fashion similar to that described above, making it clear that I was not a medical doctor or clergyman. My hosts simply said *gharib tabibast, shomâ hastid—tabibi*—"an unknown visitor is a healer, you are a healer." They explained that everyone has access to *baraka,* and they were insistent, so I agreed to go.

In my meeting and interviews with Ms. K, I learned that she had much psychological stress in her life relating to personal relationships. It seemed to me quite unique that we were able to communicate so freely and easily from the beginning. I attributed it to me not being a local resident and thus perhaps less threatening; and to the questions I asked, and silence I gave in listening to her responses, and follow-up questions based on her responses, and then further listening to her (see figure 5.10).

I knelt beside her and spoke softly so only she could hear me. There were not many other people in the open room, but I wanted her to feel free to talk frankly, which I believe she did. She mirrored my voice, speaking softly and directly to me, sharing what she had been feeling the past several weeks. We sat in silence for a few moments and I asked her to follow me in a few simple breathing/meditation exercises if she liked. We did this for a few minutes and then I recited and chanted a few prayers in a similar manner, as mentioned earlier. After the prayers, she stated that she no longer had a headache and described being more relaxed and peaceful. I then asked her about her heart (emotional heart), and she said that it was better too, which, from her tone and eyes I understood as being only a little better. It seemed to me that the emotional improvement was, in part due to the physical changes—loss of headache and relaxation response, as well as general feeling of balance. I also gathered that there was more for her to do because the full resolution to the emotional issues related above involved other family and community members. In conclusion, we discussed how she might approach her circumstances to resolve

FIGURE 5.10. Consultation and prayer with Ms. K.

the relational issues through consultation, while maintaining peace of mind through prayer, meditation, exercise, and making a visit to Dr. Shirinbek's clinic to explore her diet and perhaps adopt an herbal treatment. We thanked each other for the experience and she smiled and assured me that she was better, at least for the present time.

After this experience, it was time to part ways. The *maddâhkhân* was very happy and sent a young boy off to bring me a gift—a traditional gift of beautiful, hand woven, warm, woolen socks. The *maddâhkhân* expressed his gratitude for my coming and praying with Ms. K. I placed my hand over my heart as is common in Pamir and thanked him, saying that they had all given me so much already, and I could not possibly accept anything for having prayed for Ms. K. He and the other musicians and community members smiled and forced me to accept them after a many rounds of my refusals and their insistence. There was an aspect of ritual behavior involved in this interchange known as *t'ârof*, which here was a sincere manner of showing respect. In this instance, one or several refusals are the cultural norm before (if ever) one can accept a gift or token of gratitude for example. Before accepting the gift, I checked with Samandar, who was gently smiling to himself as he watched me navigate my way through this cultural terrain. After he saw me give sufficient reasons why I could not accept the gift, he quietly advised me that I should accept it, so I did, happily seeing that my hosts were grateful. After having accepted the gift, suddenly another

little boy appeared with another pair of socks with a different, beautiful design, then another child—a little girl with another pair! Since I had already accepted the first pair, I had by default accepted these as well, even without knowing that they would appear as they did.

In our dialogue, the *maddâhkhân* reflected the same behavior I had previously experienced—he used a kind of logical approach and Tajik sayings to build his argument so I would accept his gift: *"Shomâ az dur âmadid va miguyand ke 'qarib tabibast'"*—"You have come from so far away and it is said that 'an unknown visitor is a healer'"—emphasizing that with such a long journey and the fact that your arrival is a kind of healing or good sign, you must accept this gift. Often, reference was made to each other as being brothers or me being the son of an older community member, and that we have a spiritual-family connection that transcended our difference in culture, nationality, and religious beliefs. A very common saying was *"kuh be kuh nemiresad, âdam be âdam miresad"*—"mountains come not together, people always return to one another." After saying this phrase, which has a special emotional content, especially because everywhere you look, your eyes fall on mountains and the faces of your sincere and loving hosts, it strengthens this feeling of familial connection, and any refusal is practically impossible.

We talked for several minutes, letting the feelings that we had just experienced relax somewhat. It was almost time for our research group to move on when I began to thank the *maddâhkhân,* musicians and host for the hospitality, gifts, and for sharing the *maddâh* and *falak* with me. As I started to take money from out of my pocket and offer it to the *maddâhkhân,* he immediately said "No!" in a way that seemed to erase any possibility of him ever accepting it. In our ensuing discussion about my offering something to him he said that they could "not possibly accept money for the prayers and poems performed in *maddâh."* I smiled and said, "A little while ago I said the same thing about praying for the young woman at your request." A big smile appeared on his face, but he still did not fully accept until I put the giving of money in a spiritual or mystical context by saying that "this money is not really mine, but God's, everything comes from God . . . it comes from Him and has now come to you, it will eventually go to someone else. In the sight of God, it is no more than dust, like the mountains and the world, but it is also a gift He has given." He smiled again, nodding his head with a gentle laugh, saying *dorost, dorost, bâshe* "true, true, okay" as he agreed and accepted it.

6

Transformative Meaning *in* Sound, Empowered Sound *in* Culture

The earth gently turned as the mountains overtook the sun. Shadows fell upon our small group and we all shared a deeper sense of family—we somehow felt that we had been here before, together, walking among the mountains beyond the roof of the world. As we made our way to Dr. Shirinbek's home, we discussed what had happened with the souls we had met in our most recent sojourn, the ones that were in pain and longing for healing. We often referred to an individual as a "soul" rather than a "person"—it just felt right, and the more we used this language to refer to people, the more we saw them as spiritual beings and were aware of that invisible aspect of being that connects us all. We reflected on what potential was latent in them to effect a positive change in health and asked ourselves what we could do now that we had parted ways: "Are we still connected to them? Is the sacred healing energy of *baraka* interwoven with our consciousness? Can we gently extend it toward them and embrace them with our thoughts, our souls, our meditations, our music, our prayers?" There was silence between the spaces of our thoughts as the answers became clear to us all—yes, yes, and again, yes . . .

We made it to Shirinbek's home as night fell. We sat on long and worn cushions on the floor, which would later become our beds for the night. A tablecloth was spread out onto the floor for a pot of tea, which sat in the middle, and pieces of flat bread and *toot* (berries) were scattered about in between us and around the tea. I asked Shirinbek about what the *maddâhkhân* had said about being a healer

and that we should go with him to pray for Ms. K., that everyone has access to *baraka* and can transfer it to themselves and others. We looked deeply into each other, eye to eye, we both smiled, his face showing the same look that the *maddâhkhân* had when he told me to pray for his friend, *Khodâ barakat dârad* ("God is the possessor of baraka") he said, *va mâ ham dârim* ("and we also have it"), *az Khodâ miâd* ("it comes from God"). *Dorost* ("true") Samandar chimed in, *az to harakat, az Khodâ barakat*—"From you [us] action is required, from God comes *baraka*." Shirinbek continued, saying that through self-transformation, which comes through *harakat* (action) supported by God, one becomes less *nafs*, less ego-reliant, and more *baraka* and soul-reliant. This resonated deeply with my own experience and understanding. I asked Shirinbek, Samandar, and Davlatnazar if they thought that all religions had this idea within them—that the light of God or *baraka* is in all people and that through such practices as prayer, music, meditation, and action, we can transform individually and collectively—they all smiled and agreed and Shirinbek quoted the above-mentioned poem from Sa'adi about all people forming one spiritual human family to emphasize the individual's transformation as related to the whole. As the evening continued, we began to discuss how every created thing is a manifestation of the spiritual energy of *baraka*—or God's blessings. We shared poems and songs, prayers and stories, experiences of life and theories of science—and we talked at length about *baraka*, its enlivening potential, and our relationship to it. The poems and prayers always spoke of transformation, love, and detachment; and the words *imân* ("faith"), qodrat ("power"), *eshq* ("love"), and *erfân* ("true understanding/spiritual knowledge") echoed in our discussion like the sounds of nature in the valleys that surrounded us. Our discussion spiraled around the concept of love—the love for God, love between people, and love from God toward creation, in such a palpable way that each of us began to grow, transform, and literally fall into a deeper state of love that is often associated with the figure known as the *âsheq* ("lover")—a soul that is enchanted and entranced by an impassioned love of God to such a degree that it only sees the spiritual essence in all people, in all things, at all times. As this feeling of the *âsheq* was strengthened in me, my experience of the present moment changed dramatically:

> . . . my eyes filled with water as my emotions became transparent—there seemed to be a mist in the room that danced in and out of my field of vision, intermingling itself with the steam rising out of the teapot. Samandar sang a prayer, with a certain depth of color and what sounded like a gentle smile on his face—my eyes were closed and I began to lose my sense of balance and gravity. [I had experienced this feeling before, often at special points in my life, and

repeatedly as a stage I pass through in my personal process of prayer, meditation, and music]. My body felt detached from the ground and began to turn as I gently floated up a few feet into the air, slowly leaning to either side, like finding my balance as if I were floating in a pool of pure water. Samandar's voice trailed off and I was conscious of my heartbeat, I could feel and hear it so clearly, compelling me to chant aloud, as though my inner being or higher self was already chanting—the sound was quickly emerging from the depth of my heart, so I opened my mouth and began to intone a prayer in Persian. The sensation of floating increased, as did the turning of my body—I felt I was leaning far to the left, almost making a complete revolution. Slowly I lost any sense of my body or awareness of the physical, and I found a sense of clarity that had no borders between all things and myself. I was perfectly still, and in stillness, blatantly aware of a spiritual and loving reality that is usually hidden during wakefulness—yet is ever-present and surrounds all things. Time and space did not exist in that dimension and I only remember that at the end of the prayer I felt that I returned to my cushion on the floor, my sense of balance and grounding being slowly restored. Someone poured me a fresh cup of tea and said "rahmat" as a blessing. I was elated and deeply empathetic, a kind of sober ecstatic feeling, like I was on a borderline between the floating ecstasy I had briefly experienced and just returned from, and the grounded sense from which it arose. Water from within filled my eyes to overflowing—a few tears rested on my face. I now sat with my friends, drinking tea, which now seemed to be some kind of mystical wine that increased my sense of levity and bliss . . . a poem of Hafez came to mind and I recited the first two lines:

Biâ sâqi ân mei, ke hâl âvarad.
Karâmat fazâyad, kamâl âvarad
Bring, O cupbearer, that wine of the spirit that brings ecstasy,
It brings eternal forgiveness, beneficence, wholeness,
and perfection.

This experience, briefly sketched out in the above fieldnotes, can certainly be viewed and interpreted from different perspectives—the spiritual, reflexive, phenomenological, structural, semiotic, biological, or neuropsychophysiological. The point I build upon in this chapter however, relates to a common thread that weaves through these and other perspectives. Namely, that sounds,

or more specifically musical sounds, are vehicles of personal meaning, which is empowered to effect transformations in one's being. Moreover, the potential to effect a positive transformation rests delicately within an individual's present state of consciousness, personal sensitivities, aesthetic values, and an underlying state of cognitive flexibility—where the mind is prepared for change and is in a state where musical, linguistic, spiritual, and emotional elements or ques can influence the flow of consciousness to such a degree that the transformative process of consuming musical meaning is engaged and propagated throughout one's body and being.

But what if we were to turn the lens of physiological experimentation onto bodies through which musical and spiritual meaning is propagated? And what if we did this, not in the controlled and sterile environment of a laboratory, but in the natural environment of ritual practice, in the *maddâhkhâne,* or under the shadows of the Pamir Mountains and the vast sky beyond the *bâm-e jahân* (roof of the world)? The next section represents an approach of doing just that—not with the intent or hope to "prove" that music or prayer has the power to heal, but rather to "break ground," as it were, in the process of bridging ethnography with physiological experimentation in the context of field research. As such, this section offers one way to think about, and build upon certain research approaches in medical ethnomusicology.

Physiological Response in Ritual Performance

Modulating Stress through Music–Prayer Dynamics

To form a meaningful physiological study in the context of field research, one must start by operationalizing terms and setting parameters. For the purposes of the field experiment, healing is viewed as a downward modulation of stress (distress), which was assessed by measuring changes in the stress indices of systolic and diastolic blood pressure, and heart rate (hereafter SBP, DBP, and HR). A digital blood pressure/heart rate monitor was utilized for measurement. In addition, in four cases electrocardiographs were recorded to compare the physiological process in tandem with the musical process.

Within a vast body of literature across several disciplines, which overwhelmingly indicates the dangers of stress, there is an interesting, almost hidden connection between music and prayer in stress modulation and other positive effects. For instance, there is evidence in biomedical research which shows that music lowers stress levels (see, for example, Aldridge 1996; Majumdar and Ladak 1998; Seaward 1999), increases cerebral blood flow (Tang 1997; Mathew 1998;), "alters and structures the environment," relaxes patients, keeps arousal

and agitation levels low (Goddaer and Abraham 1994), promotes cognitive and motor abilities (Aldridge 1994), "promotes neurorehabilitation, improves emotional functions, activities of daily living and quality of life" (Pacchetti 1998) and lowers the levels of the stress hormone, cortisol (Field et al. 1998).

At the same time, there is evidence that prayer lowers stress levels (Majumdar and Ladak 1998), "is a significant mechanism for alleviating stress and improving coping ability" (Mathews et al. 1993), facilitates a relaxation response that positively affects the immune system (Hughes 1997), positively affects the health and mood of AIDS patients (Sicher et al. 1998), improves the outcome of coronary angioplasty patients (Seskevich et al. 1997) and coronary care unit patients (Harris et al. 1999), and is a positive treatment for changing thoughts to influence health (Bilkis and Mark 1998). In addition, including spiritual elements in medical treatment has been shown to facilitate recovery from depression, lower blood pressure, enhance the immune system, and improve public health (Mitka 1998).

There is also evidence that stress and negative thoughts can exacerbate existing conditions (Bilkis and Mark 1998), lowering stress positively affects immune function as where an increase in stress negatively affects immune function (Kiecolt-Glaser and Glaser 1995, Benschop et. al 1998). In clinical trials on stress management strategies, it was shown that psychosocial stressors occur within a specific cultural context, that "the means by which the . . . [subjects] manage stress . . . is often culturally determined," and that "the predominant stress management techniques were prayer and music" (Majumdar and Ladak 1998). Since psychosocial stressors cannot be divorced from culture, and since the potency of both stressors and interventions are often culturally determined, the role of music and prayer as interventions form part of a complex matrix that embodies meaning, worldview, and belief, with the potential to affect bodily and mental functions. While there is a positive correlation between music and stress reduction (Aldrige 1996) and prayer and stress reduction (Mathews et al. 1993), there are no studies that address music-prayer dynamics (i.e., the relationship between music and prayer in stress modulation or healing). This link is overlooked even in settings where both music and prayer are known to work together. For example, the music-prayer link is not considered in studies that explore church attendance or religiosity (Koenig 1997; Levin et al. 1997; Larson et al. 1998), or in studies that include cultural contexts where music and prayer would likely occur as one unit (for example, Majumdar and Ladak 1998).

The physiological data collected in the present study aim to measure changes in stress levels and provide insight into bodily experience that is not mediated by language, nor accessible through ethnographic research alone. It was hypothesized that *maddâh* in specific cultural contexts lowers stress through

the downward modulation of blood pressure and heart rate. Since there are no published ethnomusicological studies that attempt physiological experiments in the field, I adapted an experimental designed previously tested in three pilot studies. The experimental aspect of this project hopes to provide one approach toward bridging the gap between ethnographic and health science methodologies that explore the roles of music and prayer in healing.

While ethnography is perhaps the best way to convey how music and prayer *live* in the context of Pamiri healing practices and daily experience, physiological measures can go hand in hand with ethnography to broaden our scope of understanding. Building on what Arthur Kleinman calls a "culture-biology dialectic" (Kleinman 1988, 48), I suggest that clinical studies concerned with music or prayer healing, not only account for the relationships shown by the music-prayer dynamics model, but also consider culture in their designs and interpretation of data; and that ethnographic studies, while considering music-prayer dynamics, also consider experimentation as a partner to ethnography.

This portion of the study consists of two physiological experiments conducted in the field of Badakhshan: a blood pressure/heart rate experiment, and an electrocardiogram (ECG) experiment, in which a methodology was developed utilizing video recording equipment that can be employed in future research.[1] The blood pressure/heart rate experiment was carried out successfully in the field.[2]

The exploratory nature of the present field experiment should be emphasized. Although it builds on previous pilot studies, and carries the project one step further, the present experiment is also best viewed as a pilot study. In the case presented here, challenges included achieving a sufficient sample size and evenly balanced stimulus/control groups, controlling for variables of age, gender, health status and medication, and the physical challenge of navigating our way through the Pamir Mountains and valleys. Although the challenges were met to the degree that the experiment was conducted successfully, there can always be improvements. Ideally, to improve on the design presented in this chapter, all subjects would experience all stimuli while controlling for any potential ordering effect, thus providing more comprehensive data and replicable design.

Participants

Forty people participated in the experiment. The sample group consisted of thirty-two men and eight women; thirty-one participants were between the ages of twenty-five and fifty; six between the ages of nineteen and twenty-five; and three over fifty years old. All participants, with the exception of two (one of whom was

Iranian, the other was from Dushanbe) were Pamiri, Isma'ili, and had grown up with and participated in *maddâh* ceremonies on a regular basis. Before individuals could participate, they were questioned as to their current health status and background. Any illness, heart condition, smoking, the consumption of alcohol, or any medication would disqualify a person from participating.

Description of the Experiment

The experimental group consisted of listeners, performers, patients, and healers: forty participants, divided into four test groups, each receiving a different stimulus. Stimuli consisted of *maddâh* devotional music (group 1), no music (group 2), a contrasting local pop music (group 3), and an unfamiliar devotional music (group 4). All musical stimuli were performed live. The Badakhshani pop/dance music consisted of electric guitar and bass, keyboard synthesizer with a drum machine, and vocals—all amplified through a sound system. The unfamiliar devotional music consisted of a series of instrumental and vocal devotional pieces that I performed on the Persian ney, Plains style cedar wood flute, soprano saxophone, and poems and prayers chanted in Persian, English, and Arabic. Group 1 consisted of eighteen participants who listened to and performed *maddâh* devotional music; group 2 consisted of twelve participants who had no music or other stimulus; group 3 had four participants who listened to and performed local pop music for dancing; and group 4 had six participants who listened to the unfamiliar devotional music.

A between groups pretest/posttest design was utilized.[3] Two measures of each variable were taken before the stimuli and two measures after the stimuli. The factors of age, gender, and function (listener or performer) of the participants were recorded. Before field research in Badakhshan, questionnaires based on the music-prayer dynamics model and the five parameters of the PIERS review were developed and utilized in three pilot studies. Although formal questionnaires were deemed inappropriate for this project, the subject matter was covered through interviews with patients, healers, musicians, and other community members who attended *maddâh* ceremonies. These, along with the breadth and depth of traditional ethnomusicological field research, helped to provide an ethnographic frame for understanding local aesthetics of music-prayer performance and their roles in healing.

Statistical Results

Explanatory data analysis was performed to identify which, if any, stimuli and factors had a significant effect on physiological responses.[4] Two measures of

each variable (SBP, DBP, and HR) were taken pretest and posttest. Each set was averaged and the difference of averages was labeled SBPdiff, DBPdiff, and HRdiff. The systolic blood pressure data suggests that positive effects are present and are aligned with a genre's purpose and function, as well as a subject's expectations and cultural associations. In the case of the *maddâh* stimulus with a 1 percent error rate[5] show a significant effect on SBP between pre and post-test measures with a *p*-value of 0.0003. This gives a 99 percent confidence rate that the effects are a result of the stimulus. In some individual cases, there were decreases in DBP and HR but not to a significant degree; none of the factors (stimulus, age, gender, listener, or performer) had a significant effect for the changes in DBP with 5 percent error rate. Heart rate modulation was effected the least. However, there were indications that gender seems to account for a significant effect in the changes of heart rate with 5 percent error rate. This must be explored further, with a sample group controlling for gender.

Figures 6.1–6.3 show the box plots[6] of SBPdiff, DBPdiff, and HRdiff. The variables of SBPdiff, DBPdiff, and HRdiff, are indicated on the y-axis, and stimuli group numbers 1–4 along the x-axis. The dark line in each box indicates the mean.

In figure 6.1 (SBPdiff box plot), stimulus no. 1 *(maddâh)* shows the largest effect in lowering SBP, followed by 4 (unfamiliar devotional music). It seems that the two devotional musics form a separate category, that is, while they overlap with each other, they do not overlap with the boxes for stimuli 2 and 3.

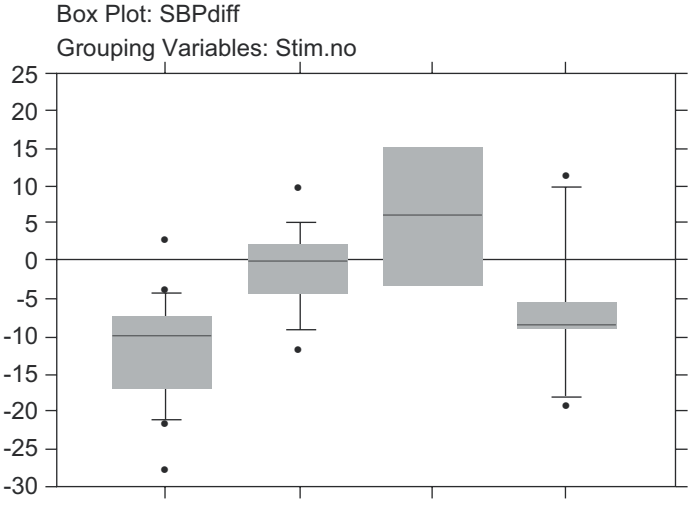

FIGURE 6.1. Box plot of SBPdiff.

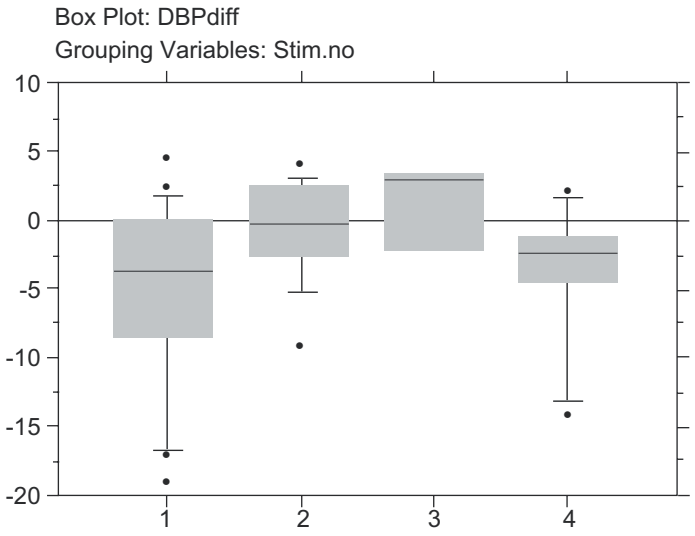

FIGURE 6.2. Box plot of DBPdiff.

TABLE 6.1. Bonferroni/Dunn for SBPdiff

	Mean Diff.	Crit. Diff.	P-Value	
1, 2	–10.514	9.557	.0006	S
1, 3	–17.431	14.175	.0002	S
1, 4	–4.972	12.088	.1706	
2, 3	–6.917	14.805	.1210	
2, 4	5.542	12.822	.1505	
3, 4	12.458	16.553	.0149	

Stimulus 3 (local pop music) shows an increase in SBP, while stimulus 2 (no music) shows no effect. In figure 6.2 (DBPdiff box plot), there is now an overlap between all stimuli, with groups 1 and 4 no longer forming a separate category. Also, there is less variability overall, with the pop music not being as elevated as in the SBPdiff box plot (figure 6.1). In figure 6.3 (HRdiff box plot), there is the least amount of variability with each group maintaining a moderate stance, with the exception of a few outliers. Also, the mean of group 4 is now the lowest position.

In addition to the box plot and ANOVA (analysis of variance) tests, multiple comparison tests—Tukey/Kramer, Scheffe, and Bonferroni/Dunn were used to determine where significant effects occurred. These tests compare the significance of effect between groups. The strictest test, the Bonferroni/Dunn, is shown in table 6.1. It is the strictest since, for p to be "statistically significant,"

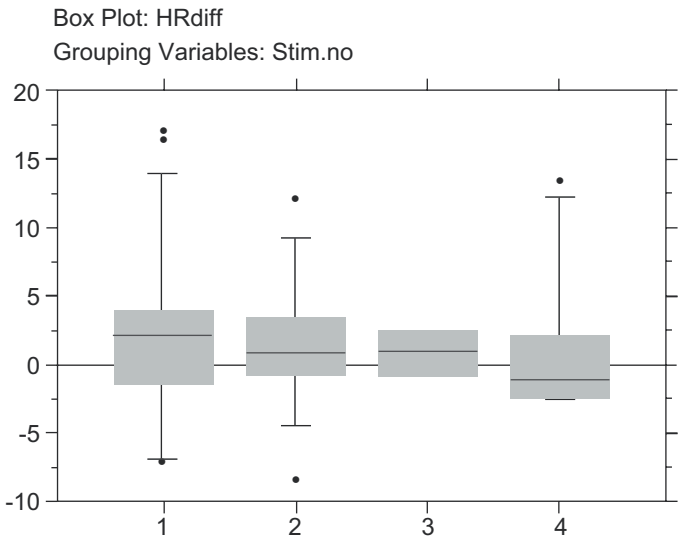

FIGURE 6.3. Box plot of HRdiff.

it must be less than .0017. This test shows a similar effect that was found in the other two multiple comparison tests. Namely, that the SBP of group 1 (*maddâh)* was significantly reduced compared to both group 2 (no stimulus) and group 3 (Badakhshani pop music). The "S" indicates a statistical significance where $p < .0017$. Groups 1–4 are indicated on the left-hand side. Note that there is no significant difference between group 1 and group 4 (unfamiliar devotional music). Additionally, there was no significant difference between any combination of groups 2, 3, and 4.

Discussion

Perhaps what is most intriguing in these data is that they suggests a culture-transcendent aspect to the types of devotional musics that were employed in this experiment. This is evidenced by the significant difference between *maddâh* and the other control stimuli, with the exception of the unfamiliar devotional music, for which the difference in *maddâh* was not statistically significant. This suggests that the unfamiliar devotional music, while not strong enough to create a statistically significant difference between itself and the "no music" or "local pop music" stimulus groups, its effect was strong enough to keep the *maddâh* from being significantly different.

Another way to view the effect is not in terms of culture-transcendent aspects, but rather in terms of shared or common cultural aesthetics. For instance,

although the second devotional music was classified as "unfamiliar," perhaps there was enough "familiarity" in the musical materials and elements—the musical instruments, modes, rhythms, dynamics, timbres, other musical components, the prayers and poems to engage cognitive networks that were previously trained through enculturation to create relaxed and healthful states, and enough familiarity to engage a cultural aesthetic and dynamic that allowed a person's consciousness to approach a flexible state, which here facilitated state of lowered stress. Additionally, the new or "unfamiliar" elements, since they were in the context of an overall pleasing soundscape, could be viewed as further encouraging the stretching or plasticity of the mind where new aural perceptions can be engaged and create a new experience of musical affect. The new aspects also seemed to be more effective for musicians who were accustomed to exploring and hearing new sounds, which they typically linked to desired states of being—relaxed, spiritual, healthy. Overall, the shifts toward relaxation were further emphasized in the local devotional music where the effect was greatest.

When considering the local devotional music of *maddâh,* with its array of cultural associations, the experimental data offer further insight into the links between local beliefs, cognitive, bodily, and spiritual response; namely, those who participate in *maddâh* believe it to possess *baraka* capable of healing the physical body, the mind, and spirit of any illness. In addition, participants often stated that *maddâh* creates a process of purging the heart of sadness and pain. For instance, participants frequently commented, "*maddâh* relieves my heart of sadness" . . . "it brings the sadness and pain out of my heart . . . if my heart is burning, broken, or tight, it feels better after *maddâh.*" A physiological counterpart to this might then be viewed as the downward modulation of systolic blood pressure—or relieving the heart of stress. Might the lowering of systolic blood pressure associated with *maddâh* be a reproducible physiologic marker for relief of sadness in the heart? The experimental data suggests that systolic blood pressure may be an effective parameter through which to monitor the spiritual effect of devotional music on human physiology.

Symbol, Structure, and Baraka

The process of imbibing musical, sacred meaning takes on many unique forms in Pamir. For instance, as shown in chapters 3 and 4, the Pamiri symbol of "five" links to multiple aspects of life, belief, culture, the natural and built environment, and conveys a meaning that is, in large part, the basis of good health and potential healing among certain Pamiris. Strikingly, in the experimental portion of my research into *maddâh*, participants reported that,

especially during the last section of the ritual process, where the musical sign of "five" is dominant in the rhythmic structure, they experienced a categorical shift in consciousness that was correlated with the above statistical data. This mindshift was often described as a process of rising above the self to a spiritual realm, crossing a border between the limited and unlimited, or moving from negative emotional states to positive ones.

Underlying this experience, through the rare confluence of uniquely constructed musical and poetic symbols and forms, there can be even more emphasis on the symbol of "five." For instance, Sultan Mahmoud sings the following poem by Hafez in the musical form of the *setâyesh*, where the musical meter of 5/4 with the same organization detailed in chapter 3. Poetically, the meter is in a five-based syllabic structure known as *rajaz*: /- - v - -/, (*chan-dân-ke-gof-tam*). The grouping of distiches in this performance adds to the five-centered poetic structure, which is rendered into musical phrases grouped by five syllables per hemistich—a comma separates each hemistich and indicates a consistent pause employed during performance. Depending on the melodic contour, the poem can be performed with a further five-centered organization—five lines to a verse, and five verses to the poem, transforming this *ghazal* into unique five-based poetic structure known as *mokhammas*, thus further extending the five-based organization here with "five" manifest at the level of the syllabic structure of the words in each hemistich and musical phrase, in the verse structure, and overall poetic form. In my experience, such a poetic organization, especially when combined with the musical meter of five is very rare, if not heretofore unseen.[7]

In hand with the five-based music-poetic organization, with its multivalent and deeply embedded meaning, is the transformative meaning conveyed through the words of the poem:

Chandân ke goftam, Gham bâ tabibân,
Darmân nakardand, Meskin gharibân.
Ân gol ke har-dam, Dar dast-e khâr-ast,
Gu sharm (o) bâd-at, Az 'andalibân.
Dorj-e mohabbat, Dar mohr-e khod nist,
Yâ-rab mabâdâ, Kâm-e raqibân.
Yâ-rab amân deh, Tâ bâz (o) binam,
Chashm-e muhebbân, Ru-ye habibân,
Ay mon'am âkher, Bar khân (o) aslah,
Tâ chand (o) bâsham, Az binasibân.
Hafez nagashti, Shaydâ-ye giti,
Gar mishenidi, Pand-e adibân,
Gar mishenidi, Pand-e adibân, dâde!

How I have bewailed the dispirited doctors who
Cannot heal these poor creatures,
With every breath, that flower feels the pain of its own thorns,
Say be ye shamefaced in the nightingale's (lover's) presence,
Know the treasure of love is not in the (lower) self,
O God! Grant not the desires of my lower self,
O God! Grant that I may awaken and see anew,
So my eyes can behold your face, my Beloved
Oh eternal friend, in you is peace,
How long will I be among the deprived,
Hafez! you won't be enraptured by the world,
If you hear the counsel of the mystics,
If you heed the counsel of the lovers—it is given!

Of the many aspects of this poem that relate directly to the Pamiri "sacred clinical reality," a few are worth mentioning here. First, the lover is grief stricken and remains uncured by the dispirited conventional doctors, so he must seek an alternative approach, namely, the help of God through prayer, which, at one level, is the poem itself. Second, a clarion call comes from a dual source that is a mix of Hafez's higher self and the voice of God that serves to awaken and assure him—"Hafez!" cries the voice, "you won't be enraptured by the world, If you hear the counsel of the mystics, If you heed the counsel of the lovers—it is given!" This shows another example of the ontological frame previously discussed, which is embodied in the aphorism *Az to harakat, az Khodâ barakat*—emphasizing that God's role is to give blessings or healing and the lover's role is to act, or as in the case in this poem, act by following the counsel that is given.

Perhaps the most telling lines of this poem are the following:

Know the treasure of love is not in the (lower) self,
O God! Grant not the desires of my lower self,
O God! Grant that I may awaken and see anew,
So my eyes can behold your face, my Beloved,

In the first line, the narrator's voice seems to come from beyond that of Hafez, making a strong statement of truth—that is, "the treasure of love is not in the lower self," implying that it is in the higher self of the *ruh/jân*, which is closer to God—the source of love. Hafez then offers a prayer in the next three lines that calls on Divine assistance to help him draw on the power of *baraka* to ascend the ladder of his prayer and leave behind the lower self—or that aspect of self, which, if dominant in a person's being, is indicative of being spiritually asleep or unaware of God's everpresent reality. Thus, he longs to awaken from

his present state of consciousness, enabling him to see anew, perceiving the Beloved in all things.

Sound, Symbol, and Synergy

The musical and poetic sounds and symbols in Pamir create a synergistic experience where consciousness is transformed to a higher state, which plays a vital role in transforming other factors of a person's being. When the synergy is strong enough, and the dynamic of change is linked to all of the five factors, the potential for lasting change is greater.

But what about outside of the Pamir Mountains, is the same process functioning, only with different forms, metaphors, symbols, and ritual practices? If a person has not grown up in a time or culture where such practices are a typical part of life, can the culture-transcendent principles and processes that underlie music and healing practices be learned and effectively applied in a meaningful and beneficial way? Can a newly developed practice then be employed to transform specific aspects of a person's life to create health or healing, to experience the emotions or attain the goals one desires, to develop a sense of awareness never before experienced, thus creating the same sense that Hafez suggests in this poem—a sense that one has truly awoken for the first time? In my experience of sharing these principles and processes with people of diverse cultural and religious backgrounds, the answer has overwhelmingly been yes.

Transformative Consciousness in Daily Life: Music, Mind, and Meditation

To explore one way that the culture-transcendent principles and processes can be applied among diverse individuals, I initiated a long-term research project[8] focused on facilitating a process of learning and practice through which participants can create the dynamics of change associated with cognitive flexibility, entrainment, embodiment-embeingment, and the Human Certainty Principle, primarily through exploring multiple approaches to meditation, including prayer, sound and music, vocalization, and movement. Although the preparation for the implementation of the project is flexible, the framework is the same. Most participants spend several weeks getting familiar with concepts and practices associated with music, the mind, meditation, and transformation before implementing a practice on a regular basis. At times, however, participants might only spend a week or a day learning a few techniques to

apply to their practice and immediately initiate a regular practice of meditation. One approach that is often adopted by participants is that of long-tone vocalization or chanting on vowel sounds or on a word or phrase that the participant chooses.

As participants become familiar with various approaches to meditation, they begin either to adopt an existing practice, modify a practice that they have learned, or create their own meditation practice. They also begin to explore the five domains of being, asking themselves what they want to develop in their lives, *what* and *how* they want to *be*. The answers to these explorations, which usually take the form of detailed accounts of physical problems and illnesses, psychosocial stresses and conflicts, emotional struggles, spiritual yearnings, joys, successes, hopes, and aspirations, are distilled into a generative thought, a positive and empowered word, idea, virtue, characteristic, skill, or capacity—something specific that embodies their intentions, and which, they want to incorporate more fully into their lives.

Next, participants employ their personalized meditation process to create a heightened state of cognitive flexibility by using an individual or combined practice of music, sound, prayer, meditation, breathing, or movement. The practice forms a ladder or channel by which participants ascend to a flexible state of consciousness that *is* their higher self and is directly connected to the unified field, matrix of all matter, or a dimension referred to by any number of spiritual or religious terms that are meaningful to each individual. Then, participants introduce into that quantum vortex of a potentially transforming state of mind, the previously chosen generative thought. A rarified, at times ineffable meditative experience follows, after which time, participants return to a postmeditative state of being, which is now categorically higher, more balanced, and more whole than their premeditation state. Finally, practitioners' extend the higher state of being into the rest of their daily lives. Most often, this practice is performed once in the morning and once in the evening, imbuing the waking life and dream state with a meditative power that is an expression of one's most heartfelt positive desires. This process is represented in figure 6.4.

In figure 6.4, the numbers 1, 2, and 3, indicate points in time—point 1 marking the beginning a transformative, meditative practice; point 2 indicating the highest point of the practice; and point 3 marking the end of the practice. L.C. stands for "lower consciousness" and H.C. for "higher consciousness." The horizontal lines indicate multiple levels of consciousness between the L.C. and H.C. The dashed line that extends from the lower left corner of the graphic to the upper right corner represents any practice (for example, music, prayer, meditation, breathing, or movement) that forms a ladder or channel between the

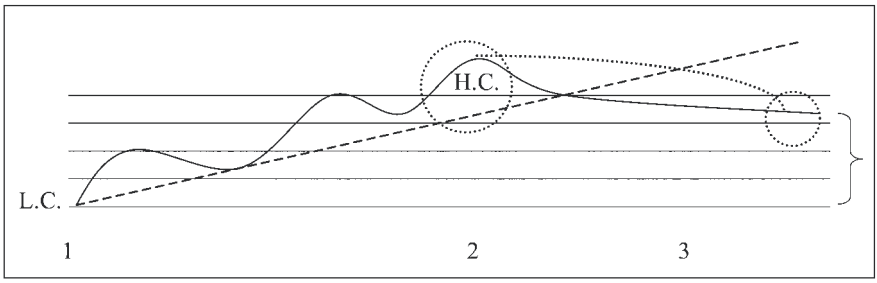

FIGURE 6.4. Model of transforming consciousness.

L.C. and H.C. The solid wavy line represents one example of the consciousness of a practitioner, illustrating a general pattern that often occurs—that is, there is ebb and flow in the mind's attention when moving toward the H.C. The dotted circle around the H.C. indicates the power-laden experience that occurs at the height of the meditative practice. Most important in the graphic is the section of the solid wavy line after the practice has ended—from point 3 onward—notice that the line, which represents consciousness, gently descends and levels out after the highpoint of the practice has been experienced. From point 3 onward, consciousness is maintained at a level that is less than the apex of experience at point 2, but much greater than that of the L.C. at point 1. Hence, the bracket on the right shows the degree of consciousness that has been traversed or transformed by the practitioner. This can also be seen as a change in the quality of awareness that has moved from a lower stage to a higher one through the dynamics and capacities of neuroplasticity and cognitive flexibility.

The goal of the practice, then, is to extend the spirit or essence of the experience of the H.C. past point 3, imbuing all of life with that energy, including a practitioner's next cycle of meditative practice. The second, smaller circle that appears after point 3 is a reflection of the larger circle around the H.C. and indicates the emergence of the ineffable meditative experience of the higher consciousness in daily life. The dotted arced line between the two circles represents a cognitive link between the experience of the H.C. and post meditative experience. This cognitive link often takes the form of direct recall of the generative thought that was the focus of the practice and can emerge through the direct attention of a practitioner to recall it, or indirectly emerge through no direct attempt to remember it. In addition to the transformation of a practitioner's mind state, "L.C." and "H.C." in the graphic can represent transformation of one or more of the five factors—the body, mind, emotions, social dynamics, and spiritual capacities.

The GAP Model—Guided Attention Practice

As participants learn about different ways of meditation, including mindfulness (or mindfulness awareness), they begin to view meditation as a dynamic process along a spectrum of brain states and states of attention that they can induce, change, and control. For some, who needed a more structured framework to gain valuable experience in meditation, which was a brand new experience for them, I formalized a process in what I call the GAP Model, or Guided Attention Practice. The model is organized around five stages, which provide clear steps for entering one's higher consciousness, and developing a state of being often called the *meditative mind*. In relation to figure 6.4, the meditative mind can be considered the same as the higher consciousness (H.C.), or that rarified state of being that the practice aims to extend into the fullness of life.

As a flexible process that is driven by principle, rather than strict rules and guidelines, the GAP approach has, as two of its core goals, the realization of two ideals that derive, in part, from my experience with scores of musicians and music students who overwhelmingly express two of their common aspirations as: (1) to achieve *musical mastery* and (2) to *experience transcendence*, the ineffable, or the sacred in music. I also found that these goals, when adjusted to be person-centered, rather than music/musician-centered are generalizable to virtually all people. Thus, the goals become *life mastery,* and *experiencing transcendence* in life.[9] It is important to note that these goals are purposefully broad in their range of potential meanings—they are multivalent and are understood by participants differently depending on their present state of being, which can be understood as a unique mix and expression of the five factors.

Five Stages of GAP

Employing the GAP model begins as a guided practice (i.e., the instructor guiding the student), but eventually develops into a practice that students perform independently. The transition from a teacher-guided practice to a student or self-guided practice is key in the process of enabling and empowering students with foundational knowledge and skills so that they develop into independent learners and become able to teach themselves in virtually any situation.

The five stages of GAP are flexible so that students can build on their unique strengths as they develop new levels and types of capacities. The stages are as follows:

1. *Engage* the mind and body to change the present state and prepare for stage 2.

2. *Enter* the state of the meditative mind.
3. *Enjoy and experience* the silence of the meditative mind and higher consciousness.
4. *Introduce* and *incorporate* a special word, idea, phrase, or goal into the meditative mind.
5. *Extend* stage 4 into the life activity.

After valuable experience is gained by students who benefit from such step-by-step structure, I begin to vary the process so they become comfortable with the dynamics of change within meditation and to emphasize that they can guide the process and should not be wedded to the form of meditation, but rather to its purpose for them, and its very mundane or natural place in the human condition. For example, one variation is to switch stages 3 and 4, and vary them a bit. So, stage 3 becomes: "*Introduce* and *incorporate* a special word, idea, phrase, or goal into the meditative mind." This stage becomes extended where a participant is guided by the instructor to gradually move *beyond* the word or idea into a nonlinguistically defined space of consciousness that is further along the spectrum of the meditative mind. This is a space at the end of stage 3 and the beginning of stage 4—a moving into silence and bliss. Stage 4 becomes "*Enjoy and experience* the silence of the meditative mind and higher consciousness." This state of consciousness becomes key in subsequent meditation sessions, because, as students become accustomed to visiting the space of the meditative mind, they develop a sense of familiarity with it and can more easily and fully engage that state of mind at will.

The excerpts throughout this chapter are drawn from a host of oral and written accounts of participants in the United States who learned and personalized various practices of music-prayer-meditation dynamics and consistently applied them over a period of time ranging from one to several months, to some who are still practicing now for a number of years.[10] Most often, participants do their individual practices each morning and evening, letting the empowering experience of the practice imbue both their waking and sleeping hours. Unlike the examples from the Pamir practices of *maddâh* and *falak*, in this project, practitioners come from a diversity of cultures, religious traditions, ethnic backgrounds, and they employ a broad diversity of music, sound, prayer, and meditation—each person's practice being developed by, specialized for, and unique to each individual. Although this does not necessarily preclude any musical or cultural analysis, the central purpose in this section is to emphasize the culture-transcendent processes detailed earlier in this chapter, rather than each individual's culture-specific practice. Participants are both women and men, who range in age from eighteen to eighty-five. Finally, in all instances, the

participants themselves are in the role of healer, engaging an internal, spiritual or metaphysical aspect of self, which allows and facilitates transformation.

Transformation through Experiencing Higher Consciousness

The following are snapshots of participants' experiences within the context of their meditation practices. The first excerpt comes from Jamie, who was very skeptical that meditation could have any effect, let alone a positive one. Moreover, although she was raised in a religious home, she had no real experience of anything that she called "spiritual" or "metaphysical" which, coupled with her skepticism, lead her to focus on the psychological, emotional, and social dynamics that she might engage through her practice. For Jamie, being a skeptic served her well, because for her this also meant that she was a critical thinker and would sincerely engage a subject, even if she were not convinced and biased against the project at the outset. Little by little, over a period of six weeks, Jamie began to experience higher states of consciousness in her meditations and eventually began to teach what she had learned to her friends.

> Although I'm skeptical by nature and was of this as well, it actually *is* real, testable, and fun. I realized that this practice helps me to surround myself with people who have the qualities that I like and want to have more of in me—to be easy-going and stress-free, to be positive and in a general good mood—balanced, you know—it's just amazing how much people and the environment can affect you. But I realize that I can control that, or if there are times I can't, I can control my reaction to my environment, I can understand things how I choose to, it's my perception after all. The meditation helps me become aware of my conscious perception and how my inner self might actually see things differently than how I've become conditioned to see things—I can then use that inner perception more and more.

Central to her experience was the link between *what* she focused her attention on in her meditation, and what relationships developed during her daily activities. She often struggled with social pressures, trying to resist a tendency to conform to what others desired her to be. This she linked to her childhood and adolescence, where she had many negative labels or cognitive markers embedded into her sense of identity. These, however, slowly began to change as she experienced a new sense of self during the experience of her higher consciousness in meditation. As part of the learning and exploration process, I ask participants to consider their sense of self during meditation, and their sense

of self outside of meditation, specifically that is, to answer the question "Who am I?" from the perspective of the higher consciousness, and answer the same question from the perspective of the lower consciousness. An aspect of this is reflected in Jamie's words, when she mentions her "inner self," which in our discussions was the same as the "higher self," and the "conscious perception" referred to the daily mindstate that was indicative of the "lower self." One of the important steps for Jaime occurred when she repeatedly experienced a shift in daily awareness where her higher consciousness slowly become more integrated into her sense of self—"the meditation helps me become aware of my conscious perception and how my inner self might actually see things differently." For Jamie, considering these questions of identity from the two perspectives was a very empowering exercise. She further stated:

> For someone as acutely and constantly self-aware as myself, I have been surprised to find through meditation that this doesn't mean I have a good or accurate sense of self. In fact, I've found the opposite to be true. I wonder sometimes whether this is just from a fundamental laziness—it's so much easier to follow the expectations of others than determine what I really want. Or maybe it's from a fear that I'll discover negative qualities, above and beyond the ones of which I am aware.

As Jamie continued, she came to view all of her negative qualities as being an expression of her extrinsic self that was largely a result of social pressures and hegemonic cultural forces that are severely and especially biased against women and girls:

> Meditation, rather than emphasizing these characteristics [of the lower self], seems instead to diminish them. As I've been improving in my meditation, I've found myself noticing what I believe to be the universal and collective human self, inner peace and a desire for happiness. While I often lose sight of these essential elements throughout the whirlwind course of my daily life, I think meditation reveals them to be at my core. . . . Meditation can and should also be used to better understand and control our surface characteristics, as these clearly and directly impact our daily lives. But the most important task of meditation, as I have come to understand it, is to strengthen and work toward maintaining a constant connection with that simple universal self.

Jamie went on to say that this core sense of the universal self that she experienced always came at the high point of her meditations. That unique space of consciousness was marked by an absence of the extrinsic self, the negative

formulations of identity that she had previously viewed as who she was. For Jamie, when her identity was based on the extrinsic self, all the negative associations that were part of that formulation became the frame within which she experienced all her relationships. Alternatively, when the inner self became her identity, the opposite was true. Building upon these sensibilities, she slowly gave up more of the outer self, for the inner self and continued to extend that further into her daily activities:

> After first contemplating my sense of self within and outside meditation, my main sense was a feeling of universality and connection. While that is definitely still a factor, I now (finally!) also have more of a feeling of control . . . but more than that is that during the high point of my meditation, which is difficult to describe in words, I feel unconditional love, safe, no judgment, and powerful, like I can do anything—I feel a sense of relief and peace, like all the stress is gone and I am free.

This last sentiment is virtually universal among participants in the project. That is, as participants enter and become familiar with the higher consciousness of meditation, which is represented by the first dotted circle in figure 6.4, and they are asked to reflect upon and consider the question "who am I inside meditation?"—that is, "who am I from the perspective of my state of higher consciousness?" All participants describe a sense of freedom and detachment from all negative things and experiences, where only an encompassing sense of love and wholeness remains. Participants often describe this state as:

> finally at peace, a sense of joy, free from the world, stress-free, light, only good, no negativity or judgment, a sense of oneness and selflessness, incredible strength and health, pain free, confident, totally capable, spiritual, being in the presence of God, life changing, energizing, beautiful, and feeling like my true self.[11]

Although these are just a few of the typical comments that participants' make about this state of consciousness, the answers in response to the accompanying question "who am I outside of meditation?"—that is, "who am I from the perspective of the lower consciousness?" are equally telling—participants' typically stating the opposites: *stressed, concerned about other's view of me, sad, depressed, weighed down, heavy, tired, restless, in pain, unloved, separate and alone, weak, sick, unmotivated, ugly, not like myself*.[12] There seems to be a general process involved, whereby participants pass through an individualized set of emotions and experiences of self as they move toward that ineffable space of higher consciousness. Yet, once participants enter the higher consciousness and reach

the high point of meditation, there seems to be a common experience, which is described as an abiding sense of unconditional love, wholeness and oneness with something greater. Finally, Jamie used both gentle vocal chanting and humming of long tones, as well as her favorite songs in her meditation practice. Importantly, the music played a key role in enabling her to extend the power of her meditation into her daily activity by forming a bridge between the meditative and post-meditative states. The music was a cognitive link between meditation and daily activity that she could draw on to evoke her true self when she felt it slipping away. She did this "throughout the day to quickly return to the state [she] achieved while meditating." This was not unique to Jamie—many participants used music in this way.

In addition to using recorded music on an iPod or recalled music in one's mind to create such a cognitive link, participants also used a number of personalized and innovative approaches to making cognitive links back to their experiences of the higher consciousness during meditation—including focused and attentive breathing, praying, purposefully thinking about or reciting a specially chosen word or phrase, physical movement, stretching, exercise, forced smiling, laughing, or a humorous individual action or thought that would make one laugh or smile. This last aspect was particularly useful for Ryan, who created a word or vocable, which never failed to bring a smile to his face, a sense of peace to his mind, and change his state of being when he felt he was losing his higher self through the day. He explains:

> After my music-meditation practice, I decided to make a link with a word that I made up that always seems to make me laugh—it has no real meaning, it's just ridiculous, like so much of life. I spent the whole day remembering this word and it gave me a sense of levity and perspective to remain positive and accepting, going with the flow—not like a lazy person, but like a wise person who has a greater sense, a deeper knowing. I spent a lot of the day in smiles and making others smile too. This actually helped to mend a fractured relationship I was having—I realized my own role in the healing process could be improved by listening to this person, and I did this by keeping a sense of lightness in mind by thinking of my made-up word whenever I felt myself getting defensive.

One practice that I often teach in preparing participants for meditation is vocal long tones, specifically low frequency vocalization, and overtone chanting. Many participants become deeply involved in their practice because of the vocal long tones and overtones. Dawn expressed the physical affect that overtones had for her body:

> I woke up this morning with a headache and blocked sinuses. I didn't think I would make it today. The meditation has been great for my mind and emotional state and I've found a quality in my voice that I like to hear—but I never thought I could do anything physically to heal myself, even from something as minor as a sinus headache, but it worked. When I first started my head hurt more, but then I changed sounds and vocalized an overtone sound—I don't know if the overtones were audible to anyone, but they were in my own head. In fact I started out with a low hum with my mouth closed. Slowly, I opened my mouth and moved my tongue on and off of the roof of my mouth. I started to focus on the sound and the physical sensation of my sinus cavity and skull vibrating. Little by little, they opened up and I could breath a bit and I kept focusing on the sound, I went deeper and deeper and I lost sight of the pain and forgot where I was. I remember that I made my voice louder and louder, then at once, I stopped and sat in silence. It was great—I don't know if you call that a cure, but it definitely worked!

In Dawn's meditation group, other participants built on her experience to do the same—heal headaches, open up clogged sinuses, or assuage other minor illnesses or pains. More interesting to me, however, were the painful conditions, chronic stresses and problems, which were not the focus of participants' meditations, but which were transformed, resolved, or lessened in their severity through an indirect process. For instance, Donna, who was some seventy pounds overweight, wanted to lose her excess weight, start feeling an inner strength, physical vitality, and an overall improved sense of well-being. Importantly, although she wanted to lose the weight, she started by meditating on being healthy, vital, and strong—not on losing weight, making a conscious decision that her goal was not "losing weight" but on "being healthy, energetic, strong, vital, and happy." As she went through the early weeks and stages of her meditation, in one group session she described an indirect outcome of her practice:

> One day I realized that I was no longer biting my nails, which I've been trying to stop for about fourteen years! What's strange, or maybe it's not so strange, is that recently, basically since I've started this meditation, I haven't been thinking about trying to stop biting my nails, and now I don't—I don't have the urge to do it; I just don't do it anymore. It's pretty amazing. I've lost a few more pounds, I'm exercising, learning more about healthy foods, and seeing my body as a gift, something sacred.

About half way through this particular four-month project, one day Donna noticed that she had lost a couple of pounds, then five, then ten by a few weeks later, and eventually fifteen by the end of our session. She has followed up once, indicating that she is feeling healthy and alive and has lost a bit more weight, and, most important, she was no longer on the borderline of being at risk for developing diabetes. In her case, she had suffered some abuse as a child and the body mass she had gained over her adolescence seemed to be a protective covering for her. So, the lessening of that physical covering seemed to have a parallel increase in her inner strength, confidence, sense of control and power.

For Donna, a cassette recording of sung prayer was her most common vehicle for meditation—but she, like most participants, used different approaches from time to time depending on her mood and needs. Reaching the high point of meditation and experiencing her*self* as higher consciousness was key for Donna's progress, since in that rarified space of her mind, she could experience in the present, all the transformations she was in the process of achieving outside of meditation. The spiritually imbued cognitive experience of her transformations before they were fully manifest in her life outside of meditation changed her quality of life and identity in profound ways. In the sacred space of her prayerful meditation, she had none of the obstacles, pains, or problems of life that were part of her daily experience. For example, hurtful words or glances were often part of a normal day for Donna, as were a host of other difficulties that she associated with being overweight. But in her meditation, once she moved through the initial stages of focusing her attention and freeing her mind from attachment to the stream of daily thoughts and conversations that she usually experienced, not only were the negative experiences non-existent, but what she described as "true peace" was finally hers. For instance, arising from her morning meditation where all of her goals were realized, albeit for a brief period and in the realm of her meditative consciousness, was, nevertheless, the crux of her progress—she would then move through her day as a somewhat transformed person.

The transformations that she experienced in her meditative mind, little by little began to effect changes in her daily actions, emotions, thoughts and reflections, relationships and social interactions. In the beginning of her meditation practice, the effect during the day was weak and would waiver, which was common among most meditators. This is where the evening meditation was key as a way to reframe the experiences of the day that slipped away from the effect of the morning's meditation, and to return again to the sacred space of meditative consciousness.

The model of morning and evening meditations was most effective for virtually all participants, beginning and ending their day with revisiting, remembering,

and experiencing the bliss and encouragement of their own consciousness. Additionally, for participants who were able to link the meditative sense of being to specific moments throughout the day, accelerated transformations were experienced.

Building on this, some participants would describe days or parts of days when they could extend their state of meditation in a very unforced way through the movements of life and maintain a state of mindfulness awareness. Reaching this type of experience usually meant that a participant had gone through a process of critical reflection, where certain emotions that had become a "fact of life" and remained unquestioned, were now subject to reevaluation from the perspective of the meditative mind. That is, participants that wanted to create and experience different emotions, create specific emotions, or not be a victim of their emotions, would decide which qualities, characteristics, or virtues were essential for those emotions and would then introduce these into the state of their higher consciousness in meditation.

This process is multifaceted and has implications for all aspects of life, but usually starts with a very specific experience. For example, Brian had road rage, the intense anger of which was causing extreme stress and was dangerous for him and others. Brian stated that he had often chased other vehicles while driving; that he had been chased; and that he had dangerous confrontations and physical fights with other road ragers. He stated that sometimes the other road ragers were much stronger and more dangerous than he was, but once his anger arose, it was next to impossible to stop it from turning into rage. Brian had not always wanted to change, but deep inside, he knew his anger was hurting him, and he resolved that it was time for him to change, to be a "peaceful and stress-free person" as he put it, to be in control of his emotions, and not to be a "victim of road rage." He decided that he first needed "patience" so he could interrupt the slippery slope of anger and be in control of his emotions when they were overcoming who he wanted to be:

> I really need patience—so, for this meditation exercise, I decided to focus on that. It's not that I'm an impatient person, it's just that I have certain pet peeves that get me really annoyed really fast. So, I guess I have a problem with anger too—yes [laughs] I'll admit it, I am a victim of road rage—I've chased cars, been chased, and gotten in fights before. It's not that I'm always in a rush to get from point A to point B; I just hate stupid drivers (especially when they're on cell phones). So, I used "patience" as a link to my meditation and long-tone vocalization exercise—I don't know how it worked, but whenever I needed to be patient, it just popped into my mind and I was re-

> minded of that feeling and all the thoughts I had around why I wanted to be patient, rather than letting things set me off—you know just being reactionary, I see that as kind of weak now. I'm still working on it and I see that consistency is important—when I don't meditate in the morning, the link to the patience feeling is weaker, but when I do the practice, the idea pops into my mind and helps me move on—it might seem small to you, but its really powerful realizing that my emotions relate so much to my mind and I can control my mind more and more.

Brian stayed with his practice until he no longer identified himself as "a victim of road rage" or a person that *has* road rage. Rather, he began to identify himself by the virtues he had developed and the life goals that he had put in place relating to his career. Underlying this transformation was a new sense of self-worth that arose from and was strengthened by his meditation practice. Previously, Brian drew a great deal of self-worth and power from the energy he experienced from road rage. Immediately after the first meditation where he experienced a moment of his higher self, he knew that the road rage identity no longer fit—this is where he started to see rage as weakness, rather than strength.

The often unexpected link between the meditation and daily experience at times strictly dealt with the material aspect of life, and Dave, a young college student, had one occasion where he was thrilled that it was so:

> I desperately wanted to go the college football game but I didn't have a ticket. So, I spent most of the morning calling all my friends but no one had an extra ticket. I was really getting frustrated and stressed as the time was getting closer to kick-off and I had tried everything. Then I realized there was one thing I hadn't tried—meditation! So, realizing that I had exhausted all my resources, I had nothing to loose—I didn't think anything would happen but said to myself "why not do it?" So, I was pretty detached now that I think about it, just like you said in the workshop, when you are trying to remember a name that is on the tip of your tongue, you try so hard but just can't, then, the moment you become detached and stop trying to remember, it just pops into your mind without your effort—I felt like that. I sat down and did the long-tone vocalization on open vowel sounds. It felt good and I basically forgot what I was doing and really got into the groove of meditating—then, something happened to grab my attention and take me out of the altered mindstate—it was the

> phone ringing! I answered it and guess what [laughs], it was a new friend I made recently who had my number but I didn't have his and he didn't know the other friends that I had previously called. He said "Hey man, I got an extra ticket, wanna go to the game?"! I was shocked, but in a way, not totally, I guess part of me knew it could happen if it was meant to be—not to get too deep about a football game, but maybe that's just where I was supposed to be.

There are other instances where participants would meditate about bringing something material into their lives—sometimes with immediate results, and at times within the context of a longer process. For instance, a few participants were able to get specific jobs after meditating on the interview process for two to four weeks—creating the interview in their minds where they would possess all the attributes they wanted to have. Then they carried those into the real interview, which they felt gave them a kind of internal air of distinction that got them the jobs.

In an ongoing meditation project that I am conducting with university students,[13] including music majors and students from across the university, virtually all of the music majors are able to make marked improvements in their practice and performance experiences, technique, and degree of musicianship, often reaching or surpassing specific goals in the context of their studio lessons and concerts. Interestingly, music majors consistently reported higher stress levels associated with music making than did their non–music major classmates, and there have been many students who were previously music majors but who changed their majors to areas outside of music, since, over the course of their study at the university level (i.e., "higher learning"), music had lost its profound meaning to them and they had become increasingly disenchanted with music as a career. Whereas music had previously been a source of positive identity, energy, fulfillment, joy, fun, and a way to build friendships within a broader musical community, music had somehow lost those qualities in the pursuit of advanced musicianship. For nearly all of the music majors that were experiencing such frustrations, the most important aspect of the meditation exercise was that it helped them to rediscover their love for music, as well as to reestablish a personal connection with why they wanted to be musicians in the first place, which then directly related to other musical and personal benefits.

Many of these and other students from across the university report that they are able to learn faster, retain what they learn, and get higher grades on their exams and in their courses—in some cases, students have raised their grades by over 20 percent. Most students attribute their success to the meditation helping them to have a clear and unstressed mind when they are learning

and when they are taking exams. Before using meditation, exams were a very stressful time that resulted in a lessened ability to recall information, think clearly, critically, and creatively. Additionally, these and other participants outside of the university usually describe how success, transformation, or change in one area of life, influences other areas, or how meditation had a holistic effect on all aspects on life. Teri summarizes this interrelationship in her final meditation journal entry:

> I have just completed my final meditation for the project and a thousand thoughts are racing through my mind . . . so I will be brief and focused. The strict regiment of meditation [every morning and evening] has really done wonders for me. I'm finding that I get much less stressed in my schoolwork. My relationships with family and friends are almost a world better, and I've lost six pounds in an extraordinarily healthy way. I don't think I could be more pleased with the results. I believed in the power of meditation from the get-go, but I would have been so cynical had someone told me the outcome at the beginning of this experiment. I've learned much about myself, especially that so many of the things I am unhappy with are strictly mental afflictions, and that when my mind is set, I can fix so many of my issues. Mind over matter would be the theme of my self-discovery in this assignment. I intend to continue to meditate. . . . I am thrilled for the self-discovery and healing that is to come.

In my experience of sharing with people the culture-transcendent principles and processes that underlie experiences of transformation, I have often been thrilled but never surprised at the results. These brief sketches, as well as a range of other experiences of music-prayer-meditation dynamics show how such practices form powerful processes of cognitive-behavioral healing. To the degree that the process is engaged and the power of the higher consciousness carried beyond the formalized period of meditation, being expressed throughout the five factors in personally meaningful ways, it can strengthen a present state of health, prevent dis-ease onset, or promote a movement from illness to health. In addition to experiencing the healing effects of meditation in the physical domain, participants often express their healing transformations as a movement from stress to peace, weakness to strength, from a frenetic and clouded mind to a focused and clear one, from negative emotions to positive ones, from strained, wounded, or dysfunctional relationships to healthy ones, or as attaining a sense of knowing, hopefulness, control, vitality, and energy. In conjunction with these, participants often experience a transformation of awareness that moves from a focus on that which is external and transitory to that which is internal and everlasting.

7

Human Certainty Principle, of Science, Spirituality, and Experience

When the concept of *tâwhid* ("unity") or *vahdate vojud* ("oneness/unity of being/creation") is the frame within which we understand health and healing, then, perhaps we can better approach the notion that in every person, there is a place of *beingness* that exists as an ever present *already given condition* of health and wholeness—a placeless dimension where illness, disease, symptom, or syndrome have no access and cannot be emplaced, since there is no *place* in such a dimension for them to take root. A counterpart to the placelessness of this ineffable dimension is a timelessness that has no beginning or end, and that cannot be defined in terms of temporal strictures.

This spiritually informed view of the physical world not only undergirds Pamiri experiences of and beliefs about healing but also articulates a culture-transcendent, foundational principle expressed in diverse ways in numerous cultures' "sacred clinical realities." It is, furthermore, a view that is growing among ICAM practitioners and physicians that is informed by modern quantum physics, which views and embraces the *uncertainty* associated with the underlying placeless/timeless dimension of the so-called physical reality as a wonderful and powerful dynamic of potentiality and probability, from which physical matter and experience comes into being, which is puzzlingly connected with human consciousness, and that can facilitate healing when more fully engaged.

Central to the notion that such a healing potential exists and is emergent in the quantum dimension middle ground that is linked to

the timeless and placeless aspect of a human's being, is, that all participants in any context of healing have a significant role to play by virtue of the power of their attention. As the Heisenberg uncertainty principle (HUP) shows, the attention of an observer in even the most controlled of environments can influence outcome in often radical and unforeseen ways. This culture-transcendent *uncertainty* principle is related to a particular dynamic that I call the Human Certainty Principle (HCP), which is a *certainty* or *knowing* that emerges in human consciousness from an *unknowable* and hence *uncertain* dimension, and which underlies, accompanies, or facilitates the experience of healing. For instance, the HCP is implicated in traditional healing practices in Pamir, as well as scientifically unexplainable healing transformations that have occurred in patients throughout the history of medicine, regardless of the modality of treatment—be it conventional biomedicine, ICAM, or other culture-specific approaches and interventions.

In addition, the HCP accompanies other aspects of experience in which a conscious or subconscious level of *certainty* or *knowing* is seen as a profound determinant or causal factor of behavior. A practically universal expression of the HCP is the experience of intuition, where one's inner voice, sense, or soul reveals the right answer or path that one should take in any given situation. It is important to distinguish that by *"Human* Certatiny Principle" I am not suggesting an orientation of humanism through which certainty is gained—quite the contrary. By invoking the term "human" here, I simply suggest that humans, as essentially spiritual beings, can embody the attribute of certitude or knowing when the spiritual capacities of the soul are engaged. The *certainty* implied by the HCP is not an ego-based determination of being right or having "knowledge." Rather, it is a quality of calm *certitude* that is borne of the higher self, which by definition is linked to and expressive of unity and wholeness, which here has been described in part, by the terms *tâwhid, vahdate vojud,* the matrix of all matter, and Markum's poem (see beginning of chapter 1), in which the reality of love is shown as an all-inclusive, enveloping, borderless circle. Moreover, the HCP can be seen to intersect the space of consciousness between precognition and manifestation—the quantum crossroads of potential/probability and materialization/actualization.

These crossroads can be seen in diverse contexts of traditional healing, where the conscious attention, intention, and expectation of healer, patient, as well as community members, is directed toward a spiritual realm to bring about a particular healing effect. For instance, this is true in Cook's (1997) investigation of sacred music therapy in northern India, Hinton's (1999) exploration of Isan musical healing ceremonies in northern Thailand, Friedson's (1996) in-depth experience among the Tumbuka sacred clinical reality in Malawi, Roseman's

(1991) research into Temiar music and healing practices in Malaysia, and the traditional and integrative practices of music and prayer in Pamir. In such cases, a process of transformation can be discerned that functions between a precognitive spiritual realm, and the present realm of daily cognition and experience. A corollary to the experience of healing is overwhelmingly expressed as a *certainty*, *knowing*, or an "*expectation* of change, even cure" (emphasis added, Kleinman 1988, 120). In these specialized musical–spiritual healing practices, a patient's state of being moves from that of illness to a state of potential healing, then to healing. The HCP underlies this process, often along with the other culture-transcendent principles previously discussed, music-prayer dynamics, entrainment, embeingment, neuroplasticity, and cognitive flexibility.

In these and numerous other traditions, *spiritual cognition* stands out as a dynamic connector or channel by which the healing energy from that placeless/timeless realm can be engaged. Although the cognition of daily activity is often fleeting, frenetic, bound, or unfocused, the practices that engender cognitive flexibility, which emboldens the capacities of the mind and soul to be open and unbound, focused, still, and at peace, can be learned, practiced, and perfected to such a degree that normal cognition can be transformed into spiritual, empowered cognition.

In the Pamiri sacred clinical reality, this type of cognition is expressed as attaining a rarified state of consciousness where thoughts move from the *nafs* to the *ruh/jân*—a dynamic which is virtually always interwoven with the experience of healing. Through practices that can be described in terms of the music-prayer-meditation dynamics model, cognitive flexibility and entrainment are encouraged, which in turn facilitates the flow of *baraka* and the embeingment that marks the culmination of a transformational process. Emphasizing the primacy of spiritual thought, experienced practitioners of *maddâh* or other prayer forms often made statements about how their thoughts would transcend the self and move to a placeless/timeless dimension, which would instill *baraka* into their beings. For instance, one *maddâh* performer stated that during performance "my mind moves to another world, a spiritual world . . . beyond the mountains and the roof of the world. . . . I am not in my body then, but my soul flies"; another participant said that "when I listen to it [music and prayer], sometimes I feel like I am dreaming where I can fly, I know that life is good then"; and a young *khalife* stated "my thought changes ... and becomes *another* thought, a *spiritual* thought." He further stated that there was a relationship between the degree that he would focus his thought on the higher self and God and the degree of *baraka* that he would subsequently feel come into his being.

A key component in these experiences, which occurred through multiple forms of prayer, devotional music, meditation, and daily action, is a sincere belief

that healing is possible and even probable—in this way, the *certainty/knowing* of the HCP can also be seen as related to the human capacity of belief or faith. Intimately linked to this belief is a kind of detachment that was often expressed by the phrase *hame chi dar daste Khodâs, har chi ke Khoda bekhâd* "everything is in God's hand, whatever God wants will be" or *enshahallah* "God willing," meaning that if "healing" were or were not granted, both cases could be viewed as God's will. However, whereas a positive response was always attributed to God, a negative response to a healing prayer or ceremonial performance might be viewed as the result of one's own actions, the negative thoughts or actions of someone else, or just as an uncontrollable aspect of life. In other words, if healing does not occur, a "spiritual" explanation or justification is not necessarily constructed or sought out. Rather, there is often an acceptance of the *unknown*, which is followed by further attempts to bring about a resolution.

Physiology and Spirituality

Arising from a spiritually informed view of science, as well as ancient traditions of music, prayer, and healing, which are integrated with the long-standing ICAM practices in Pamir, the role of scientific experimentation is uniquely situated in the Pamiri sacred clinical reality, forming one aspect of understanding, rather than suggesting a predetermined outcome as is too often the case in the hypertechnologized, data-driven world of conventional biomedicine in which an overreliance on statistical data approaches a kind of blind faith by physician and patient alike, which can facilitate a nocebo effect and virtually shut off any possibility of transformation or cure that is outside of present expectations and beliefs.

Experimentation is one of the greatest tools of science, used to extend common sense notions to generalizable principles or laws, test ideas, theories, and established "facts"—all in an effort to gain a greater degree of *certainty* about the physical world, including the body and its functioning, especially how it gets out of balance and returns to health. In a benchmark work, *Medical Choices, Medical Chances* (Bursztajn et al. 1981), the authors apply the HUP to the process of decision-making by patients and physicians. They assert that informed medical decision making must account for the HUP, which implies that doctors must be centrally concerned with the underlying values and beliefs that they and their patients have about themselves, health, disease, and the medical system—all of which can profoundly influence health outcomes.

This paradigm shift from a mechanistic Newtonian-based view of health to one of modern physics, where humans are potential, affective agents of change

at all times and under all conditions, empowers the mind to engage its inherent healing capacity in individual and complementary ways. In the mechanistic model, *certainty* is sought out through tests, technology, and experimentation, which amounts to the best and only way of how to proceed with treatment. In the modern physics informed model, which accounts for the *uncertainty* of the quantum potential/probabilistic paradigm, statistical data and experimental results work in harmony to understand and treat holistically the person and the underlying causal factors of any condition, illness, or disease. In this model, experimentation can give insight into the mechanism of specific cases, namely the ones that were used in a particular experiment, but, importantly, such data are not a blanket determinant of outcome in other cases. Unfortunately, many conventionally trained physicians suffer from the same problem that they accurately assert is a central problem with many CAM practitioners, namely, a lack of critical thinking.

For instance, the eminent physician-scientist Dr. Ken Brummel-Smith, in a special presentation to one of my doctoral seminars on Medical and Cognitive Ethnomusicology, gave two apropos examples of how a "right-thinking" physician or researcher should employ tests and utilize data. The first case dealt with a patient of one of Ken's medical residency mentors. The mentor explained that one day a patient came into his office, knowing that he had advanced cancer. The patient asked, "How long do I have to live, doc?" The mentor immediately picked up a large and impressive medical text from his desk. Intentionally showing that his attention was clearly focused on the book, he searched through the massive text for an answer. After some moments of searching, leaving just enough time for anticipation to grow in the patient's mind, the wise and skilled mentor closed the book and said, "I don't know, you're not in the book, *you'll* have to tell me." The point here is that whereas "the book" does have statistical data indicating how long people have lived with this particular type and stage of cancer, that data does not cause the same outcome in the questioning patient, or, in other words, *correlation does not equal causation*. Although this principle is well known to researchers, because the HUP, HCP, and nocebo effect are not widely or routinely explored in the context of conventional medical training and practice, the mistake of severely and negatively biasing a patient by only giving partial information about any given condition, which in this case would have amounted to the mentor answering the patient's question based on the statistical data, unfortunately is more the rule than the exception.

The mentor went on to tell Ken that because the statistical data could not tell him anything, necessarily, about the specific *person* (patient) sitting in front of him, and that because people such as this have had spontaneous remissions, as a physician he needed to understand what the individual's assessment of

the situation was—what were the patient's desires, values, and beliefs about personal health, all of which are central to good medical decision making. Moreover, because correlation does not equal causation, answering the patient's question based on the statistical data alone is not only inaccurate, but also has the potential to create a nocebo effect, which, in contrast to the placebo effect, creates a negative effect from that which is introduced into the psyche, whether it is in the form of a sugar pill, a thought, belief, or seemingly benign statistical data. Because the mentor had *certainty* in the potential/probability of the patient's capacity to participate in the healing process, or even to create healing, he was willing to allow the dynamic of *uncertainty* to operate in the context of consultation, decision making, and treatment.

The second example emphasized the inherent human capacity to heal and the mind's role in this process. A young man, Don, after finishing his Bachelor's degree, was on his way back home from college. After several hours of driving, Don was experiencing extreme pain in his forearms, which were streaked with red marks, both possible signs of rheumatoid arthritis, an autoimmune disorder. Fortunately for Don, his family physician, Dr. Yan, could also be considered a healer in one sense, inasmuch as he was open to diverse potentials of healing beyond the conventional mechanistic model. After taking a history and ordering a blood test to check the *rh* factor in Don's blood, Dr. Yan was certain that Don had rheumatoid arthritis, although he did not mention it to Don. He first asked Don, "So, what do you think this is from?" He answered straightaway, "Well, I've just been driving for about ten hours nonstop, on my way home from college, and I was gripping the steering wheel pretty tightly, I think that's why." "Why were you gripping it so tightly?" Dr. Yan asked. Don replied, "Well, I suppose it was because I was dreading my father, who wants and expects me to go to law school, and that's the absolute last thing I want to do!" In the conversation, it became clear that there were several issues between Don and his father, particularly around the issue of Don's future. He felt disempowered, controlled, and as though he would be forced to go against his own will and heart's desire at this transitional stage of life. After listening intently to Don's story, Dr. Yan asked, "Hmm, well if you don't want to go to law school, what do you think you should do?" Again, straightaway and seriously, Don said, "I should go to Hawaii and hang out on the beach for a couple weeks!" "Well," Dr. Yan said, "I think you *should* go to Hawaii and hang out on the beach for a couple weeks." Surprised, but encouraged, Don decided to go home and give the news to his father.

It was not long before Dr. Yan's phone rang, with the most powerful lawyer in town, Don's father, adamantly chastising him for giving such a "prescription" and seemingly discouraging his son from pursuing a law career. Dr. Yan

explained to Don's father that going to Hawaii was exactly what Don needed, that it could only do him good, and even *potentially* facilitate his healing. Nevertheless, Don's father said that he was getting a second opinion from the most esteemed specialist in the area. The specialist was a close friend of Dr. Yan's, who called him ahead of time to give him the history and encourage him to follow suit. Dr. Yan told his colleague to "do the test if you want, but our tests already show that the *rh* factor was extremely high" (indicating rheumetoid arthritis). He went on to say that in this case there was no need to start any treatment immediately and that two or three weeks in Hawaii could only help Don by boosting his immune system. Dr. Yan's colleague agreed and gave the same remarkable advice to Don, "go to Hawaii." Don's father was incredulous, but, with the wise counsel of both physicians, Don made a smooth transition to his Hawaiian paradise. Remarkably, or perhaps expectedly, when Don returned and the blood test was repeated, there was absolutely no *rh* factor in his blood and all of the symptoms were gone. Interestingly, Don never knew that he had the *rh* factor and symptoms of rheumatoid arthritis. More important, Don had a *certainty* of what he needed to do—a *knowing* that emerged in his consciousness and facilitated his healing at subtle levels of his being.

What would have happened to Don had one of the physicians taken the data-driven approach and started him on medications? He would most likely not have gone to Hawaii and might have started to view himself with a host of negative labels—*sick, ill, diseased, a patient with the incurable autoimmune condition of rheumatoid arthritis,* and perhaps many more. He might have been forced to comply with his father's demands, which would have only compounded his problems, and which might have eventually manifested in a more severe condition. These physicians represent a slowly expanding minority in medicine that is open to the notion that a powerful and subtle healing potential exists within people. However, it is a small number, with most still attached to the false notion that statistical data is a kind of arbiter of patient outcome.

HCP and Consciousness

The HCP can be seen as a multileveled fabric of consciousness that acts in unique ways, informing and imbuing life experience with insight into one's present state of *beingness*. Often, at the moment of dis-ease onset, a person has a *knowing* or inkling that something is just not right. The sign is usually conveyed more strongly through one of the five aspects or dimensions that comprise a human's being. Each of these aspects of the whole is connected to the HCP in fully integrated ways. Thus, although a sign of health or illness that appears

in conscious thought might seem to be more aligned with the psychological aspect, it might have a stronger tie to the social aspect if it primarily relates to the issue of relationships. It is more complex, however, the quality and health of the relationship might be primarily a result of the interacting psychologies and ontologies of the people involved in the relationship, which gives rise to action, thus forming the visceral lived experience of the relationship in the body. Moreover, the mind and one's sense of being in the world is intimately intertwined with and can be dramatically influenced by each of the aspects. For instance, a simple yet profound change in diet and exercise, which seems to relate more directly to the physical/biological dimension, can completely change the dynamic and health in the dimension of relationships, a point all too often overlooked in family therapy counseling and in training children in socialization skills. Even adding breathing exercises to virtually any context of therapy, counseling, or healing, can result in dramatic changes. An interesting example of this is described in the next section. It comes from an experience that I had when consulting with a group of family counselors and researchers, who were working with a young couple to salvage their relationship.

Breath, Place, Thought, and Transformation

The young man was in his early twenties and the young woman was not yet twenty and living with her mother. They were not married, expecting a baby, unemployed, and unsure how to make a life together since they had recently called off plans to marry and had almost ended the relationship altogether. However, a renewed sense of possibility had entered their consciousness and they decided to come for counseling. As we watched one of the therapists consult and guide the couple through techniques of healthy communication, it became strikingly clear to me that the room in which *therapy* was supposed to be happening was the first challenge that had to be addressed.

The counseling room can be viewed as a temporary womb world for nurturing and encouraging the development of the skills and capacities needed to create a healthy relationship—all components that comprise the room, including everything that is introduced into that space can influence, to an extent, the quality of life beyond its walls. While the room cannot be seen as the only factor in the outcome of counseling, it certainly can be viewed as a potent context and effectual component of therapy. In considering the role of *place* in this setting of therapy, important questions arise. What aspects of a room could facilitate a healthy relationship? Would these be the same for everyone? Are there some universal factors that could be incorporated into the counseling room? Could knowing the clients backgrounds help to add customized aspects

that could directly or indirectly be affective components of therapy? So, how did this particular room appear? The paint was drab and everything in the room appeared to be dusty. The shelves had damaged and unattractive books scattered in no particular kind of order or organization, which conveyed a sense of apathy and outdated knowledge; the carpet and drapes seemed to be unclean and made everything darker; and the dilapidated sofa where the couple sat had little if any support, which encouraged a slumping position and added a further constricted respiration to their already shallow breathing. There was little diversity of color in the room, which had a dominant tone of worn out brown and off-white that had lost any brightness it might have once possessed.

When the therapist joined us mid-session to get feedback from the group (we had been watching her work on the closed circuit video monitor), she was praised for her textbook approach and given new ideas to further facilitate their discussion. Her frustration, however, was clearly based on their present state of inertia—"I don't think they really want to save the relationship" she said. I pointed out that they were sitting in a very introverted, depressed position, with their bodies slumped over, rib cages collapsed, and arms folded over their chests—judging from the video monitors, one could barely tell if they were actually alive and breathing, which meant they were getting minimal oxygen into their brains. Although the room cannot be seen as the only cause of this, it clearly encouraged their lack of commitment by providing the perfect context for depressed respiration, which in turn encouraged a feeling of tiredness and apathy. I recalled the potent meaning of the natural and built environment that surrounds so much of daily life in Pamir, especially in the place of the *maddâhkhâne,* which is often where most counseling sessions or important discussions would occur. The present room was a stark opposite—nothing in the room even faintly related to the beauty or majesty of nature. Other than the people, there was nothing alive in the room, no flowers, plants, or natural light, nor was there anything in the room that was substantively meaningful that might serve as a reminder of the potential capacities of the human spirit, the virtues of love, compassion, or other attributes necessary to heal a broken relationship.

I certainly did not want to paint a hopeless picture for the group, and in particular for the therapist that was facilitating the session, so I focused on what I perceived as the most important immediate issue, the breath. The video monitor continued sending a live feed of the couple, who were still slumped over on the couch and clearly tense and distressed. The young woman was sunken into one corner of the couch with her arms crossed over her chest in a defensive, protective position with her eyes downcast; the young man was slouching in the other corner in a noncommittal apathetic posture. I pointed

this out to our group saying, "They simply aren't getting enough oxygen to their brains, which means they are moving away from an alert and engaging consciousness to a more depressive and introverted one—the antithesis of creating a healthy relationship. Perhaps you could do some breathing exercises with them." I continued to look at the primary therapist saying, "I know that just one truly deep breath is enough to get them into a state change, and then *what* you are saying will have a greater effect."

Then I looked up at the screen again, this time with my palms lifted upward and said with some energy as though I was talking *to* them, "But right now, you really need to breath!" All the members of the counseling group nodded along, with a few interjections that supported the idea that breaking with a more conventional approach of only talking, and using breathing or exercise as a jumpstart and perhaps an ongoing aspect of this couple's therapy was exactly what was needed. Our group consciousness converged to a point of unity at the moment I said, "You really need to breath!" Then, as if on cue, the couple relaxed and began to change their positions, sitting up a bit and for the first time they noticeably inhaled and exhaled. We all watched, some with amazement, others with a quizzical facial expression, and a few with a sense of *knowing* that we had conveyed this thought of breathing to the couple, and, more important, they were receptive to it, which contradicted the primary therapist's first inkling that they might not want to save the relationship. Their breathing continued at this new level of wakefulness and they began to talk and listen to each other with more sensitivity.

This encouraged our group—we were now watching with anticipation and even sending more conscious energy to them and it seemed like a kind of biofeedback that functioned between people rather than for the individual only. I quietly but enthusiastically chimed in while looking up at the monitor, "Yes, that's it, breath!" Group members smiled and few let out some gentle laughter. The couple let down their defensive arm positions and slowly moved toward each other, each showing signs of reaching out—the young man sitting upright, gently leaning forward with an open hand outstretched on the couch, the young woman sitting up with her arms now unfolded and down at her side, her eyes were lifted up now, looking directly at him with a reflective kind of gaze. They were now looking at each other, breathing together, and finally they crossed the physical borderland that had divided them for the first thirty minutes of the session—they made physical contact with a soft touch of hands. In the span of a few minutes, they had made a profound shift toward unity, which started with a breath. In the last moments of consultation with the group, the primary therapist decided to forego any breathing exercises for the time being because they had serendipitously started to breath better on their own.

It is impossible to tell if our group caused or encouraged the breathing, which seemed to set off a chain of events that helped the couple work toward a connection. Nevertheless, our shared experience seemed not only to facilitate a movement toward unity between the couple but also a sense of unity among our group of researchers and therapists—we came to a silent understanding of the power of thought that had not been experienced in the group before. After the primary therapist returned to the couple, we began to watch another monitor where we could see another live session in progress. But the experience we had just shared kept rising to the service, as if calling our attention to a greater lesson that we were supposed to glean. A few comments were made about how the couple might continue to progress by using complementary techniques of music, breathing, exercise, and nutrition. I asked about the couple's beliefs—religious, spiritual, philosophical— anything to get more insight into how they relate to that placeless/timeless aspect of their own beings, but no one knew. From there, we revisited our experience and the possible role we played in the couple's breathing and subsequent actions. In our religiously and culturally diverse group of therapists and researchers, I mentioned a few versions of the concept of the ontology of oneness to frame the spiritual aspect that might be engaged with this couple if they were open to it. To spur our conversation, I said:

> There are so many ways throughout the world that people describe the possibility or reality of oneness—people of diverse religions often say that all people are the 'children of one God' and refer to the idea of the being one or connected to a greater whole, which, for instance, in Persian and Arabic is also known as *tâwhid* or *vahdat-e vojud*; or a beautiful phrase I learned in China is *wo men shi iga da jia ting* "we are one big family," which in the past used to refer China alone, but now, among the younger generations is more inclusive of the world; or we might also see it expressed as Jung's collective unconscious, which to me relates to a kind of underlying fabric of generative and self sufficient spiritual energy that informs and supports our experiences. With this couple, maybe we linked to them through a frequency where the collective unconscious emerged into our shared consciousness.

There was silence for a few moments, and then agreement, then a few personal stories emerged from our group as to how some aspect of spirituality and directed thought has been a profound instrument of change and healing in their lives as well as for their clients. One therapist shared that he had both positive and noneffective experiences with so-called spiritually oriented treatments.

He attributed the noneffective experiences to a disconnect between the couple or the therapist and individuals with respect to the spiritual concepts, treatments, or language used. I suggested that this is where the individual cultural context of a person's beliefs and practices can come into play, and where music can be of profound assistance. If for instance, the right music can be aligned with the individual client or couple in the right moment, it can even bypass the therapist knowing the clients' beliefs by allowing the sound and internal dimension of belief to work together in the cognitive domain, through the fabric of the HCP, which can effect a change in anyone who is open to such an internal dialogic interaction of the subtle levels of consciousness that undergird ontology, belief, conscious thought, and behavior.

Musical Unity, Relationship Unity

To illustrate this point, I shared a story of a precious experience I had with the legendary master drummer, Babatunde Olatunji, who had invited me to play saxophone with him in the context of a master class in New York City, which included students ranging from world-class professional musicians to beginners who had never before played a drum. The class was about learning Olatunji's system of African drumming, not about therapy per se. Nevertheless, Olatunji talked at some length about music's capacity to heal. Interestingly, in the course of his discussions and comments, he mentioned all five aspects of a human's being, especially focusing on the social/relationship and emotional dimensions. There was one couple in attendance that clearly needed marriage therapy, which they unwittingly received that day through the shared experience of music. Although this couple, Shaila and John, made no explicit mention of conflicts they were having, their argumentative speech, distressed body language and demeanor toward each other spoke volumes. In this case, there was also no way of knowing what their beliefs were, which in one sense, made the transformation through music even more interesting. Shaila picked up on Olatunji's system much faster than her husband, whose entire body was stiff, distressed, and dry. He seemed to have several layers of protective walls up around him, while his wife seemed to be more open but distressed nonetheless.

We all sat in a circle, each with a drum, and me with a drum and saxophone. As everyone settled in and the couple's last minute bickering died away, Olatunji waited for just one moment of silence to permeate the space and then gave a powerful and effortless drum stroke in the middle of his huge djembe drum—"GUUN" he said with a smile. A ripple of "guun" strokes and soft vocalizations scattered around the room, everyone realizing that they were to follow his lead—that is, everyone except John. Rather than proceeding, Olatunji

looked at him with raised eyebrows as though his eyebrows were going to reach over and strike John's drum if he was not going to do it for himself—but he did, a bit awkwardly, like a robot that needed oil in its joints. Olatunji smiled, as did many who were part of the circle, including Shaila. She then gently touched the space between his shoulder blades and rubbed that area with a few small circular motions—no words were spoken, just a glance and a momentary sparkle that escaped out of a half formed smile. John seemed a bit surprised at her touch and exhaled the air he had been holding onto—he shook his head gently, seeming to let go of some mental baggage.

This all happened in the span of a few seconds and was interrupted by Olatunji raising his right hand again, this time higher to send a message that the group should play together with him in *unity*—"GUUN!" his voice rang out as the ripple of hands smacked the center of the drums in an effort to mirror his sound and play together. This went on for a couple minutes, although at the time it seemed to be much longer. With each stroke, John became more focused on the task of musical unity, which included being at one (musically) with his wife, who was sitting next to him. His robotic motions seemed unnatural in the extreme, almost unimaginable for a musician who had never seen such a stiff and mechanical approach to drumming. Olatunji walked around the circle, observing the group, at times squeezing a shoulder to relax the arms, or striking the drum himself as an example, or giving an encouraging nod. When he came to John he called the group to stop: "Don't kill the sound man, lift up your hand after you strike it to let the sound come out, let it sing, its alive, like this . . . " he said, and he gave one deep stroke, lifting his hand elegantly and the sound filled the room. It was almost unbelievable that the same drum produced such a different and powerful sound. John hit the drum, but nothing rang out.

After a few attempts, Olatunji looked at the beautiful drum from Nigeria that was given to Shaila at the beginning of class and then looked at the synthetic drum that John was using. Olatunji said, "Look at her drum! It is full of life, this is what you need, yes!" Shaila smiled as though the drum represented much more than a "musical instrument," and she offered it to Olatunji, who passed it to John. The drum was made only from wood, skin, rope, and steel. Both the drum and John were part of the natural world and both had a deeper dimension or capacity. Yet, in that space between the two, John struggled to find a natural relationship. He played a few strokes that brought a forced and disjunctive wrangling that resulted in a sound that seemed to lack any aesthetic value. Olatunji then played with him on the same drum "GUUN!" and everyone's eyes opened wide. Throughout these many minutes, the group was silent, focused on John and wanting him find that most important fundamental frequency of the drum, the sound from which all the other sounds emerge, and upon which

all the music is built. Teacher and student played a few strokes together, then John played one stroke alone "GUUN!" rang out in a deep tone that amazed everyone. Everyone in the group smiled, a few even clapped and cheered, Olatunji said "Okay!" and moved on to directing the group to the next sound.

But as he walked back to his drum, John and Shaila looked at each other in silence with a calmness they had not experienced since they had arrived. The next rhythm built upon the GUUN sound, which was the lowest pitch of the drum, by adding two sounds in the middle of the drum's range, which Olatunji named "GO-DO" (both pronounced with long "o" sounds as in "go" and "doe"), and that were twice as fast as GUUN. The new level of complexity was again challenging for John, but as the evening went on, and more and more complexity was added, he rose to the challenge. The major challenge was not actually playing the rhythms but playing them *together* with the others in the group, playing in *unity*. With each new rhythm, I observed a process of transformation that was physically visible in John's facial expression, body language, and flexibility, and some intangible level where he and his wife became connected and unified in the sound of the drums. They began to share an experience of musical communication that was framed by the goal of creating musical unity. Every time they found that level of musical connection, an onion-skinned layer of John's persona seemed to melt away. Shaila also changed, her presence becoming lighter and her body language becoming less stressed, which seemed to be from her own musical experience, as well as from the transformation of her husband.

At our first break, about one hour into the session, many students arose bubbling with excitement about the experience—one could hear the words "fun" and "powerful" threaded throughout various conversations. But John and Shaila were silent and did not arise from their seats immediately, each in their own sound world, side by side—both in a kind of meditative state where they were absorbing their shared experience. There was a peace about them that was fresh and unforced. Before Shaila arose, without speaking she gently touched her husband's knee and then walked over to one of the areas where the drum cases were kept by the wall. John had expended much mental, physical, and emotional energy during the first part of the session, all of which seemed to focus his mind and lead him into a kind of drum-centered meditation. He got up from his chair after a few minutes and walked over to his wife, resting his head against the wall, mirroring her body language and facing her. There was more silence, spontaneous and gentle smiles, a few whispered words, and then another level of unity as they slowly embraced.

Using this experience as an example, I suggested to our counseling group that when disunity exists in a relationship and counseling with words does not

seem to break the mind-action or thought-behavior barrier, creating unity at the musical level can be a stepping-stone to unity at other levels of the relationship. I continued saying that "music can be employed to create what I like to think of as a *model of unity*—that is, musical structure and meaning can be used to create a model that allows diversity at the level of individual and unity at the level of the relationship—it is a way and metaphor for couples to view their differences as enriching their relationship just as different rhythms can enrich a musical sound and experience." I illustrated this with a simultaneous triple and duple-metered rhythm, as well as a single meter with multiple rhythms, and one rhythm as in the example given when everyone played "GUUN" together.[1] From the case of John and Shaila, it seemed that there was a power in unity at the individual musical level, as well as the group level, which functioned without them consciously intending to resolve their conflicts, and without Olatunji having any knowledge of their beliefs. In this way, creating a shared experience of musical unity could effect a positive change by facilitating unity in other domains of the relationship.

Musical Weapons in War

One of the most tragic and complex levels of social relationships, which suffers from a total lack of unity and is in need of healing, can be found in the context of civil war. After the fall of the Soviet Union, which had for so long constricted the social and cultural expression of the Tajik people, the civil war struck at the very heart of all the virtues embodied within the classic Tajik notion of self, described in detail in previous chapters. I shall never forget the look in Samandar's eyes when he said, "When people haven't eaten for two weeks, like it was during the war, then you see what monsters people can become." He explained that it was a time of great confusion and fear, when, for example, people who had fled their homes would return to find another desperate family, without any means, living there and refusing to leave. This would usually end in fighting and bloodshed, even among relatives. Samandar and others did not want to discuss this period in detail, but he did briefly share his experience of making music in the midst of war.

The social dynamics during the war were complex, encompassing everyone in some way—even forcing unarmed civilians into terrible positions of making life and death decisions due to the unbearable and chaotic social disaster of civil war. Samandar and a few of his closest friends, rather that being swept up in the insanity that they witnessed around them, made a radical decision as to how they would participate in the war—"our weapons were our instruments" he said with a seriousness that seemed to defy any doubt that their weapons

were not as powerful as the conventional weapons of war that surrounded them. Samandar continued:

> we played *maddâh*, *falak*, and my own music, and other folk music, we sang of love and peace . . . people could not believe it . . . they could not believe it because we were standing in the middle of war, on the street, but slowly some of the ones that were close to the group would stop what they were doing and listen, they would remember who they were, humans, not animals.

The music had a profound effect, but the tragedy of war was too much—it was like a rampant disease with an ill-structured consciousness and life of its own. The group had to disband and Samandar sought refuge in the high mountains to the north.

Although their music can be seen to have saved some people from death or injury by interrupting the dynamics of war and calling people to remember their higher self, for Samandar and his group, the music was also a personal healer, protector, and preserver of their own humanity and sanity. The music gave a physical manifestation to the opposite of war, namely the virtues of love, compassion, peace, fellowship, and unity—all of which had been lost in the confused and frenzied context of that time and place. Samandar told me, "We could have been killed, but it would have been while we were trying to bring peace, it was what we had to do for the people and ourselves."

Rather than recount the stressful and horrific memories of the war, Samandar preferred to discuss his experience of the power of music and prayer, how he felt his consciousness transform during the performance of spiritual music, and how that helped him get through that period. He would often describe his mind as being in what he called a "special condition" during devotional music or prayer. This condition was Samandar's experience of that in between quantum dimension discussed earlier in this chapter and in chapter 2. It was a kind of stopping point along the path to an ineffable spiritual realm that Samandar would mentally escape to while in his mountain refuge. While in the mountains, away from the sounds and scenes of war, Samandar would pray and meditate to recalibrate his being to return to a sense of balance. Once he was retuned and revitalized, he would return to the field, where he would extend that spiritual consciousness into the context of war, standing as a musical sign of nonviolence and attracting some back toward their sense of humanity. Most however, were deeply immersed in the emotional madness of war, out of balance and non attentive to Samandar's musical message of peace. "Everything was out of balance at that time," he said. "People lost their sense of stability and faith, and I wanted to bring things back to balance."

Culture-Transcendent Principles: The Physics and Metaphysics of Sound

Throughout my interactions in the field, before, during, and after Pamir, a recurrent theme emerged in diverse manifestations, which is both simple and elegant in its clarity and profound in its meaning, and which seemed to underlie my experiences and conceptualizations of music, prayer-meditation, and healing. Namely, that balance equals health, imbalance equals illness or disease, reestablishing a balance equals healing, and the process of healing functions along a nonlinear continuum of energy that can, in part, be described in terms of *vibration*. Notably, quantum physics reflects a truth long known by musicians and healers steeped in ancient wisdom—that from the invisible world of dancing subatomic particles, to the infinite reaches of space, *all things are in vibration*. It follows then that the vibration of health will be different than that of illness. Furthermore, health can be seen as *balanced vibration,* and illness or disease as *imbalanced vibration*, or vibration moving away from its balanced state. That is, each physical object has a particular vibration or spectrum of vibrations that define its optimal or healthy state. When the vibrations that are characteristic of a healthy state for that object change enough, the healthy state also changes to one of disease. Conversely, it follows that there is a potential to lead a dis-eased vibratory spectrum back to balance either by directly introducing that object's natural or characteristic state of vibration, or gradually reaching a healthy vibratory state through a sequence of related vibrations—a kind of multileveled entrainment process.

On a broad level, music exists as a kind of dance between infinite types of sounds and silence—sounds simply being vibrations of energy carried through the air. But the power of vibrations found in specialized sounds and music is anything but simple—they have the potential to effect healing transformations in the five domains of a human's being, changing imbalance to balance, or conversely, where vibrations that are out of sync with an object's own vibration can bring about illness, even destruction. Consider the classic example of the physical power of sound/music/vibrations, where the focused, vibrating sound energy of a singer's voice has the power to shatter a glass. This is a wonderful example of how vibration can create a profound *imbalance* in the physical makeup of the glass—so much so that the vibration of the voice overwhelms and transforms and destroys the glass. What, then, might be the unbalancing or balancing effects of certain sounds, music, or vibrations on the human body? When we like or dislike certain sounds, are we responding to deeper level relationships between our present states of vibration and the vibration

of the sound in question, which will either vibrate in some sort of harmony or disharmony, creating balance or imbalance, health or illness? What about other levels of vibration—for example, thoughts, emotions, spirituality, and interpersonal relationships? Insights toward answering these and other questions began to emerge for me as I reflected on my experiences before and in Pamir. In particular, my thoughts were focused on the multiple aspects that comprise a vibration and how a holistic approach to employing vibration in healing seemed to instinctually occur in traditional practices, which I sensed must also be informative for other contexts of healing.

For instance, a unique and powerful music of Pamir, known as *dafsâz,* combines the large frame drum, or *daf,* with vocal performance of Sufi poetry and prayer. The *daf,* which is found throughout the Middle East and Central Asia, gives a rich and complex spectrum of sound and rhythm that can at times produce the effect of two or three drums. This is principally a result of the role of dangling metal rings that strike the skin on the inside of the drum at multiple times and in multiple places while both hands and many fingers can simultaneously play the drum. When two or more of these drums are played together, their power increases substantially.

When discussing the genre of the *dafsâz* with Samandar, Davlatnazar, and other musicians and participants, the vibratory power of the performance was central, often being described as "feeling the drum in my body," "my body moves while I am still," "I feel something mystical happening, a change in my body, a shift toward the rhythm of the music," "when the voice sings the spiritual verses over the rhythms, my mind floats, its more powerful than *maddâh!"* and "the *daf* makes me shake inside, its good, it feels good, but it is powerful, strong, I can't always listen." Such comments all made perfect sense to me when I experienced a *dafsâz* ceremony for the first time, especially because I had been playing the *daf* for the past few years. The ritual process of *dafsâz* is practically identical to that of *maddâh,* and can even form part of a broader *maddâh* performance. The uniqueness of the *dafsâz* lies in its naked type of sound that is almost stark but powerfully complete at the same time, seeming to speak to a primal aspect of being that repels anything extra or superfluous. And in addition to being a spiritual music, it is a very physically engaging and demanding to perform, which seems to convey a sense of heartfelt striving to those present.

In *dafsâz* and *maddâh,* there is an important musical element that directly relates to the subject of vibrations, balance, and entrainment, which is unique to these genres in Pamir, and which can best be described as a drone. In *maddâh,* this drone, which is often best heard in live performance is a result of the low drone string of the *rubâb* as well as other recurrent open string sounds, which create a perpetual sound that gently underlies the musical-spiritual experience,

supporting the transformational process of cognitive flexibility and entraining frequencies of energy expressed in one's being. There is a similar effect in *dafsâz*. The drone, however, is primarily found in the lowest or fundamental frequency of the drum, which is produced by striking the drum in the center. Especially when there is more than one *daf* present, the drone is more pronounced and creates a deep vibration that seems to wash over one's whole body, and, in some sense, defines the soundscape by providing a sound container in which one is immersed, and where one becomes rebalanced. Moreover, in the case of these genres, the spiritual center is further emphasized by the effectual dynamics produced by the drone and other levels of vibration. In particular, considering the role of spiritual cognition, in which laden vibrations that embody spiritual meaning and can entrain aspects of both bodily and brainwave activity, an interesting connection can be seen between such vibrations and healing transformations.

Vibrations can be seen as the multifaceted substance of sound and music. They are multifaceted because they are composed of six aspects—*duration, direction, amplitude, waveform, frequency,* and *meaning,* each of which is intertwined with the capacity of vibration to create balance or imbalance. *Duration* refers to the time measurement of a sound from its beginning to its end and is most strongly linked with a healing potential when it is formed as a drone as was mentioned earlier. *Direction* refers to the place of the sound source, which is a physical resonator. However, when viewed from diverse cultural perspectives, the spiritual plane is often the *source* of healing sounds, whereas particular resonators are viewed as the embodiment of a spiritual essence, as in the case of the *rubâb*. *Amplitude* refers to the level of energy a sound source creates, or the degree of pressure created by an oscillator. We experience amplitude as the perception of volume, or the degree of loudness of a sound. *Waveform* refers to the graphic representation or aspects of a wave's characteristics, or shape, which we experience perceptually as timbre or sound color and quality. *Frequency* is the physical measurement of the number of repetitions of a complete waveform per unit of time. This is often expressed in terms of Hz (hertz), which is a measurement of the number of cycles per second of a period or waveform. We experience frequency as pitch perception, or the highness or lowness of a sound. Finally, *meaning* refers to the all of the associations that are inherent or ascribed to all levels of vibration/sound/music.

Inherent meaning can be seen as culture-transcendent or universal, while ascribed meaning can be seen as culture-dependent, however, they are not necessarily mutually exclusive. For example, the ancient Indian concept of the *anahata nada,* or *unstruck* sound, which is ever-present and without beginning or end, is both ascribed and viewed as an inherent aspect of a certain

spiritual sound that people can more intimately connect to through prayer and meditation. One of the most well-known examples of a unified inherent/ascribed meaning of sound also comes from ancient India, where the divine and generative sound of "AUM" (or "OM") is a creative force, expressive of a spiritual reality from which the physical world was manifested. Indeed, in that and many other contexts, the meaning cannot be separated from the physical manifestation of the sound. For instance, we have already seen in the context of Pamiri devotional music that the web of meanings associated with *maddâh* and other music and prayer forms are, in addition to being central to their healing potential, expressive of what is viewed as inherent and ascribed.

In a categorically different example, consider the experience of a loud door slamming shut, which seems to have an inherent quality to it. For instance, even if most people are aware that a loud bang is forthcoming, when the extreme sound bursts into the audible domain, common experiences include an orienting response in the brain, vasoconstriction, increased blood pressure, and a galvanic skin response or pilomotor reflex—a skin response known commonly as "gooseflesh." The same responses, which are linked to other domains of a human's being, are also related to the fight or flight reflex that often occurs with sounds that are unexpected and have extremely high amplitude. Beyond these few, there are myriad examples throughout the literature of ethnomusicology, music cognition, physics, health science, and linguistics that show how vibration, intonation, sound, or music creates meaning in diverse domains of life, evokes physiological responses, and creates balance or imbalance in physical and biological structures.

In considering the application of vibration, sound, and music in healing, whether one is researching an existing practice or using such knowledge in an applied way, there is a complexity to the issue of employing these sonic expressions to effect specific healing transformations. Primarily, this is a result of the infinite variations that exist within the six aspects of vibration, all of which can be intertwined with each other. If the goal is to move from *imbalance* to *balance,* vibration being the vehicle to facilitate change, how can one know what kind of vibration, sound, or music will accomplish the goal in any given situation? Can vibration be healing without the context of music? Can music help or hinder any healing potential of vibration? Is music or sound efficacious in specific contexts because of the cultural meaning? Does such meaning always have or imply a culture-transcendent aspect that can be appropriately employed in other contexts? Are there broad and encompassing vibrations, or a range of vibrations that provide a kind of holistic recalibrating or balancing effect that is culture-transcendent? If so, how would the spectrum of overtones function in different cases? Or, are vibrations better utilized in highly specific

ways to entrain certain oscillations that are out of sync with a healthy vibratory state—if it is possible to know the specifics of such a state? And what of other types of frequencies related to cognitive and spiritual processes and experiences, which are so highly implicated in traditional healing practices and also linked to the HCP? Beyond the numerous culture-specific examples in the ethnographic literature that relate to many of the above questions, rigorous research is lacking to specifically explore these and related questions. However, considering the last question, much insight can be gained by exploring the different frequencies of brainwaves that are associated with specific cognitive and spiritual states.

For instance, delta state, which is a frequency between 0.5 and 4 Hz, most often occurs in deep sleep, but it also can be accessed through advanced meditation. Delta is associated with the unconscious or superconscious mind, *fanâ* or complete annihilation of the lower self through the love of God, immersion in a spiritual realm, as well as healing potential. Theta state ranges from 4 to 7 Hz and is associated with deep relaxation or meditation, a movement toward sleep, dreaming, access to creativity and insight, and altered states of consciousness, including the experience of the transcendent. Alpha state ranges from 7 to 12 Hz and is associated with daydreaming, peaceful relaxation and a higher degree of wakefulness than theta while maintaining a sense of inward focus. Beta state ranges from 13 to 40 Hz and is associated with the active mind, daily tasks, wakefulness, as well as stress and anxiety in the higher levels of beta. Normally, the brain is producing all of these frequencies at all times. So, there is a kind of dynamic mix that exists and changes with the diurnal cycle and with specific activities and practices that encourage certain frequencies/brainwaves more than others.

For instance, to increase the frequencies of theta in the mix of brainwaves, certain practices that encourage that brain state can be performed, or specific frequencies can be utilized to entrain that state in the brain (see, further, Lane et al. 1998; Thaut 2005). In addition to these techniques, culturally meaningful sounds and music can encourage other dynamics of neuroplasticity, cognitive flexibility, and directed thought, which can emerge from a certain context of consciousness where the physical vibration of specific brain states are key. Moreover, although such vibrations are physical and measurable frequencies, they are associated with and profoundly expressive of emotional and spiritual meanings in addition to diverse bodily states.

In ancient and long-standing traditions of musical healing, it seems that through the process of creating culture, many of the above questions have been indirectly answered and a sense of certainty has been engendered among practitioners, providing a kind of music-healing technology that seems to

function with some degree of efficacy for those who participate in the system. Is it possible to test such traditional systems or to prove how a constellation of sounds, practices, and beliefs that imbue and contextualize musical healing are efficacious? Do such practices as discussed here defy testing? Perhaps. Maybe this is an arena in which intimate ethnographic research is key, providing insights of a different kind—about the nature of a musicospiritual healing experience. Insights can then lead to broader culture-transcendent principles and theories, which can be tested or employed in research programs to benefit people in multiple ways, creating healing effects in specific dimensions of a person's being, engendering a holistic healing transformation, or encouraging behaviors that function as preventive practices and underlie healthy living.

Concluding Thoughts

Healing can be viewed as a dynamic process that occurs at multiple levels, from the individual, to all levels of relationships, to a particular group that is part of a larger sociocultural context, to the whole of humanity. I was fortunate to experience numerous instances of such power exemplified at the 2002 Smithsonian Folklife Festival, "The Silk Road: Connecting Cultures, Creating Trust." For example, over one million people who visited the festival learned from and interacted with people and cultures, about which they often knew very little or were perhaps ill informed. Festival participants also learned from the public and each other and developed some sense unity that transcended borders of culture, religion, language, and nationality. For instance, in rare performance-workshops on devotional music, *music* was a bridge between Asyrian Christians and Usbeki Jews; and between Indian Hindus and Pakistani Muslims—the groups performing together or sharing the same stage to show the unity of spirit conveyed in different religious-musical forms. However, it was surprising to the participants and audience that the musical forms were also very similar, showing yet another level of connection that could be seen in the shared development of music-culture across history.

In the midst of the rich diversity of the festival, which included groups spanning cultures from China to Italy, with a large Central Asian representation, there was a palpable sense of unity that pervaded the National Mall in Washington, D.C., and perhaps beyond. Themes of unity in diversity, the power of thought and belief, performance and prayer, and more, were shared throughout the festival and emphasized in the final day's morning ceremony. There, at the site named the "Tree of Life," which stood as a symbol of the essential unity of religion and oneness of humanity, prayers that had been written during the

festival by participants and public alike were gathered together and burned in a ritual performance of prayer and music. As the smoke rose to a cello performance by Yo-Yo Ma, the festival's director, Richard Kurin, expressed the hope that the spirit of the prayers and the festival, ascending with the smoke, would be carried across the world and create stronger ties of unity and peace—such as had been experienced on this Silk Road journey.

As I looked across the dense crowd, faces from all corners the world could be seen, lifted up and watching the smoke drift away. Slowly, the joy of being together overtook the silence and the atmosphere of a Silk Road bazaar dominated. I gazed across the crowd and felt my heart illumined by the beauty and power of the light of unity that encompassed these souls from practically all over the world. I imagined what hopes and prayers had been written on all those burning papers, what dreams and meditations were written on the tablets of all the hearts of the people gathered there; and what of their families—in Pamir, all along the Silk Road, Africa, and all people?

Gradually, the crowd dissolved as each person and group went their separate ways and my thoughts turned back to the quietude of Pamir. I relived in my mind that precious meeting with a humble Sufi in the mountains of Ishkishim. He had no dogma, no sheikh, nor manmade hierarchy to give a false sense of certainty. Rather, he had love, a simple life, and insight. As I floated between that moment and the new present experience of watching festival participants part ways, our final exchange played over and over in my mind. As I watched us all moving into the next experience of life, enacting our worlds after performing a universal prayer for peace together, that exchange atop the roof of the world became more poignant. "Prayer without action is useless," he said with a smile. I smiled back and agreed, "True, the answer to prayer lies in action." "True" he said, "True."

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Notes

CHAPTER 1

1. The placebo effect is most often set in motion by the psychological associations patients have with a substance they believe to be a medicine that will help or heal them. Although what they believe to be a medicine is actually an inactive or inert substance, the psychophysiological response that operates through dynamics of thought, belief, and bodily response can be efficacious, even in the most difficult of cases. The nocebo effect is the opposite of this—through a person's negative psychological associations with a substance, treatment, or suggestive language, harmful effects, as well as the creation of, or increase in a disease process, can occur (see Bellamy 1997; Benedetti et al. 2003 and 2007; and Staats et al. 2004).

2. This is a Special Interest Group within the Society for Ethnomusicology in the United States.

3. Among the expanding group individuals and collaborators from across the health sciences and allied fields, a few additional ethnomusicologists should be mentioned here, whose work is highly varied, intersects with multiple disciplines, and creates a new level of musical-medical discourse informed by the ever-present frames of culture, belief, and ontology. Foremost among the scholars whose work helped to facilitate the emergence of medical ethnomusicology is Marina Roseman, whose engagement with Temiar musical healing practices and sociocultural forces of modernity, as well as her cross-disciplinary approaches that explore Temiar healing, brings a broader audience into connection with Temiar sensibilities and healing practices. Similarly, Steve Friedson, by virtue of the cultural landscape surrounding the traditional and biomedical cultures of healthcare for the Tumbuka of Malawi, has been able to place local musical healing practices and beliefs within the

broader discourse of healing in Africa and explicate aspects of a clinical reality that rely on multiple domains of knowledge. Judith Becker's *Deep Listeners* has provided one approach where the neural architecture of the brain can be more easily linked, not only to trance states, but to correlates in bodily, emotional, and spiritual states, all of which can play key roles in health and healing. Kay Kaufman-Shelemay's recent work exploring the transformations of pain within and across domains of biology and culture is opening new connections across disciplines and within ethnomusicology. Margarita Mazo's pioneering work to establish the first program in cognitive ethnomusicology, as well as her expanding research that interrelates domains of music, brain function, culture, and emotion has not only nurtured initial developments in formalizing medical ethnomusicology, but has opened new methodologies that integrate the rigors of cognitive science with the rigors ethnomusicology. Equally important is an ECG experiment that Mazo carried out in 1975 in a remote village of the Vologda province in North-European Russia. The study explored the physiological effect of listening to Russian lament. Preliminary results were telling, but unfortunately, government authorities confiscated her research when she left the Soviet Union in 1979 and it has remained unpublished. Finally, Michael Bakan is directing a collaborative research project to benefit children with autism. Collaborators in this project include the present author, a medical doctor, a specialist in autism research, a cognitive psychologist, and several student assistants.

4. The medical anthropologist and physician Devon Hinton has done notable work in this regard, which is directed toward understanding cross-cultural cognitive frames that underlie healing experiences.

5. As medical ethnomusicology expands (including applied research and practice), ethical codes and issues of professional practice will likewise need to expand. Building on the existing "Statement on Ethical Considerations" of the Society for Ethnomusicology in the United States, important considerations can further be drawn from the following: the "Code of Ethics" of American Music Therapy Association (http://www.musictherapy.org); the "Code of Professional Practice" from the Certification Board for Music Therapists (http://www.cbmt.org); and of special importance for the medical ethnomusicologist are those ethical considerations that are cross-cultural in nature. Here we can consider the World Health Organization's ethics resources at http://www.who.int/ethics/en/ and those that focus on health and human rights http://www.who.int/hhr/en/, as well as the volume edited by Robert Veatch from the Kennedy Institute of Ethics, Georgetown University, titled *Cross Cultural Perspectives in Medical Ethics* (2000).

6. Throughout this book, "Persian mystical poetry" is used generally and can also be understood as Persian spiritual, religious, or Sufi poetry.

7. It should also be mentioned that, although there are medical anthropologists and medical ethnomusicologists who are also physicians, "medical anthropology" and "medical ethnomusicology" does not imply in the least that the nonphysician medical anthropologist or ethnomusicologist is qualified or licensed to practice medicine, as is a medical doctor.

8. In this section, "Western" refers to the dominant influences and institutions established through European settlement and colonizing of America, not Native American

cultures, which also fall within the so-called Western geographic area but that most often go unmentioned when the term "Western" is invoked.

9. Although a comprehensive review of the music therapy literature is beyond the scope of this book, a few other music therapists should be mentioned. Jayne Standley's groundbreaking research and application of medical music therapy with premature infants presents new understandings of music's unique ability to engage premature infants along developing neurological pathways, and gives insight into potential culture-transcendent dynamics with respect to developmental stages of the brain and nervous system (see Standley 2003). Michael Rohrbacher, who is both a music therapist and an ethnomusicologist, is involved in a wide array of research programs and applications that are informed by both disciplines, is deeply involved in the ICAM discourse, and is a proponent of the mutually reinforcing aspects between the disciplines. In addition, Alicia-Ann Clair's pioneering work with people with Alzheimer's disease and other forms of dementia; Therese West's collaborative work with the physician-scientist and psychologist Gail Ironson, which has clarified certain physiological pathways on which future music and healing research can focus; and Michael Thaut's research into rhythmic entrainment in music therapy applications, among others, show important threads of ongoing development in music therapy.

10. A history of the roots of medical ethnomusicology is beyond the scope of this book, building on the work of numerous scholars from multiple disciplines in the humanities and sciences. See further, Koen (2005), Barz (2005), and Koen (2008a). Also see Roseman (1991), Friedson (1996), Laderman and Roseman (1996), Hinton (1999), and Gouk (2000) for important works in music and healing in diverse cultural formulations.

11. The term "applied ethnomusicology" is invoked by ethnomusicologists whose work is not limited to discourse within the academy, but also engages work within the public and private sectors. Applied ethnomusicology grew out of ethnomusicologists working in these sectors, similar to their counterparts in anthropology and folklore—often in the context of concert and festival organization, apprenticeships, museum work, grassroots social development work, public awareness and advocacy for the underserved or marginalized. Current discourse in applied ethnomusicology is broader, and, in recent years, one track of applied ethnomusicology has become virtually wedded to medical ethnomusicology.

12. Cognitive flexibility is best viewed as a spectrum of thought processes that emerge from and feed consciousness whereby varying degrees of flexibility are potential. Here, not only are concepts of practice, habit, and conditioning key, but of equal importance is that of ever-increasing engagement of the dynamics of flexibility. Otherwise, cognitive flexibility might become rigid within a particular range. For instance, in education, cognitive flexibility indicates the degree to which a child can transfer knowledge or a skill from a familiar domain where the knowledge was learned to a new or different domain—for example, a child learns to be respectful to parents, and then can transfer that behavior to showing respect to a teacher. If, however, the cognitive flexibility is limited to respect for parents and teachers, there must be more learning to extend the flexibility further to wherever that skill or knowledge is appropriate.

CHAPTER 2

1. Looking at healing through the limited lens of only the "physical" or "biological" disallows a comprehensive understanding of the "how" of healing, which overwhelmingly remains a mystery, irrespective of context or discipline. A typical example is found in the *Physician's Desk Reference*, which often states that the "mode of action" of a particular medicine is "unknown," (i.e., the "how" of the medicine's effect is unknown even though the statistical data shows that the medicine is effective). Moreover, when the "how" of healing does not fit within a mechanistic, Cartesian model, as is often the case with indigenous practices, musical healing, or spiritual healing, the situation is more complex. In all cases, understanding the "state where healing can occur" is becoming more important to approaching an understanding the "how" of healing. Consider for example, even if we can describe some of the "what" that is happening when a small cut heals, no one really knows, nor can describe fully "how" a cut heals on its own without recourse to concepts and dynamics from outside a strictly mechanistic/material model—for example, metaphysics, quantum physics, spiritual conceptualizations, among others, all of which are integrated into the ICAM and holistic medicine discourse, and are gradually moving from the periphery of conventional health science and music therapy discourse toward the center.

2. *Du'â* typically refers to prayers in general; however, in Pamir it is often used to refer to Muslim daily prayer, which is most often called *salât*.

3. Also known as the dotar (lit. two-strings), a long-necked lute, this instrument is associated with the nomads, shamans, and bards of Central Asia.

4. When transliterated as "shashmaqâm," the first "a" should be pronounced like the "a" in "ash" or even like the "e" in "bed."

5. There are categories beyond these examples, which relate to other, specific genres of music or poetry.

6. Khân is from *khavândan* = to sing/chant/recite/intone (pronounced *khândan*—the "av" after the "kh" remains silent). Another word, "khan," which has the same pronunciation but a different spelling (omitting the silent *av* as in the above), is an honorific that is used to refer to community leaders and other respected individuals. Although the use of "khân" in the term *maddâhkhân* literally refers to singing, because the *maddâhkhân* is also one of the most highly respected individuals in Pamiri culture, there is often a double or deeper meaning, which draws on the honorific meaning of khân. This conflation of meaning became evident through several discussions with musicians, community members, and *maddâhkhân*s, in which the play on words would be emphasized to attribute respect to the *maddâhkhân* or other individuals.

7. See van den Berg (1997) for an in-depth examination of the poetry of the region.

8. See Keshavjee (1998) for the role of pharmaceuticals in Badakhshan.

9. This transliteration emphasizes the pronunciation of the "z" sound. A common transliteration is also "dhikr," in which the "dh" relates to a particular letter "z" in Persian and Arabic. In Arabic, the "dh" is pronounced like the English "th" as in the word "though."

10. For a background on aesthetics, architecture, and built form, see Holgate (1992), and Metcalf (1996).

11. Epidemiological research shows an association between the development of Reye syndrome and the use of aspirin for treating the symptoms of influenza-like illnesses, chicken pox, colds, and similar conditions. The U.S. Surgeon General, the Food and Drug Administration, the Centers for Disease Control and Prevention, and the American Academy of Pediatrics recommend that aspirin and combination products containing aspirin not be given to children under nineteen years of age during episodes of fever-causing illnesses. It is possible to develop Reye syndrome without taking aspirin. However, the chances of developing Reye syndrome can be reduced by not giving aspirin to individuals for relief of discomfort or fever without first consulting a physician for each specific use. Antinausea medications may also contain salicylates, and may mask the symptoms of Reye syndrome. Teenagers and adults are especially at risk of developing Reye syndrome as a result of self-medication. See also http://www.reyessyndrome.org/aspirin.htm

12. Although readers of this book will likely be informed about most of the illnesses, diseases, and crimes that are manifestations of a "malignant social psychology," which itself can be seen as a symptom of a spiritual and religious fallout, it is nevertheless difficult to stay abreast of them all, given their proliferation. Therefore, a few references are worth mentioning that will raise awareness with respect to modern day slavery—what is known as "human trafficking," and crimes against children—see for example: Penn and Clark (2008) for the role of music and art in pediatric and public health; and the following: http://www.unodc.org/unodc/press_release_2007_03_26.html; http://www.unicef.org/protection/index_exploitation.html; http://www.unodc.org/unodc/en/trafficking_human_beings.html; and http://www.redlightchildren.org.

CHAPTER 3

1. Translation by Hunsberger (2000).

2. Here, the "*o*" is a spoken version of the word "*va*," which means "and." The "*o*" sound lends itself to a more aesthetic poetic rhythm.

3. Throughout the book, titles (e.g., khalifa, dervish, apprentice) or pseudonyms are used for all informants to preserve confidentiality—this includes the names of participants in the meditation studies situated outside of Pamir. Exceptions to this are the members of the research group (Samandar, Davlatnazer, Dr. Shirinbek, and nurse Lailo), physicians at the Khoroq hospital, and Sultan Mahmoud, all of who gave their permission to use their names. All photographs are by the present author.

4. The heading of this sections builds on Keshavjee's subtitle "A House of Faith: The Architectural Embodiment of Religious Belief" (Keshavjee 1998, 250).

5. *Sunna* refers to the "path," life, utterances, and actions of Muhammad. The *haidari* section of *maddâh* draws heavily from historical and legendary examples from the life of Ali, Haydar being one of his epithets.

6. Although this is often the case, the time for each section is totally dependent on the *maddâhkhân*'s inspiration and the purpose of performance. Moreover, when interludes or subsections are added, the overall performance time can be substantially increased.

7. See also Levin (2006) for an in-depth discussion of musical mimesis in Tuva and beyond.

CHAPTER 4

1. One *somoni* equals approximately 25 cents.

2. See also Levin 2002, 900–01; and Kunanbaeva 2002, 952–9 regarding the *dombra* and *dotar* in Central Asia.

3. This dynamic and sentiment is expressed in many places in Chinese literature about *tai chi* and related practices and arts. This quote comes from Wu Yu-hsiang and can be found in Lo et al. (1979, 54).

4. This metaphor was inspired by and draws on a talk given by Adib Taherzadeh at Alaska Pacific University in the summer of 1984.

5. For a good introduction of entrainment and its implications for ethnomusicology, see Clayton et al. 2003.

6. B*i parvâ* most often means "fearless," "without concern," or "carefree." Here, Sultan Mahmoud explains the manner of singing *falak* can be with a sense of abandon, a kind of letting out all your emotions, and that it can refer to *falak* without instruments.

7. *ostad* Minakov is the leader of the Badakhshani ensemble that was featured in the 36th Annual Smithsonian Folklife Festival *The Silk Road: Connecting Cultures, Creating Trust*.

CHAPTER 5

1. One exception to this is major cities in Uzbekistan, where, in some circles, Persian is used for daily communication.

2. This is a Turkish group, based in Konya, which strives to preserve an authentic ritual performance tradition of *samâ'* as it developed in Turkey. Numerous and diverse traditions of *samâ'* exist throughout the world.

CHAPTER 6

1. This consists of videotaping the electrocardiogram during musical performance and marking the electrocardiogram when the music begins. Although this will give a rough alignment of the musical and physiological processes, further steps must still be taken to digitize and more accurately align the data streams. Although the ECG experiment produced had too few participants for within or between group statistical analyses, there may still be sufficient data within each ECG to study and analyze heart rate variability, a particularly useful measure with respect to stress.

2. The following description of the experiment is adapted from Koen, Benjamin D. 2008b.

3. A *between groups* design compares effects between different test groups, as opposed to a *within group* design where all participants experience all stimuli.

4. For readers unfamiliar with statistical analysis, see http://www.utexas.edu/cc/stat/world/Education.html for online links to statistical definitions, textbooks, references, and tools. Also see the 1998 *Statview Reference*, SAS Institute, 2nd edition (Cary, NC: SAS Institute).

5. Two levels of error rate are typically used in research. The 1 percent error rate employed here is the standard, most widely accepted rate in biomedical and scientific literature since it is the most narrow rate applied to test *p* (probability). The other commonly used rate in the humanities, some behavioral research, and music therapy is 5 percent, which gives 80 percent confidence that the effect is a result of the stimulus. The 5 percent error rate is most effectively used in pilot studies to suggest that further research should be conducted.

6. A box plot is a graphic showing the distribution of a variable.

7. As is often the case in regions where written and oral traditions intermix throughout history, this text, which is transcribed here, does not exactly mirror the well-known version of the poem (see Shajarian et al. 2002).

8. This project has been ongoing for nine years.

9. For example, when I have taught various courses on *Music, the Mind, and Meditation* to a diversity of students who range in age from eighteen to eighty-five, and who come from diverse countries, cultures, and religious and philosophical backgrounds, they all have found a personally meaningful place in the concepts of life mastery and experiencing transcendence as frames or goals of meditation.

10. A more comprehensive and detailed account of the multiple approaches to meditation explored in this project, as well as the types of music and related practices employed are beyond the scope of this book, and will be explored in a subsequent work.

11. These are summarized from oral and written comments from participant journals.

12. Also summarized from participants' journals and comments.

13. Presently, nearly four hundred students have participated in the project.

CHAPTER 7

1. Each of these examples has further metaphors that relate to relationships and family therapy, but these are beyond the scope of this book and are part of a current project that will be explored elsewhere.

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