

HEALING THE ENLIGHTENMENT RIFT: RATIONALITY, SPIRITUALITY AND SHARED WATERS

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Water management, by definition, is conflict management. Water, unlike other scarce, consumable resources, is used to fuel *all* facets of society, from biologies to economies to aesthetics to spiritual practice. Moreover, it fluctuates wildly in space and time, its management is usually fragmented and it is often subject to vague, arcane and/or contradictory legal principles. As such, there is no such thing as managing water for a single purpose—all water management is multi-objective and based on navigating competing interests. Within a nation, these interests include domestic users, agriculturalists, hydropower generators, recreators and environmentalists. Any two of the interests are regularly at odds, and the complexity of finding mutually acceptable solutions increases exponentially as more stakeholders are involved. Add international boundaries, and the difficulty grows substantially yet again.

While press reports of international waters often focus on conflict, there are encouraging stories throughout the world on how water also induces cooperation, even in particularly hostile basins, and even as disputes rage over other issues. This has been true from the Jordan Basin (between Arabs and Israelis) to the Indus Basin (between Indians and Pakistanis) to the Kura-Araks Basin (among Georgians, Armenians and Azeris). Despite empirical research that repeatedly shows how water-related cooperation has vastly exceeded conflict over the last fifty years, prevailing theories fail to explain this phenomenon.¹ Certainly, there is a long history of conflicts over, or related to, shared freshwater resources; yet, there is also a long and in many ways deeper history of water-related cooperation.² Why do countries that share a basin cooperate on water, even when they will not cooperate over other issues? Water is a resource upon which we are all dependent and for which there is little detailed guidance in international law.³ By any quantitative measure, water should be the most conflictive of resources, not an elixir that drives enemies to craft functioning and resilient institutional arrangements.

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Studies offer economic, environmental or strategic rationale to explain this “hydro-cooperation,” but none of these studies seem completely adequate.⁴ Prevailing wisdom in both the science and policy of water resources does not seem to provide the foundation for answering this clearly ethical question. Perhaps some part of the answer lies not in the world of rationality, but rather in the spiritual, ethical and moral dimensions of water conflict resolution. Incorporating these components may offer not only new understanding of current disputes, but also models, tools and strategies for more effective water conflict management and transformation in the future.

This paper seeks to investigate the potential of integrating a spiritual understanding of water conflict transformation with currently prevailing economic, environmental and strategic constructs. First, the context of the current understanding of water conflict and cooperation is presented. Then, the geography of what I call the Enlightenment rift—the process by which the North/West separated out the worlds of rationality from spirituality—is investigated by exploring the impact this rift has on ideas related to natural resource management.⁵ This idea is then developed under the context of the current clash of worldviews, as the North/West entwines its rational construct with the flow of international development capital and management philosophies, and the inevitable disconnect as these approaches collide with the more integrated views of the South/East. In closing, this paper describes how the two worldviews might be gently interwoven within a fairly universal construct of the Four Worlds of perception, and how this construct might be employed within the framework of more effective water conflict management and transformation.

WATER, CONFLICT AND COOPERATION

Water is a unique and vital resource for which there is no substitute. It ignores political boundaries, fluctuates in both space and time and has multiple and conflicting demands on its use—problems compounded in the international realm by the fact that the international law that governs it is poorly developed, contradictory and unenforceable. It is no wonder, then, that water is perpetually named not only as a cause of historic armed conflict, but also as the resource that will bring combatants to the battlefield in the 21st century. What is the likelihood that “the wars of the next century will be over water,” as some have predicted?⁶

In order to cut through the prevailing anecdotal approach to the history of water conflicts, researchers at Oregon State University (OSU) undertook a three-year research project, which attempted to compile a dataset of every reported interaction between two or more nations, whether conflictive or cooperative, that involved water as a scarce and/or consumable resource or as a quantity to be managed, i.e., cases in which water was the driver of events.⁷ The study documented a total of

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1,831 interactions, both conflictive and cooperative, between two or more nations over water during the past fifty years. The results challenge the notion that water will lead to the next big wars of our time.⁸

First, despite the potential for dispute in international basins, the record of acute conflict over international water resources is historically overwhelmed by the record of cooperation. The last fifty years have seen only thirty-seven acute disputes, i.e. those involving violence. Among these disputes, thirty took place between Israel and one of its neighbors, and that violence ended in 1970. Non-Middle East cases accounted for only five acute events, while, during the same period, 157 treaties were negotiated and signed. In fact, the only water war between nations on record occurred over 4,500 years ago between the city-states of Lagash and Umma in the Tigris-Euphrates basin.⁹ The total number of water-related events between nations of any magnitude is likewise weighted towards cooperation: 507 conflict-related events versus 1,228 cooperative events.¹⁰ This implies that violence over water is strategically irrational, hydrographically ineffective and not economically viable.

Second, despite the occasional fiery rhetoric of politicians—perhaps aimed more often at their own constituencies than at the enemy—most actions that occur over water are mild. Of all the events, some 43 percent fell between mild verbal support and mild verbal hostility. If official verbal support and official verbal hostility are included in the analysis, the share of verbal events reaches 62 percent of the total. Thus, almost two-thirds of all events were only verbal, and more than two-thirds of those had no official sanction.¹¹

Third, cooperative events related to water covered a broad spectrum, including water quantity, quality, economic development, hydropower and joint management. In contrast, almost 90 percent of the conflict-laden events related to quantity and infrastructure. Furthermore, almost all extensive military acts—the most extreme cases of conflict—fell within these two categories. As such, water acted as both an irritant and a unifier. As an irritant, water can make good relations bad and bad relations worse. Despite the complexity, however, international waters can act as a unifier in basins with relatively strong institutions.¹²

This historical record suggests that international water disputes do get resolved, even among enemies, and even as conflicts erupt over other issues. Some of the world's most vociferous enemies have negotiated water agreements or are currently in the process of doing so.¹³ The institutions they have created often prove to be resilient, even when relations are strained. For example, the Mekong Committee—established by the governments of Cambodia, Laos, Thailand and Vietnam as an intergovernmental agency in 1957—exchanged data and information on water resources development throughout the Vietnam War. Israel and Jordan have held secret “picnic table” talks on managing the Jordan River since the unsuccessful

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Johnston negotiations of 1953–1955, even though they were technically at war from Israel's independence in 1948 until the 1994 treaty. The Indus River Commission survived two major wars between India and Pakistan. Moreover, all ten Nile basin riparian countries are currently involved in senior government-level negotiations to develop the basin cooperatively, despite water wars rhetoric between upstream and downstream states.

Therefore, the question of whether water leads to conflict or cooperation turns out to not be mutually exclusive at all—both are true, and often in the same place. Shared water often leads to tensions between nations, which in turn offer a vehicle for dialogue that often results in some form of joint management. In fact, a general pattern has emerged for international basins over time that exemplifies both conflict and cooperation. Riparians of an international basin implement water development projects unilaterally first on water within their territory, in attempts to avoid the political intricacies of the shared resource. At some point, one of the riparians, generally the regional power, will implement a project that impacts at least one of its neighbors. These projects can, in the absence of relations or institutions conducive to conflict resolution, become a flashpoint, heightening tensions and regional instability that, in turn, lead to negotiations, treaties and/or collaborative river basin organizations and mechanisms for future conflict management.¹⁴

These processes from conflict to cooperation have historically suggested room for greater efficiencies. The first complicating factor is the time lag between when nations first start to impinge on each other's water planning and when agreements are finally, arduously, reached. As noted, once a project becomes a flashpoint that heightens tensions and regional instability, it often takes years, or more commonly, decades, to resolve. The negotiations for the Indus, Ganges and Jordan treaties took about ten, thirty and forty years, respectively. All the while, water quality and quantity degrades to the point at which the health of dependent populations and ecosystems are damaged or destroyed. This problem gets worse as the dispute rises in intensity; one rarely hears talk about the ecosystems of the lower Nile, the lower Jordan or the tributaries of the Aral Sea because they have effectively been written off to the vagaries of human intractability. During these periods, threats and disputes rage across boundaries with relations as diverse as those between Indians and Pakistanis and between Americans and Canadians.¹⁵ Water was the last and most contentious issue resolved in negotiations over a 1994 peace treaty between Israel and Jordan, and was relegated to "final status" negotiations—along with some of the other most difficult issues such as Jerusalem and refugees—between Israel and the Palestinians.¹⁶

The second set of security issues occur at the subnational level. If there is a history of water-related violence—and there is—it is a history of incidents at the sub-national level, generally between tribes, water-use sectors or states/provinces. Within nations,

there are many examples of internal water conflicts, ranging from interstate violence and death along the Cauvery River in India.¹⁷ The inland, desert state of Arizona even commissioned a navy consisting of one ferryboat and sent its state militia to stop a dam and diversion on the Colorado River in 1934.¹⁸ In fact, the recent research at OSU suggests that, as the scale drops, the likelihood and intensity of violence rises.¹⁹ This leads to the realization among the water community that despite the historic record of cooperation over shared waters, there is still definite room for improvement.

RECONNECTING PROCESS WITH SPIRIT

How can the process from conflict to cooperation be enhanced? To begin our understanding, we might drop our scale of analysis from the macro to the micro level. Along with describing global and regional trends from an abstract geopolitical perspective, there is also the process that occurs “in the room.” At the end of the day, negotiations are about people and relationships, not solely about geopolitics and economic interests. This begs the question: Are negotiations rational or is something else taking place “in the room,” something connected more to energy and transformation? To gain insight into this question, it is worth looking at the values and philosophies inherent within the negotiating context. This approach will be developed in the following sections.

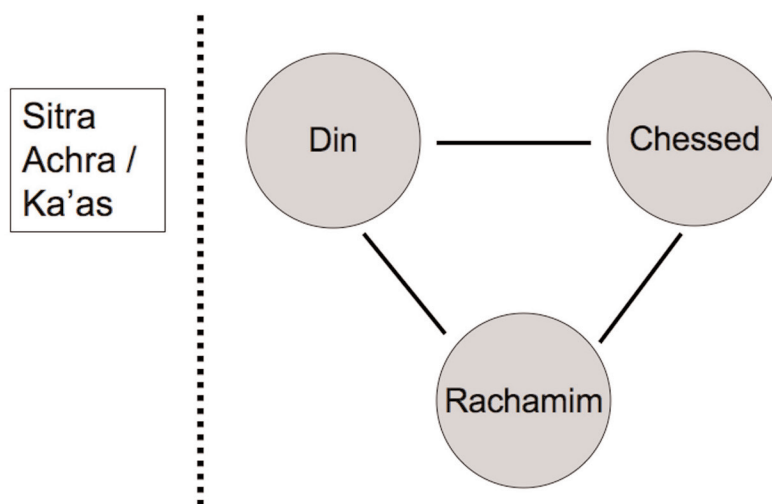
The Enlightenment Rift: When North/West Meets South/East

The Enlightenment of the 18th century left a profound rift between the worlds of spirit and reason, one with intense implications for today’s clash of ideas. In temporal terms, it suggested that day-to-day considerations should be gauged in rational, objective concepts, while the world’s spiritual dimension should be considered separately, in the evening at home or within one’s Friday, Saturday or Sunday community.²⁰ Over time, rationality dictated the structure of subsequent paradigms, such as economics, science and modernity, to the point that those in the North and West are consistently satisfied to ask the “what” without the “why” in terms of public discourse. We talk comfortably of economic growth rates, for example, without the accompanying discussion of how focusing on creating and owning more commodities might affect an individual’s soul. We are able to put the emphasis in debates over crime disproportionately on the value of punishment and retribution, and less regularly on the potential for the individual and his or her community for rehabilitation.²¹ We frequently turn to benefit-cost analyses as a decisionmaking tool in which all factors must be reduced to an economic value, explicitly excluding often profound, but intangible, considerations.

However, the idea of separating out rationality from spirituality is, fundamentally, a Western construct. As Smith eloquently puts it, “The modern West is the first society

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Figure 1



to view the physical world as a closed system.” Conversely, much of the thinking in the South and East often retains its integration of rationality and spirituality.²²

As a model, consider Figure 1, which shows frameworks from two different spiritual traditions that illustrate the idealized relationship between self and community, between justice and mercy, and between boundaries and expanse. This illustration models three of the ten Kabbalistic sefirot, or spheres of divine attributes.²³ These three figures show a balance between *din*—the attribute of justice, boundaries and self—with the *sefirah* of *chesed*—the attribute of loving-kindness and mercy.²⁴ Within this tradition, these two attributes remain in balance—one cannot exist without the other, but not quite. In this balance of divine attributes, the *sefirah* of *chesed*, is always modeled just a touch higher, connoting that that attribute takes precedence in any conflict between the two.²⁵

As the map of the *sefirot* shows, the balance of *din* (justice) with *chesed* (mercy) is manifested in the *sefirah* of *rachamim* (compassion). The attribute of *rachamim* is explicit in what is meant by compassion, suggesting a precise integration of consideration for both justice and mercy, for self and community, for boundaries and expanse. The root of *rachamim* is the same as for *rechem* (womb) giving us a very clear allusion to what is meant: A mother is able to give not only nourishment, but her very life force to her unborn child (ultimate loving-kindness), and is able to do so only if she takes care of her own health and needs.

The message of the construct has relevance for many of today’s grand issues. Do we pursue justice or mercy in our lives and politics? Shall we be concerned with individual rights or responsibility to one’s community? Modernity or post-modernity? Free market or safety nets? Right or left? Red or blue? Given the understanding

elaborated above, the answer to all these choices is “yes, in exquisite balance.” The dichotomies are false, as is the apparent division between rationality and spirituality.

This balanced construct exists fairly universally and can be influential in respect to approaches to resource allocation, negotiations and understanding of relationships. The unity of a balance of self and other, light and dark, can be seen in the *Taijitu*, the traditional Taoist symbol for *Yin* and *Yang*. In the Christian construct, the triad of justice, loving-kindness and compassion has been described through the Trinity—the Father, Son and Holy Spirit. Some Christian Kabbalists make these comparisons explicit.²⁶ In Islam, *Al-Hakam* (the Judge), *Ar-Rahman* (the Merciful) and *Ar-Rahim* (the Compassionate) are three common names out of the ninety-nine names of Allah.

To generalize, the overemphasis on rationality and the rights of the individual as opposed to the inclusion of spirit and the needs of the community is disproportionately a North/West phenomenon, associated primarily with the non-Asian developed world. The South/East often retains a more integrated view of issues of the individual with the community or one’s spirituality with one’s rationality. These are two profoundly contradictory worldviews: The North/West’s dichotomous views of rationality and spirituality, justice and mercy, are in stark contrast to the South/East’s holistic, integrated balance. They clash regularly and intensely across the world stage, from foreign policies to expectations of immigrant communities to dynamics in the United Nations. In other fora, one might note the implication this geography has on the current clash of civilizations, but one can use water as a microcosm of these larger issues.

Parting the Waters: The Enlightenment Rift and Water Ethics

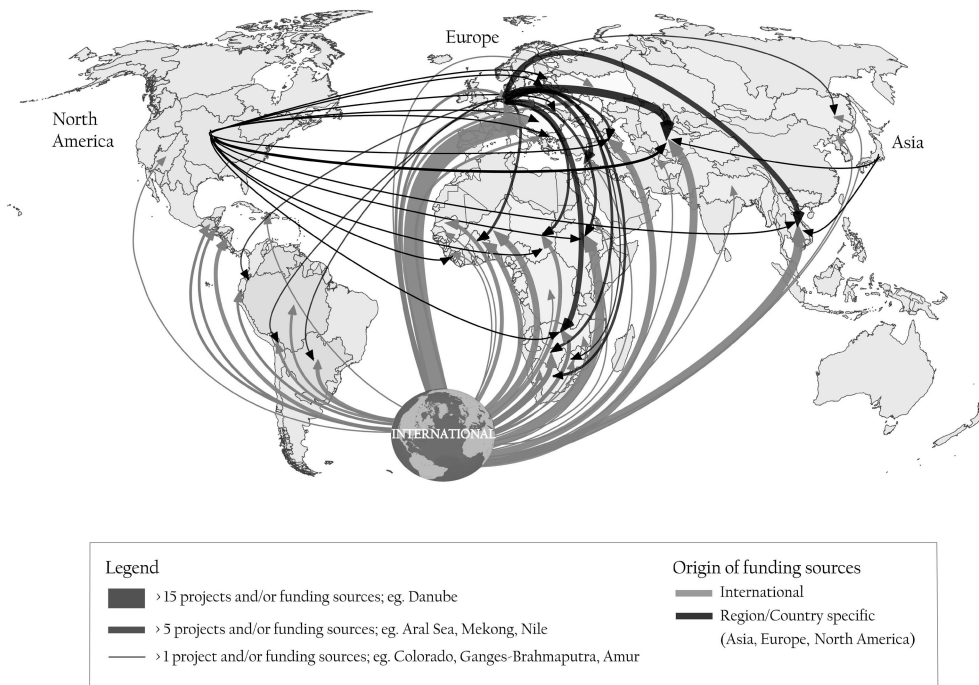
Water and the Economics of Cooperation

The geography of this post-Enlightenment rift is, at times, enlightening. Figure 2 shows the flow of water-related foreign assistance, primarily from the developed to the developing worlds. What this figure illustrates is the extensive interface between very different value structures. In recent decades, for example, the North/West has approached international water management from an increasingly economic framework, most notably through the 1992 Dublin Principles that state: “Water has an economic value in all its competing uses and should be recognized as an economic good.”²⁷ This was the first explicit recognition of water as an economic good, and this principle is often found quoted in literature that has ensued since its establishment. Agenda 21, which emanated from the Rio Conference on Environment and Development in June of 1992, echoed this theme. Furthermore, the World Bank and other development banks have increasingly been urging conflict resolution by thinking of water less in terms of a zero-sum commodity and more in terms of the benefits of

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Figure 2

Sources of Funding For Water-Related Projects in International Basins



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water, a positive-sum commodity that can be enhanced and quantified through economic principles.²⁸

Yet, these economic principles, so prevalent in the North/West and encouraged through its development agencies and banks, explicitly contradict local and indigenous practices throughout the developing world. For example, Islamic legal tenets will vary in accordance to the source of the water. Water “provided by God,” such as natural surface or groundwater available year-round, will have different legal implications than water “provided by man” such as a cistern or the attendant canal system requiring human labor. “God-given” waters may not be bought or sold, and their use is available to all equally.²⁹ To many, the idea of buying and selling water is both repugnant, like “buying and selling one’s children,” as one Berber mediator mentioned in an interview, and contrary to the tenets of Islam.³⁰

Healing Waters: Water Rights and Water Honor

Another interface for these clashing concepts and principles is in the realm of conflict management and transformation. As noted above, approaches to the balance

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between the individual and the community can be thought of very differently in the North/West as compared to the South/East. These views play out in approaches to legal principles and conflict resolution as well. The Western-based legal structure, for example, is very comfortable with the idea that one side in a dispute can be found entirely right and gain everything, while another side can be found entirely wrong and lose everything.³¹ In contrast, in many communities, the balance of justice and mercy described above leads to the importance of both retaining individual rights and honor on both sides of a dispute, and to reconciliation of a wrong-doer within one's community. For example, consider the Arabic word *taarradhin* defined as, "resolution of a conflict that involves no humiliation." It is a profound concept with no Western equivalent. This is not a theoretical concept, but a concept put into practice throughout the Muslim world when a wrong has been committed. This takes place through the ceremony of a *sulha*, a ritual ceremony of forgiveness. The term comes from *musalaha* (reconciliation), which implies that hostilities are ended, honor re-established and peace restored in the community.³² This custom, which consists of private, often mediated, negotiation of redress between the affected parties, is followed by a public declaration of forgiveness and usually a festive meal.³³ Once the *sulha* is performed, the slate is wiped clean, as if the dispute never happened. The agreement is legally binding on both the individuals and the community. Grudges are dissuaded and reference to past disputes may not be made to gain position in a current conflict.³⁴

The balance of rights and honor, and justice and mercy, in contrast to the Western construct of justice, is described by Jabbour:

This is how [social] justice should be achieved. The courts condemn the guilty party in vain, because they never take care of the harm. Magistrates and police don't know what social justice is. Honor is an alien virtue. They believe in the virtue of punishment, but forgiveness is overshadowed and neglected, because peacemaking is not on their minds.³⁵

The international community seems to be lacking in this very type of ritual ceremony of forgiveness. The negotiating process of many transboundary agreements is secret or, at best, a televised signing ceremony. Accord over an issue such as water, generally considered un-newsworthy, may take place without any public notice at all. A public ceremony would allow the community affected by a dispute—the stakeholders from all sides—to celebrate its resolution and thereby assume ownership of its implementation.³⁶

To be fair, the field now known as Alternative Dispute Resolution (ADR) came about precisely because of the limitations, and cost, of the Western legal framework.³⁷

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For the most part, even ADR, as exemplified by Fisher and Ury and its offshoots, is more often than not rooted in both rationality and/or economic constructs of interests and benefits.³⁸ A claim by practitioners is that ADR works because the mediator can help parties construct agreements that meet the needs of both parties. In other words, people agree when it is in their interest to agree. But how does one know it was in the parties' best interests to agree? The only proof is tautological: they agreed.

SPIRITUAL TRANSFORMATION AND LESSONS FOR WATER NEGOTIATIONS

Conflict, Cooperation and Kabbalah

Are negotiations actually rational? Do we agree when it is in our interest to agree? Rather, is something more transcendent occurring in the negotiating room—a process more connected to energy and transformation? Successful multiparty negotiations often require profound transformations in the way participants conceptualize the issues at hand. Those involved can often define the precise moment when thinking altered dramatically, essentially the “aha!” moment where emphasis shifted from individuals thinking solely in terms of their own respective agenda to a dual comprehension and understanding of others' needs. As previously noted, traditional conflict resolution models define these transitional moments in rational terms: People come to agreement when it is in their interest to agree. Even overlooking the tautological nature of this argument, rationality simply often does not hold sway if the conflict involves even a modicum of real emotion.

To really understand the process of transformation, and the settings most conducive to inducing these shifts, one should look outside of the field of conflict resolution as currently defined in modern, academic terms. When one thinks of the situations most analogous to settings conducive to transformative thinking, the world of spiritual transformation arises as perhaps the most appropriate. After all, every spiritual tradition in the world is devoted to precisely this process of transformation: to transform and aid individuals in moving from a focus on their own immediate wants and desires, to an acknowledgment that focuses on addressing their obligations to society, humanity and the divine.

Throughout the history of water conflict management, inducements to diverse stakeholders have centered on three sets of interests: economic inducements, environmental protection and strategic interests. Each has met with successes over the years, yet each has its limitations, especially in tense settings. Researchers have occasionally sought to bolster these traditional approaches with the experiences of other, seemingly peripheral, issues. For example, a report on a workshop that brought

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together participants involved in international water management and international arms control agreements suggests that common issues were found, and approaches exchanged, in regards to political suspicion, incomplete data and the monitoring and enforcement of agreements.³⁹ Ostrom has undergone remarkable work in tying small-scale, local experiences in water management with larger lessons and scales, and Wolf investigates the allocation rules and conflict resolution mechanisms of Berbers and Bedouin and draws implications from their experiences for international waters.⁴⁰

Most research and practice of connecting the worlds of spirit and water has focused on how religions address the environment and its protection. Much of this thinking has been documented by Mary Evelyn Tucker and John Grim of Bucknell University, who coordinated a ten-conference series on World Religions and Ecology at Harvard's Center for the Study of World Religions, and who are editing the conference papers from the series, with separate volumes describing relationships between each religion and the environment.⁴¹ Similarly, Palmer and Finlay provide an overview of religious approaches that include statements on the topic from leaders in eleven of the world's religions, as specifically related to the environment's connection to international development, and include statements on the topic from leaders in eleven of the world's religions.⁴²

However, little in this field has been specifically applied to shared water and issues of environmental conflict management. Some work has described the Catholic Church's leadership in the promotion of a religious obligation to protect the Columbia River watershed as an international basin. Further, Ecumenical Patriarch Bartholomew recently planned a boat trip down the Danube with international invitees to promote protection of that basin, although the trip was subsequently cancelled.⁴³

The focus here is subtle, but importantly different from that described above. The key is what spiritual and ethical processes of transformation can offer environmental negotiations and conflict management, not the overall framework in which each religious tradition approaches the environment as a whole. As such, the scope of each individual application is by necessity defined on a smaller scale by a select group of stakeholders. Yet, one could argue that the overall potential to effect change in thinking about the process of conflict management is vast.

Very little work has been done explicitly in tying spiritual transformation to environmental negotiations and management, although what has been done suggests exciting potential. In February 2003, the Program on Negotiation at Harvard Law School launched the Harvard Negotiation Insight Initiative, specifically aimed to offer mediators and stakeholders resources to "explore the interface of contemporary negotiation theory and practice with alternative frameworks including some drawn from perennial wisdom traditions."⁴⁴ While the initial focus was in the realm of legal

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mediation within the United States, the first workshop, held in June 2004, brought a variety of facilitators, mediators and environmental experts together for training. As the annual workshops have grown, the focus has broadened to encompass all branches of mediation and negotiation.

Literature does exist suggesting the potential for applying the tools of spiritual and ethical processes to conflict transformation possess, which goes on to further suggest the potential applications that these tools hold in relation to environmental issues as well. Transformative mediation, a relatively new branch of ADR, is based on “empowerment and mutual recognition of the parties involved,” as well as on their long-term interests.⁴⁵ It offers an alternative to problem-solving mediation, which can be highly directive and focused on short-term problem-solving. Compassionate listening is a faith-based technique of guided communication which has proved effective in extremely hostile settings, notably by Carol Hwoschinsky in guiding dialog between Israelis and Palestinians who have been touched by violence.⁴⁶ Similarly, Rabbi Uzi Weingarten teaches similar techniques of communicating with compassion, which have been applied in a variety of hostile settings.⁴⁷ Abou El Fadl describes Islamic processes for “institutionalizing mercy and compassion in social interaction,” while McConnell structures mediation in a Buddhist construct, and Barthel suggests lessons for process from a Baha’i perspective.⁴⁸

The Association for Conflict Resolution (ACR) now has a spirituality section, and the Fall 2005 issue of ACR’s journal, *ACResolution*, is entitled “Spirituality and the Heart of Conflict Resolution.” While most of that activity focuses on the mediator’s own spirituality, or on mediation as a spiritual practice, some work does draw directly from the spiritual world to facilitate the process of conflict resolution.⁴⁹ Marc Gopin, director of the Center for World Religions, Diplomacy and Conflict Resolution at George Mason University, suggests the potential for conflict resolution’s learning from spiritual transformation:

One example [of the possibilities of merging study of religion and conflict resolution] is the spiritual process of transformation of character through reflection and ethical improvement of one’s behavior. Several theories of conflict resolution suggest the importance of personal transformation for the resolution of deep conflicts. Spiritual programs of personal transformation might be combined with this kind of conflict resolution methodology in religious settings...Could such phenomena be incorporated into conflict resolution strategies among religious peoples or even more generally?⁵⁰

Process and the Four Worlds

Thinking of negotiations less in terms of rational interests and more in terms of transforming energy allows us to center on the process of transformation in negotiations—the point at which parties move from thinking of themselves as representing countries or political bodies to perceiving more broadly the needs of all stakeholders and needs within a basin. These are critical junctures that occur within the negotiations processes where movement from rights-based to needs-based to interest-based to equity-based negotiations suddenly becomes possible. In international basins, as noted above, this transformation may normally take years or even decades, during which time political tensions are exacerbated, ecosystems go unprotected and water is inefficiently managed, at best. However, this negotiation transformation may have a corollary in spiritual transformation. Every spiritual tradition in the world is devoted to a very similar process, which includes guiding individuals to thinking less about their immediate wants and desires, and to encouraging more of a focus on their obligations to society, humanity and other issues larger than themselves. In this setting, conflict can be seen less as a displacement between rational sets of interests, and more as a rift in the fabric of community, with the attendant obligation for healing.

The Universality of the Four Worlds

One construct that can help inform negotiation processes is the idea of the Four Worlds and the use of transformative processes to move through them. In many faith traditions, our relationship to the world can be experienced through four types of perception: physical, emotional, knowing and spiritual. One intuitive example might be seen through a glass of water, which exists most recognizably on a physical plane. However, if one is thirsty or the water is particularly satisfying, one's experience of water can be transformed into an emotional response. One can also intellectualize the water and thus can consider its components and interaction of the water with our body to provide and maintain sustenance. Finally, one might say a blessing over the water, lifting its "profane" covering, and it now becomes a source of spiritual nourishment. While these four levels of perception can be considered separately, they can often be best achieved in sequence but they should neither be considered distinct nor linear. The water exists simultaneously in all four states and it is up to the individual to determine through which lens it will be best perceived. Nonetheless, understanding the Four Worlds in sequence is often useful, if not critical.

This construct seems particularly useful for our purposes of cross-cultural and political boundary negotiations. One notes the near universality of the Four Worlds construct, which Huston Smith refers to as the "levels of reality."⁵¹ Psychologists will recognize Maslow's hierarchy of needs in the Four Worlds, but those familiar with the

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mystical traditions around the globe will find much more ancient roots. In Judaism, the Four Worlds are seen in Kabbalah, and applied through the structure of the daily prayer service—a guided meditation based, in turn, on the construct of the Temple in Jerusalem, which itself was built to emulate Moses' experience of the levels of holiness during his ascent of Mount Sinai.⁵² In Buddhism, these levels are described in the Four *Jhannas*—levels achieved through meditation and corresponding to “the four great levels of the heavenly realm.” They are evident within the Sufi mystical experience, as well as in the Shaman Four Levels of Perception, the Toltec Four Agreements and the Native American Sacred Tree.⁵³ In fact, this construct is so widespread that Zalman Shachter-Shlomi suggests that human biology is actually hard-wired to experience the world through these four lenses—the reptilian, limbic, cortex and unused portions of the human brain.⁵⁴

Understanding this construct and its universality leads to tremendous possibilities in relation to the design and implementation of the negotiation processes, training and collaborative learning. It allows for a structure that moves through different lenses and perceptions, while tapping into what seems to be a fairly universal set of needs. Finally, it allows for a focus on the transformative processes in negotiations to bolster the only partially successful historical emphasis on quantifiable benefits.⁵⁵

Application: Stages of Water Conflict Transformation

How might the Four Worlds be harnessed for water negotiations? This section describes how each of the worlds can be seen in different stages of water conflict and conflict transformation. There are, of course, no blueprints for water conflict transformation. Gilbert F. White reminded us long ago that, “every basin is unique.”⁵⁶ There does seem to be, however, general patterns in approaches to water conflict which have emerged over time. Classic disputes between, for example, developers and environmentalists, rural and urban users, or upstream and downstream riparians, suggest zero-sum confrontations where one party's loss is another's gain and when confrontation seems inevitable. Yet such seemingly intractable conflicts are regularly and commonly resolved, as creative thinking and human ingenuity allow solutions which draw on a more intricate understanding of both water and conflict to come to the fore.

Over time, the process of transformation along a continuum from zero-sum, intractable disputes towards positive-sum, creative solutions has been slightly formalized and can be described through a migration generally along four stages.⁵⁷ Note that all stages exist simultaneously, and therefore, do not need to be approached in a sequence nor achieved necessarily for success. In today's world, many disputes never move beyond the first or second stage, yet are tremendously resilient, while a few have achieved the fourth stage and are fraught with tension.

Figure 3: Four Stages of Water Conflict Transformation⁵⁸

Negotiation Stage	Common Water Claims	Collaborative Skills	Geographic Scope
Adversarial	Rights	Trust-building	Nations
Reflexive	Needs	Skills-building	Watersheds
Integrative	Benefits	Consensus-building	“Benefit-sheds”
Action	Equity	Capacity-building	Region

Nevertheless, like any skill, it is useful to understand the structure of an ideal path in order to perfect the tools required for any individual situation. The generalized path described here is structured around an understanding of each of the four stages through any of four perspectives, as described in Figure 3.

Stage I. Assess the Current Setting: Basins with Boundaries

In Stage I, in its initial, adversarial setting, regional geopolitics often overwhelm the capacity for efficient water resources management. Metaphorically, the political boundaries on a map at this stage are more prevalent than any other boundaries, either of interest, sector or hydrology. Dialogue is often focused on the past, based on the rights to which a country, state or province feels it is entitled, and a period of expressing of pent-up grievances can be necessary. As a consequence of these initial tensions, the collaborative learning emphasis is on trust-building, notably on active and transformative listening, and on the process of conflict transformation. By focusing primarily on the rights and interests of countries, states and/or provinces, inefficiencies and inequities are inevitable. Once stakeholders are brought to the table, this stage generally involves classic hydropolitical assessments of the current setting within a basin, including biophysical, socioeconomic and geopolitical parameters. The processes for assessing many of these aspects are well-defined (e.g., hydrologic studies or benefit-cost analyses of development alternatives), while many are less quantitative, but no less critical (e.g., social impact statements or assessments of indigenous traditions of management).

At this stage, stakeholders often think nationally, or as a state or province or other political constituency, and are focused on their rights. This may lead them to look disproportionately backwards, if only to be able to vent and perhaps address perceived grievances. Although understanding the baseline of any basin may take decades (if possible at all), it is not necessary to agree to all data before greater

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cooperation takes place. These assessments or training workshops can be used in and of themselves as confidence-building measures to move to the next stage, even as greater mutual understanding of the basin is being created.

Stage II. Changing Perceptions: Basins without Boundaries

As the adversarial stage plays out, occasionally some cracks can be seen in the strict rights-based, country or state/province-based positions of each side. In actual water negotiations, this process can last decades. Eventually, and sometimes painfully, a shift can start to take place where the parties begin to listen a bit more, and where the interests underlying the positions start to become a bit apparent. In Stage II, a reflexive stage, negotiations can shift from rights (what a country, state/province feels it deserves) to needs (what is actually required to fulfill its goals). Conceptually, it is as if we have taken the national, state/provincial boundaries off the map and can, as if for the first time, start to assess the needs of the watershed as a whole. This shift, from speaking to listening, from rights to needs and from a basin with boundaries to one without, is a huge and crucial conceptual shift on the part of the participants, that can be both profoundly difficult to accomplish and absolutely vital to achieve for any movement at all toward sustainable basin management. To help accomplish this shift, the collaborative learning emphasis is on skills-building, and we might approach the “boundary-less” basin by sector rather than by nation.

At this stage, the attention shifts from past to future, as stakeholders examine each others’ interests beyond positions. A process of social learning sets in. Parties can begin to ask, “What could be?” rather than “What was?” or “What is?” The metaphor for this stage is a basin without borders where, rather than rights, there are needs; and rather than thinking of national issues, we might look instead to how different sectors might be developed basin-wide.

This shift is transformative—the point at which parties move from thinking of themselves as representing countries or states/provinces to perceiving more broadly the needs of all stakeholders within a basin (whether or not they like these needs). Parties begin to understand the needs of the other and thus the requirements that must be met if agreements are to be reached.

Stage III. Enhancing Relations and Benefits: Beyond the River

Once participants have moved through the first two stages from mostly speaking to mostly listening, and from thinking about rights to thinking about needs, the problem-solving capabilities that are inherent to most groups can begin to foster creative, cooperative solutions. In Stage III, an integrative stage, the needs expressed

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earlier begin to coalesce to form group interests—the why underlying the desire for the resource. Conceptually, we start to add benefits to the still-boundary-less map, and in fact, to think about how to enhance benefits throughout the region, often by adding resources other than water, and geographic units other than the basin. In fact, rather than allocating water, we can think about allocating benefits. The collaborative learning emphasis is now on the relationship-building of the group, and we begin to move in “benefit-shed” rather than being restricted by the basin boundaries.

Once the shift has been made in thinking about allocating water to allocating benefits, it is a natural progression to think together about how to enhance the benefits within and beyond the basin. This may be done within the realm of water resources alone. A well-designed dam upstream might, for example, both enhance agricultural production downstream and help protect riparian habitat. But it is often helpful to think at this stage about “baskets of benefits” that may go well beyond water, or well beyond the basin in question. Indeed, the most successful cases of building regional approaches to water have gone beyond seeing water as the ends to seeing it as a means to achieve other goals, such as socioeconomic development and reduction of fears of floods and drought.⁵⁹ Energy production and water development are often linked, for example, as are afforestation programs, transportation networks and environmental protection. Naturally, the transaction costs of including more sectors than water go up exponentially, but so do the potential benefits. This means bringing in actors beyond the water sector and expanding the basket to be considered.

Stage IV. Bringing it all Together: Institutional and Organizational Capacity and Sharing Benefits

Finally, although tremendous progress has been made within the first three stages, both in terms of group dynamics and in developing cooperative benefits, Stage IV (the action stage) helps with tools to guide the sustainable implementation of the plans and to ensure that the benefits are distributed equitably among the parties. The scale at this stage is now regional where, conceptually, we need to put the political boundaries back on the map, reintroducing the political interest in seeing that the baskets that have been developed are to the benefit of all. The collaborative learning emphasis is on capacity-building, primarily of institutions.

Much as the water community likes to think in terms of basins or watersheds alone, eventually the borders have to come back on the map. Political entities are primarily responsible for their own benefits and sovereignty, after all, and it is often hard to sell their own constituents on an integrated basin alone. The most critical issues at this stage are addressing how benefits can be distributed equitably or perceived as fair; how sustainable and resilient institutions can be crafted; and how

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the existing institutions and organizations are to be taken care of or compensated for any change. The first question may require trade or side-payments, while the second and third questions must evoke the best in institutional design. It is important to remember that conflict potential can actually increase during periods or situations of increased benefits. The increase of benefits alone will not assure the mitigation of conflict. This is because parties may realize benefits they never had, but they may perceive that the other party is getting relatively more benefits than they are getting. Thus, the perceptions of fairness and equity, not just the tangible delivery of benefits, are critical.

It is critical not to think of these stages as a linear process, where the further along the better. Most basins ebb and flow back and forth over time, finding the level that meets a particular set of hydropolitical needs for a given place and time—there is no right set of answers. One might think of these all existing in parallel universes simultaneously, each with its own set of approaches or tools, any of which may be useful at any given time, or conceptually, as a helix or set of spheres rather than strictly linear. They are broken apart here only for the purposes of explanation.

Four Worlds of Water

Understanding this construct may help structure more effective future negotiation processes, as well as skills-building and collaborative learning exercises. Even the word “water” can be understood differently depending on through which lens one is viewing it, and the mediator/facilitator can harness the construct and sequence of the Four Worlds to facilitate new understanding. In contrast, we ignore the Four Worlds at our peril.

As peace negotiations between Israelis and Arabs commenced in the early 1990s, for example, each side approached the issue of water very differently. From the Palestinian and Jordanian side, water was conceptualized in a very physical sense—in some cases, people literally did not have enough clean water for sustenance—or as “emotional water”—the lack of sovereign control over water as representing larger issues of national identity and occupation. From the Israeli side, water was constructed intellectually. Survival had long been assured, so the challenge was to move, price, treat and store water in the most efficient manner.

These conflicting conceptualizations led not only to difficult impasses—water was the last issue concluded in the Israel-Jordan Treaty of Peace—but also to especially creative solutions. In what will no doubt become a classic modification of the tenets of international law, Israelis and Jordanians invented legal terminology to suit particularly local requirements in their 1994 peace treaty. In negotiations leading up to the treaty, Israelis, making the intellectual argument that the entire region was running out of water, insisted on discussing only water allocations, that is, the future needs of each

riparian. Jordanians, in contrast, refused to discuss the future until past grievances had been addressed. They would not negotiate allocations until the historic physical and emotional question of water rights had been resolved. There is little room to bargain between the past and the future, between rights and allocations. Negotiations reached an impasse until one of the mediators suggested the term rightful allocations to describe simultaneously historic claims and future goals for cooperative projects. This new term is now immortalized in the water-related clauses of the Israel-Jordan Treaty of Peace.⁶⁰

In relation to the Fourth World, we can see that, throughout the world, native and indigenous peoples see water as a holistic, spiritual resource. With the construct of the Four Worlds, we can conceptualize how jarring it can be, to the point of being sacrilegious, to approach problem-solving in rational, economic concepts.


CONCLUSIONS

Shared water resources provide a useful lens through which to describe both the hazards of ignoring the relationship between rationality and spirituality, but also to demonstrate the potential an integrated approach may offer for effective negotiations and conflict transformation.

As the historically contrasting worldviews of the Global North/West and Global South/East increasingly interact, both within and without the worlds of shared waters, we have the opportunity to heal historic divisions. The history of water conflicts and cooperation suggest that people do come together, even across vociferous divides. It is anticipated, however, that the dangers of scarcity-driven suffering and conflict will only increase with population growth, poverty and global change. Yet, as grows the threat to increased conflict in the future, so too grow the opportunities for dialogue and healing.

In 1996, the Episcopal Diocese of Massachusetts shifted its diocese boundaries from political divisions to watershed boundaries. The rationale was instructive:

Simply demonstrating that we are all connected by water: rich and poor, urban and rural, upstream and downstream, is a fine place to start. I think the Holy Spirit will take care of the rest.⁶¹

Water ignores all separations and boundaries save for those of the watershed itself. As such, it offers a vehicle to bring those who share it together. Since it touches all we do and experience, water creates a language through which we may discuss our common future. 

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NOTES

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¹ Aaron T. Wolf, Shira Yoffe, and Mark Giordano, "International Waters: Identifying Basins at Risk," *Water Policy* 5, no. 1 (2003), 29-60.

² Ibid.

³ Mark Giordano and Aaron Wolf, "Sharing Waters: Post-Rio International Transboundary Water Management," *Natural Resources Forum* 27 (2003), 162-170.

⁴ For economic rationale, see Franklin M. Fisher et al., "Optimal Water Management and Conflict Resolution: The Middle East Water Project," *Water Resources Research* 38, no. 11 (2002); for an environmental perspective, see Petri Ollila et al., "Multicountry Project Arrangements: Report of a Thematic Review" (Monitoring and Evaluation Working Paper 3, September 2000); and for strategic rationale, see Matthias Finger and Ludivine Tamiotti, eds., "The Multi-Governance of Water through Four Case-Studies" (Report for the World Conservation Union [IUCN], Commission on Economic, Environmental and Social Policy [CEESP], Geneva 2001).

⁵ I acknowledge the wild over-generalization involved in dividing up the world between the North/West and the South/East. This construct should be understood infinitely more porous and ephemeral than dichotomous, but roughly follows the geography of Edward T. Hall's *Beyond Culture* (New York: Doubleday, 1976) "high context" and "low context" cultures (critiqued though the model has been). In very general terms, the former includes Europe and much of the non-indigenous Americas, while the latter includes most of Asia, Africa and the Middle East. While these terms parallel the more common Global North and Global South, they are not identical. The Global North and the Global South generally describe the level of economic development and, while there is tremendous overlap with North/West and South/West, these latter terms refer more to cultural constructs of the relationship between rationality and spirituality, as will be noted below.

⁶ World Bank Vice President Ismail Serageldin, as quoted in Barbara Crossette, "Severe Water Crisis Ahead for Poorest Nations in Next 2 Decades," *New York Times*, 10 August 1995. His statement is probably most often quoted. For complete discussions of the relationship between water and security, see Ken Conca and Geoffrey D. Dabelko, eds., *Environmental Peacemaking* (Washington, D.C.: Woodrow Wilson Press, 2002); Alexander Carius, Geoffrey D. Dabelko and Aaron T. Wolf, "Water, Conflict, and Cooperation" (policy briefing paper for the United Nations Global Security Initiative, 2004); Aaron T. Wolf, Annika Kramer, Alexander Carius, and Geoffrey D. Dabelko, "Managing Water Conflict and Cooperation," *State of the World 2005: Redefining Global Security* (Washington, D.C.: Worldwatch Institute, 2005).

⁷ Excluded are events where water is incidental to the dispute, such as those concerning fishing rights, access to ports, transportation, or river boundaries. Also excluded are events where water is not the driver, such as those where water is a tool, target, or victim of armed conflict. See Wolf (2003), 29-60.

⁸ Wolf (2003), 29-60.

⁹ Aaron T. Wolf, "Conflict and Cooperation Along International Waterways," *Water Policy* 5, no. 2 (1998), 251-265.

¹⁰ Wolf (2003), 29-60.

¹¹ Ibid.

¹² Ibid.

¹³ Ibid.

¹⁴ Wolf, Kramer, Carius and Dabelko (2005).

¹⁵ Ibid.

¹⁶ Aaron Wolf, "International Water Dispute Resolution: The Middle East Multilateral Working Group on Water Resources," *Water International* 20, no. 3 (September 1995). The "final status" topics, as listed in the Oslo Accords that were to be negotiated after a period of normalization between Israelis and Palestinians, to include Jerusalem, refugees, water resources, settlements and borders, are listed here: <http://www.afsc.org/israel-palestine/learn/glossary.htm>.

¹⁷ Amita Baviskar, *In the Belly of the River: Tribal Conflicts over Development in the Narmada Valley*

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(Oxford, England: Oxford University Press, 1995); Prathivadi Bhayankaram Anand, "Water and Identity: an Analysis of the Cauvery River Water Dispute" (BCID Research Paper Number 3, Bradford Centre for International Development Series, Bradford, England: 2004); Marc Reisner, *Cadillac Desert: The American West and Its Disappearing Water* (New York: Viking, 1986); "Thousands flee water fights," News24.com, 24 January 2005, http://www.news24.com/News24/Africa/News/0,6119,2-11-1447_1651487,00.html (accessed 7 February 2007); and "Thousands flee Kenyan water clash," BBC News Africa, 24 January 2005, <http://news.bbc.co.uk/2/hi/africa/4201483.stm>.

18 Char Miller, ed., *Fluid Arguments: Five Centuries of Western Water Conflict* (Tucson, Ariz.: University of Arizona Press, 2001).

19 Meredith Giordano, Mark Giordano and Aaron T. Wolf, "The Geography of Water Conflict and Cooperation: Internal Pressures and International Manifestations," *Geographical Journal* 168, no. 4 (2002), 293-312.

20 David Martin, "The Religious and the Secular: Pressure Points and Alignments" (Keynote address, Forum 2000 Conference: *Freedom and Responsibility*, Prague: 8 October 2007).

21 Thomas P. O'Connor, Jeff Duncan and Frank Quillard, "Criminology and Religion: The Shape of an Authentic Dialogue," *Journal of Criminology & Public Policy* 5, no. 3 (2006), 559-570.

22 Huston Smith, *Forgotten Truth: The Common Vision of the World's Religions* (San Francisco, Calif.: Harper, 1992), 96.

23 For accessible introductions to Kabbalah, see: Gershom Scholem, *On the Kabbalah and its Symbolism* (New York: Schocken Books, 1996); Daniel C. Matt, *The Essential Kabbalah: The Heart of Jewish Mysticism* (Edison, N.J.: Castle Books, 1997); Arthur Green, *A Guide to the Zohar* (Stanford, Calif.: Stanford University Press, 2004).

24 "Justice" is meant here in the strict, bounded sense, and is not meant in the same vein as one might refer to a more holistic "restorative justice."

25 Any parent understands this construct intuitively. Raise a child with justice alone, and the result will be an unfeeling bully. Raise him or her with only loving-kindness, and the child will become unbearably spoiled and self-centered. And, truth be told, when we are ever conflicted between which of the two approaches to take with our loved ones, we generally cannot help but show some favor to mercy.

26 See, notably, Christian Knorr von Rosenroth, *Kabbala Denudata, sive Doctrina Hebræorum Transcendentalis et Metaphysica Atque Theologia* (Sulzbach, 1677-78). Translated into English as: S. L. Macgregor Mathers, *An Introduction to the Kabbalah Unveiled* (Whitefish, Mont.: Kessinger 2005).

27 ICWE, International Conference on Water and the Environment, The Dublin Statement on Water and Sustainable Development, Guiding Principle No. 4. (Dublin, Ireland: January 1992), <http://www.wmo.ch/pages/prog/hwrp/documents/english/icwedece.html>.

28 For a history, please see Jerome Delli Priscoli and Aaron T. Wolf, *Managing and Transforming Water Conflicts* (London and New York: Cambridge University Press, 2008).

29 The famous first scene in Lawrence of Arabia, which seems to have shaded the perceptions of many vis-à-vis Middle East water tensions, in which a hapless traveler is shot for drinking from another's well simply would not have happened. The well and its water would have been accessible to anyone.

30 Aaron T. Wolf, "Indigenous Approaches to Water Conflict Negotiations and Implications for International Waters," *International Negotiation: A Journal of Theory and Practice* 5, no. 2 (December 2000); Naser I. Faruqi, Asit K. Biswas and Murad J. Bino, eds., *Water Management in Islam* (Tokyo: United Nations University Press, 2001).

31 O'Connor, Duncan and Quillard (2006), 559-570.

32 Elias Jabbour, *Sulha: Palestinian Traditional Peacemaking Process* (Montreat, N.C.: House of Hope Publications, 1996).

33 Jabbour (1996), 56: "The eating of a meal together, from ancient times, carries the strength of covenant and is a sign of reconciliation and the removing of barriers from between the participants."

34 Daniel L. Smith, "The Rewards of Allah," *Journal of Peace Research* 26, no. 4 (1989), 385-398; Jabbour, (1996); George Irani, "Islamic Mediation Techniques for Middle East Conflicts," *Middle East Review of International Affairs* (MERIA) Journal 3, no. 2 (June 1999), <http://meria.idc.ac.il/journal/1999/issue2/jv3n2a1.html>.

35 Jabbour (1996), 116.

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³⁶ Wolf (2000). To some degree, this concept is being introduced to the international community. George Irani describes a *sulha* which was carried out between the Christian and Muslim communities in Beirut. The interviewees in Daniel L. Smith (1989) argue that, while the problems between Israelis and Palestinians are too great to be dealt with in a simple ceremony, the principles of *sulha*, balancing rights with honor, might be applied.

³⁷ Alternative Dispute Resolution (ADR) refers to any means of settling disputes outside of the courtroom. ADR typically includes arbitration, mediation, early neutral evaluation, and conciliation. For more information, see: <http://www.law.cornell.edu/topics/adr.html>.

³⁸ Roger Fisher and William L. Ury, *Getting to Yes: Negotiating Agreement without Giving In* (London: Hutchinson Business, 1981); the potential of ADR in the context of international water resources conflicts can be found in Evan Vlachos, *Transboundary Water Conflicts and Alternative Dispute Resolution* (Cairo, Egypt: International Water Resources Association, VIIIth Congress, 1994); Gail Bingham, Aaron Wolf and Tim Wohlgenant, *Resolving Water Disputes: Conflict and Cooperation in the U.S., Asia, and the Near East* (Washington, D.C.: U.S. Agency for International Development, 1994); Aaron T. Wolf, ed., *Conflict Prevention and Resolution in Water Systems* (Cheltenham, England: Elgar, 2002); Yona Shamir, *Alternative Dispute Resolution Approaches and Their Application* (UNESCO IHP Technical Documents in Hydrology, PCCP Series 7, Paris: 2003); Jerome Delli Priscoli and Aaron T. Wolf, eds., *Managing and Transforming Water Conflicts* (London and New York: Cambridge University Press, 2008).

³⁹ Elizabeth L. Chalecki et al., "Fire & Water: Technologies, Institutions, and Social Issues in Arms Control and Transboundary Water-Resources Agreements," *Environmental Change and Security Project Report 8* (Summer 2002), 125-134.

⁴⁰ Elinor Ostrom, *Crafting Institutions for Self-Governing Irrigation Systems* (San Francisco, Calif.: International Center for Self-Governance, 1992), 41-65; Wolf (2000).

⁴¹ Mary Evelyn Tucker, and John Grim, eds., *Worldviews and Ecology* (Maryknoll, N.Y.: Orbis Books, 1994).

⁴² Martin Palmer and Victoria Finlay, *Faith in Conservation: New Approaches to Religions and the Environment* (Washington, D.C.: World Bank, 2003).

⁴³ Jane Lubchenco, personal communication, 2004. Bartholomew I has been dubbed the "Green Patriarch" for his attention to environmental issues, and for consistently proclaiming the primacy of a spiritual imperative in addressing environmental ethics and action. See Fr. John Chryssavgis, ed., *Cosmic Grace, Humble Prayer: The Ecological Vision of the Green Patriarch Bartholomew I* (Grand Rapids, Mich.: William B. Eerdmans Publishing, 2003).

⁴⁴ The Harvard Negotiation Insight Initiative, *Launching Document* (2003).

⁴⁵ Heidi Burgess, "Transformative Mediation: A Summary," <http://www.colorado.edu/conflict/transform/tmall.htm>.

⁴⁶ Carol Hwoschinsky, "Listening to the Heart," *Alternatives 25* (Spring 2003).

⁴⁷ Uzi Weingarten, "Communicating with Compassion," Course packet available online at: <http://www.homestead.com/uziteaches/>.

⁴⁸ Khaled Abou El Fadl, *Islam and the Challenge of Democracy* (Princeton, N.J.: Princeton University Press, 2004); John A. McConnell, *Mindful Mediation: A Handbook for Buddhist Peacemakers* (Bangkok, Thailand: Buddhist Research Institute, 1995); and Trip Barthel, "Unity and Diversity in Conflict Resolution," *ACResolution 5*, no. 1 (Fall 2005), 32.

⁴⁹ As Eileen Barker, Chair of the ACR Spirituality Section asks in her introductory article, "How can we 'be the peace' we wish to create for others?" See Eileen Barker, "What the BLEEP does Spirituality Have to Do with Conflict Resolution," *ACResolution 5*, no. 1 (Fall 2005), 10-12; For work focusing on the mediator's spirituality, see, Leonard L. Riskin, "The Contemplative Lawyer: On the Potential Contributions of Mindfulness Meditation to Law Students, Lawyers, and their Clients," *Harvard Negotiation Law Review 7*, no. 1 (Spring 2002), 1-67; Daniel Bowling, "Who Am I as a Mediator? Mindfulness, Reflection, and Presence," *ACResolution 5*, no. 1 (Fall 2005), 12-15. For mediation as a spiritual practice, see, Kenneth Cloke, "Why Every Conflict Breaks Your Heart: Conflict as a Spiritual Crisis," *ACResolution 5*, no. 1 (Fall 2005), 16-21. For work connecting spirituality and conflict resolution, see, Erica Ariel Fox and Marc Gafni, "Seeing With New Eyes: One Step Toward the Field of the Future," *ACResolution 5*, no. 1 (Fall 2005), 22-25; Kenneth Cloke, *The Crossroads of Conflict: A Journey into the Heart of Dispute Resolution* (Calgary, Alberta: Janis, 2006); and Leonard L. Riskin, "Mindfulness: Foundational Training for Dispute Resolution," *Journal of Legal Education 4*, no. 1 (March 2004), 79-90.

⁵⁰ Marc Gopin, *Between Eden and Armageddon: The Future of World Religions, Violence, and Peacemaking* (Oxford, England: Oxford University Press, 2000).

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- ⁵¹ Huston Smith, *Forgotten Truth: The Common Vision of the World's Religions* (San Francisco, Calif.: Harper, 1992).
- ⁵² Described by R. Bachya Ben Asher, Spanish commentator (1263-1340), who first applied the Four Worlds into a Torah commentary based on four simultaneous yet sequential levels of meaning of text: plain, *midrashic* (*aggadic* or homiletic), philosophical, and kabbalistic exegesis. R. Bachya Ben Asher, *Midrash Rabbeinu Bachya*, first published in 1492; currently available in English and Hebrew as, *Rabbeinu Bachya: Commentary on the Torah* (New York: Judaica Press, 1998).
- ⁵³ Laurence-Khantipalo Mills, *Buddhism Explained* (Chiang Mai, Thailand: Silkworm Books, 1999), 109; Judie Bopp, Michael Bopp, Lee Brown, and Phil Lane, Jr., *The Sacred Tree: Reflections on Native American Spirituality* (Twin Lakes, Wisc.: Lotus Light, 1986); Alberto Villoldo, *The Four Insights: Wisdom, Power, and Grace of the Earthkeepers* (Carlsbad, Calif.: Hay House, 2006); Don Miguel Ruiz, *The Four Agreements: A Toltec Wisdom Book* (San Rafael, Calif.: Amber-Allen, 1997); and Sheikh Ragjip al Jerrahi, "Introduction," in James Fadiman and Robert Frager, eds., *Essential Sufism* (New York: HarperCollins, 1999).
- ⁵⁴ Zalman Shachter-Shlomi (lecture, Jerusalem, Israel: June 2005).
- ⁵⁵ Manfred Halpern (1924-2001) developed his theory of transformation as the root of both personal and political change, based largely on Sufi understandings, as applied to international relations. He left an unfinished manuscript on the topic as his Princeton class notes for Politics 325.
- ⁵⁶ Gilbert F. White, "A Perspective of River Basin Development," *Journal of Law and Contemporary Problems* 22, no. 3, 1957.
- ⁵⁷ Described in the following books: Priscoli and Wolf (2008); Aaron T. Wolf, ed., "Sharing water, sharing benefits: working towards effective transboundary water resources management," A graduate/professional skills-building workbook. Paris and Washington, D.C.: UNESCO and the World Bank (forthcoming).
- ⁵⁸ These stages build primarily on the work of Jay Rothman, who initially described his stages as ARI-Adversarial, Reflexive, and Integrative (Rothman 1989)-then added Action in later work: Rothman, Jay, "Supplementing Tradition: A Theoretical and Practical Typology for International Conflict Management," *Negotiation Journal* 5, no. 3 (1989). The skill-set in each stage is drawn from Kaufman (2002), who ties each set of dynamics specifically to Rothman's ARIA model in great detail, based on his extensive work conducting "Innovative Problem Solving Workshops" for "partners in conflict" around the world. Edy Kaufman, "Innovative Problem Solving Workshops," in eds. John Davies and Edy Kaufman, *Second Track/Citizens' Diplomacy: Concepts and Techniques for Conflict Transformation* (Lanham, Md.: Rowman & Littlefield: 2002), 171-247.
- ⁵⁹ Claudia W. Sadoff and David Grey, "Beyond the River: The Benefits of Cooperation on International Rivers," *Water Policy* 4, no. 5 (2002), 389-404.
- ⁶⁰ For histories of these sets of negotiations, please see: Aaron T. Wolf, "International Water Dispute Resolution: The Middle East Multilateral Working Group on Water Resources," *Water International* 20, no. 3 (September 1995); Munther J. Haddadin and Ury Shamir (2003); Jordan Case Study (Paris: UNESCO IHP Technical Documents in Hydrology, PCCP Series no. 15).
- ⁶¹ Steve MacAusland, one of the initiators of the idea, as quoted in, Anonymous, "Massachusetts Episcopal Diocese Bases Reorganization on Watersheds," *Earthkeeping News* 5, no. 6 (September/October 1996), 1-2.