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Christiana Z. Peppard

Journal of Environmental Studies and Sciences

ISSN 2190-6483 Volume 3 Number 2

J Environ Stud Sci (2013) 3:109-119 DOI 10.1007/s13412-013-0116-1





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Troubling waters: the Jordan River between religious imagination and environmental degradation

Christiana Z. Peppard

Published online: 20 April 2013 © AESS 2013

Abstract Rivers are essential, environmental circulatory systems. They are also polyvalent repositories for religious and cultural meanings. This essay wades into the murky waters of the Jordan River and charts its shape from sociopolitical, environmental, and religious perspectives. Hovering in the Jordan's polysemic eddies, we find quandaries that are epistemic as well as ethical. This essay orients ethical reflection on the disjuncture between the symbolic stature of the Jordan River and its materially degraded status.

Keywords Jordan River · Degradation of riparian systems · Fresh water · Climate change · Symbolic stature · Environmental degradation · Bodies of water · Waters of memory · Ideational landscape · Holy waters · Middle East · Israel · Palestine · Kingdom of Jordan · Environmental ethics · Christian ethics · Religion · Ecology

Introduction

Rivers brim with historical and symbolic power. Still today, to name certain iconic rivers—the Colorado, the Yamuna and Ganga, the Nile, the Jordan—is to evoke potent symbolic associations of power and turbidity, of unrelenting flow. Such evocations are grounded in cultural memory and, in some cases, religious texts and value systems. Yet in the early twenty-first century, religious and cultural narrations have become increasingly

C. Z. Peppard (🖂)

Department of Theology (Ste. 924), Fordham University, 113 W 60th Street, New York, NY 10023, USA e-mail: cpeppard@fordham.edu disconnected from the environmental actuality of riparian systems.

The decline of rivers worldwide is due largely but not exclusively to industrial pollution, diversion for agricultural irrigation, and increased domestic use.¹ Fresh water scarcity and strain on riparian systems are especially visible in arid and semi-arid regions and will become even more acute as climate change alters hydrological patterns (DeBuys 2011). Storied rivers that once watered vast landscapes now wither well before their natural outlets. This means that the power of some rivers may persist in cultural imagination but not in material, hydrological fact.

The fate of rivers in an era of fresh water scarcity is a hot topic at present. The titles of popular books published within the past few years convey a crescendo of concern—*When the Rivers Run Dry: Water*—*The Defining Crisis of the 21st Century*, or *WATER*—*The Epic Struggle for Wealth, Power and Civilization* (Pearce 2006; Solomon 2010). Ascending furor over fresh water is fueled, in part, by a simple insight: Fresh water is essential. At every level of scale, it is a baseline of existence—from human bodies to societies, from ecosystems to cellular exchange. In addition, fresh water is a potent symbol in cultural, literary, and religious traditions (Chamberlain 2008; Strang 2004).

Rivers occupy a variety of important roles: They are essential, environmental circulatory systems for fresh water, and they are polyvalent repositories for religious and cultural imaginations. Given this dual significance, the polluted and inhibited flow of storied rivers poses a brazen, even epistemic, contradiction: How can rivers with such symbolic stature fail to reach the sea, or run rife with pollution? Or, inverting the sequence: How do rivers that fail to reach the sea, or that run

¹ Hydrology is profoundly impacted by global climate change. This datum rests atop the twentieth-century backdrop of major decline in key riparian systems worldwide. Their decline is symptomatic of a developing situation of global fresh water scarcity.

And what, if anything, is the significance of this disjuncture? The most prominent scholarly work on the environmental and religious significance of rivers is David Haberman's (2006) River of Love in an Age of Pollution: The Yamuna River of Northern India, in which the author aptly wonders, "What does religion have to do with the health of a river?" (p. 17). Haberman implies that the contemporary reality of environmental degradation challenges received religious frameworks: "The current degradation of the Yamuna, however, is not just an ecological problem; it also involves a religious crisis, bringing into question the very nature of divinity" (Haberman 2006, p. 1). Does his observation apply to other riparian contexts as well, namely, the Jordan River? Indeed, in the conclusion to his book, Pollution in a Promised Land: An Environmental History of Israel, Alon Tal asks: "Who would expect the people to turn the good rivers of their land into streams of squalor?" (p. 432).

To be sure, place matters: No two rivers run through the same ecological, cultural, and sociopolitical domains. The particularities of the Jordan River pose challenges that have not been adequately addressed (Peppard 2009).

For Willis Jenkins (2009), "ethics assumes a methodological imperative to foster ongoing adaptive responses" (p. 304). He adds that ethicists must attend to "the gap between the capacities of theological traditions and the demands of difficult problems—a tensive disparity that produces theological creativity for the sake of practical strategies" (Jenkins 2009, p. 304). The challenge is both to interpret the situation accurately and to pose "effective critical questions" that can lead to creative mobilization of energies, both scholarly and practical (Jenkins 2009, p. 303). The result is an interdisciplinary form of moral bricolage.

This essay first engages recent interdisciplinary scholarship in order to depict multiple levels at which the Jordan River is valued and mediates meaning. Especially important for understanding the Jordan River are sociopolitical, environmental, and symbolic contexts. Next, this essay identifies three quandaries that arise at the disjuncture between the river's sociopolitical and hydrological status and its rich, symbolic stature. These quandaries, which are both epistemic and ethical, provide a rubric for considering what is at stake in conceptualizations of the Jordan River in an era of environmental degradation.

The shape of the contemporary Jordan River

He said to me, 'Mortal, have you seen this?' Then he led me back along the bank of the river. (Ezekiel 47:6)

The Dead Sea is quietly heaving. Its predatory shores pursue the salty sea and press it inward, creating sandy sinkholes the size of houses. Truth be told, this is not the fault of the sea: Waters always hold an elusive agency toward their own persistence. Nor is this strictly the fault of the shores, which are mere accessory to the Dead Sea's decline. It might be said that the fault lies with the Jordan River, which for centuries has fed fresh water into its hypersaline terminus, but which now flows toward the sea as a pea-green, sluggish trickle of agricultural runoff. Yet even here causality is elusive: The meager flows of the Jordan are causing the decline of the Dead Sea, but what causes the decline of the Jordan River? Does it matter? Should it?

In some ways, the story of the Jordan River is a story that intersects with those of many rivers worldwide; in other ways, it is unique. It involves aridity, irrigated agriculture, colonial legacies, economic incentive, engineering projects, population demand, political power, nationalist narrations, and religious resonance.

Sociopolitical aspects: Who has the water, has the power

Contestations over the waters of the Jordan River in modernity can be traced to nineteenth- and twentieth-century colonial enterprises and the lasting legacies bequeathed to the region by the colonial powers' demarcation of borders leading up to the creation of the state of Israel in 1948. These political demarcations did not occur in ways that made hydrological sense, and the subsequent legacy of political negotiations-some diplomatic and others militarizedspeaks, at least in part, to the problem of water and boundaries in the Jordan River Valley (Lowi 1984, 1993; Hillel 1994; Haddadin 2002). Annex II to the 1994 Israel-Jordan Peace Treaty identified the midpoint of the Jordan River as the international boundary between Israel and the Hashemite Kingdom of Jordan; it also specified the precise amount of seasonal flow to which each country was entitled (Haddadin 2002, pp. 516-521).

Despite the numeric precision of treaty agreements, riparian reality is never as simple as numbers might suggest. Rainfall and flow rates do not adhere to the stipulations of treaty conditions. Nor does water stay in one place; it resists easy containment and is difficult to move around without extensive infrastructure. Furthermore, international water law lacks institutional authority within and between countries, which proves problematic for enforcement and adjudication of disputes. As a result, those upstream—usually by dint of geographic position and sometimes by fact of political power—tend to take what they can, especially in times of drought, for access to water is a matter of survival for states no less than individuals. The sandy husks of desiccated civilizations tell us that much (Solomon 2010; Wittfogel 1957; Worster 1985).

The presence or absence of fresh water leaches into concerns about security, political power, economic viability, and more. In this way, sociopolitical and environmental realities resist clean separation. Territorial, political, and hydrological squabbles are part of the social geography of the Jordan River Valley. In his book Rivers of Eden, polymath hydrologist Daniel Hillel (1994) indicated that "[a]lthough the amount of water at issue is small, the rivalry over the Jordan is even more intense than that over the region's much larger rivers. ... The relationships among the Jordan River's riparian states are exceedingly complex hydrologically as well as politically" (pp. 156–157). It is not purely coincidental that Israel has some of the best hydrologists and engineers in the world, nor that in order to access the lower Jordan River one must be under military escort in the West Bank and pass through many military checkpoints in Jordan. To cross the Jordan River entails long waits, passports, and security checks for those who have the appropriate credentials-in rural areas, between two countries with a peace treaty.

There is zealous attention devoted to the distribution of fresh water in this region. Agriculture continues largely unabated in the arid lower Jordan River Valley on both the Jordanian and Israeli sides of the river, and frequently, the crops grown include very thirsty ones-bananas, palmwhile the water-conserving method of drip irrigation is not always followed. Here, the Zionist ideal "to make the desert bloom" has a long legacy (Tal 2002). But on both sides of the river, agriculture is embedded in national memory and local identity as a rightful use of water (Hillel 1994; Tagyar 2007). Still, some efforts at transriparian reform have met with success: For example, the environmental organization Friends of the Earth Middle East-which has headquarters in Tel Aviv, Bethlehem, and Amman and which was honored as one of TIME Magazine's "Environmental Heroes" for 2008-has established a program called "Good Water Neighbors" that promotes cooperation among villages that share limited water supply. The organization has also developed plans for a Peace Park on an island in the Jordan River, where Jordanians and Israelis (but not Palestinians) could freely mingle (Havrelock 2011, pp. 275-289). Still, tension and sensitivity in the region endure-as belied by the title of a recent update in the Christian Century: "Israel removes landmines from [the] Jesus baptism site" (Sudilovsky 2011, p. 19). Or, as a pamphlet from the Jordan River Foundation (2002) more delicately suggests, "the area of the River Jordan has a formidable history, and is well known both within and beyond the Middle East region" (p. 3).

Many commentators have noted that agreement about the use of fresh water is a condition for any lasting peace in the Middle East. At the time of the signing of the 1994 peace accords, Daniel Hillel offered guarded prognostications about the prospects for peace, for which he—like many in the region—understands water as a crucial middle term: As the rivalry over common waters between neighboring states and territories intensifies, the Middle East is poised literally on a precarious watershed divide, For just as water in nature can be either a bearer of life or an agent of death, so in a desperately thirsty region the issue of water can either bring the parties together or set them apart (Hillel 1994, p. 283).

Nearly 20 years have transpired since that assessment. When in 2008 I asked Dr. Hillel whether he would consent to a reprinting of *Rivers of Eden*, he shook his head heavily and responded, "it was written at a different time"—a time, presumably, in which there was optimism about the peace process, a sense of multi-state hydrological possibilities, and less concern about fresh water scarcity in the Jordan River basin.² In other words, the possibility of large-scale international cooperation on matters of the Jordan River seemed attainable in 1994. Whether continued cooperation—or even more hopefully, a semblance of environmental restoration—is possible will depend on many factors, such as the growth of thirsty, populous societies, the centrality of irrigated agriculture to economic development, entrenched sociopolitical realities, and endemic drought.

The environmental status of the Jordan River

Historically, the Jordan River flooded its banks with seasonal cycles of precipitation. Groups of resident agro-pastoralists inhabited the valley floor. Hillel (1994) observes that until the twentieth century, environmental change came in the form of gradual degradations due largely to overgrazing and agricultural clearing of forest (p. 147). He depicts the lower Jordan River this way:

After traversing the Sea of Galilee (known as Lake Kinneret in Israel), the river twists its way in an incredibly sinuous manner through the gray chalky marls of the lower valley. Squirming madly as if trying to escape its fate, the Jordan finally completes the journey from its cool crystal-clear origin to its literally bitter end, where it dies a tired death in the warm, murky brine of the Dead Sea (Hillel 1994, p. 155).

To be sure, for all of written history, the Jordan River has terminated with "a tired death" in the Dead Sea. Yet it is in the past century that human impacts have dramatically shaped the river and altered its flow.

During the twentieth century, as in other arid and semiarid regions worldwide, the waters of the Jordan were subjected to intensified demand, ranging from domestic use by growing populations to ongoing sociopolitical contestations and invasive hydraulic engineering innovations

² Interviews were conducted in May 2008, in Israel and Jordan.

(especially for irrigation), as well as extended periods of drought (Teisch 2011). As a result, the flow of the lower Jordan River (that is, the stretch of river between the Sea of Galilee and the Dead Sea) decreased by 90 % between the mid-twentieth century and the beginning of the twenty-first century (Gunkel and Lange 2012, pp. 963–980; Samuels et al. 2009, pp. 513–523). A team of hydrologists observed in 2008,

Lake Kinneret, Israel (the Biblical Sea of Galilee), the only major natural freshwater lake in the Middle East, has been transformed functionally into a reservoir over the course of ~70 years of hydrological alterations aimed mostly at producing electrical power and increasing domestic and agricultural water supply (Hambright et al. 2008, p. 1591).

Hillel (1994) agrees: "The lake serves as a natural reservoir, regulating the flow of the lower Jordan. In recent decades, the lake has also served Israel as an artificially regulated reservoir: a dam built at its southern end allows water managers to control the outflow" (p. 166). South of Lake Kinneret, in the span of the lower Jordan River valley, at several points the water barely runs at all. At others, it seems a mere stream of slow-moving, pea-green sludge, a composite aqueous solution of industrial and domestic pollution and agricultural runoff.

In the twenty-first century, the Jordan River Valley is expected to feel the effects of climate change in ways that exacerbate this situation. Geophysicists recently reported that "[f]or people living in the Jordan River region of the Middle East, such changes can have immediate devastating impacts as water resources are already scarce and overexploited and summer temperatures in the desert regions can reach 45 degrees C or higher" (Samuels et al. 2011, p. 17). The hydrological stakes will only intensify in coming years. Thus, from an environmental perspective, the Jordan River is beleaguered and even endangered.

Rhetoric and reality

That the Jordan River is beleaguered comes as a surprise to many travelers, especially religious pilgrims to the Holy Land. Consider, for example, an area slightly downstream from a purported baptism site abutting the Sea of Galilee. This site, called Yardenit, is easily accessible to tourists and a primary destination for many Christian pilgrimages to Israel. Several hundred meters south of Yardenit, the calm waters of the Jordan disappear. The river has been dammed, siphoned, redirected into underground pipes heading for Tel Aviv, and replaced by a spout of barely treated sewage that foams into a dry, rocky canal. Here, the Jordan is a limp, toxic strip of river; a warning sign and convincingly sobering image portray the health hazard posed by entering the water. A few hundred meters north, eager Christian pilgrims continue their ritual purifications and prayers at Yardenit, oblivious to the defiling sludge just downstream:

While a diminished, torpid river (the lower portion of which carries wastewater, agricultural runoff, and saline waters) presents a disappointment, most tourists are unaware of the Jordan's ecologic status and the imminent danger of its disappearance (Havrelock 2011, p. 283).

Closer to the mouth of the Dead Sea, the Jordan River remains opaque. During my visit with hydrologists in May 2008, the Jordan River measured just 7 ft deep between the remaining two attested baptism sites, which are located at the same latitude on opposite banks of the river. One site is in the West Bank and the other is in the Hashemite Kingdom of Jordan.³ The two sites are so physically proximate—just a few meters—that people standing on the opposite shore can discern one another's facial features.

The site in the West Bank is known as Qasr el-Yehud. Major construction has shored up the eroding banks, and a staircase down to the water provides a pathway from the river to an amphitheater. In 2008, the Israeli government officially opened the \$5 million project to the public. But to leave the banks of the river, to stand in the middle of its (sluggish) flow, to immerse more than a toe here—as, for example, my companion hydrologists did, in full waders and rubber gloves—requires advance permission from the governments of both Israel and Jordan. Military personnel stand watch. This is because the Jordan River constitutes an intently observed international border (Fig. 1).

A stone's throw across the river and a nation away, tourists and pilgrims attempt to dip their toes into a tepid, sluggish, silted river from a dock-like platform that, hovering several feet above the water, inadvertently measures the river's continued decline in volume. This version of the baptism site in the Hashemite Kingdom of Jordan is called Al-Maghtas or, colloquially among Christians, Bethany-Beyond-the-Jordan. The *Christian Century* reports how "while the Israelis maintain that the baptism [of Jesus] took place on their side of the river, the Jordanians insist it occurred a few meters across the

³ These data were generated by the team of hydrologists that I accompanied in May 2008. While clear archaeological data about the precise location of the historical site of Jesus' baptism is non-existent, historians of religion seem to agree that the two purported sites—one on each side of the river—near the Dead Sea are much more likely to have been close to the sought-after "original" baptism site than the commercialized version near the Sea of Galilee.

river on theirs" (Sudilovsky 2011, p. 19). On which exact bank was Jesus baptized? The past is a mute witness. But the contemporary contestation is significant. In Rachel Havrelock's (2011) analysis, the competing "baptismal sites function as ciphers for national self-assertion" (p. 281). The Jordan is a river in which much is invested and much is at stake.

Religious significations of the Jordan River

It is an awful trial to a man's religion to waltz it through the Holy Land.

(Mark Twain, *Innocents Abroad*; cited in Phipps 2003, p. 80)

Herman Melville and Mark Twain, visitors to the Holy Land a decade apart in the mid-nineteenth century, relied upon the Bible as "their main literary source" for descriptions of the social and geographical terrain of the Jordan River basin (Phipps 2003, p. 79). Presumably they envisioned the Jordan River valley as it was described in the Hebrew Bible: "well watered everywhere, like the garden of the Lord" (Genesis 13:10). Yet both Melville and Twain were aghast at the reality that they beheld. Each writer described the Jordan River as a paltry approximation of the imagined river and environs. Still today a great many visitors (especially those who visit the lower Jordan River) express outright shock at its degraded state and opaque hue. In a digital age, and a century and a half after Melville and Twain, why does surprise remain a prevalent response?

That the Jordan River of monotheistic lore could exist materially as a sluggish trickle sounds laughable to many people. Robust riparian mythologies have been shaped by literary and symbolic attestations from the Hebrew Bible, the New Testament, and subsequent religious, literary, and artistic expressions. To be sure, the vagaries of relying upon



Fig. 1 The lower Jordan River, Qasr el-Yehud (May 2008). Photograph by the author

the Bible as a historical or cartographic source are legion. Yet a biblically informed symbolism persists that renders the state of the Jordan River surprising, not just to bygone penwielding gentlemen-adventurers Melville and Twain but also to contemporary visitors.

To explore the symbolism and stature of the Jordan River, one must delve not only into the sociopolitical and environmental status of the river but also its broader cultural and religious associations—a task significantly abetted by recent scholarship within biblical and cultural studies.

The Jordan River in the Hebrew Bible

The Jordan River appears as a proper noun in at more than eighty contexts in the Hebrew Bible.⁴ Among its noteworthy appearances, the river surfaces in Genesis. In later texts, it is often depicted as a liminal entity to be crossed. For example, Joshua establishes a memorial to the Israelites' crossing of the river with the Ark of the Covenant. King David crosses the Jordan with his triumphal retinue (Joshua 3:15-17, 4:1-23; 2 Samuel 19:14-19). After his famous wrestling match with an angel and his designation as "Israel," Jacob crossed the Jabbok, which is a tributary of the Jordan (Gen 32:22-28). In 2 Kings, Elijah parts the waters of the Jordan; his mantle and spirit are passed to Elisha, who also parts the river and later heals Naaman on the river's banks (2 Kings 2:6–9 and 5:10–14). In the book of Judges, Gideon and his people cross the Jordan (Judges 7:24, 8:4). The famous brothers Maccabee are also said to have traversed the river (1 Maccabees 5:24).

Biblical scholar Jeremy Hutton describes the significance of the Jordan River in the Hebrew Bible as a literary device—the "TransJordanian Motif"—in which a figure's crossing of the River confers a new authoritative status or effects a personal transformation (Hutton 2009). Upon what kind of riparian environment did the deployment of the transJordanian motif depend? Hutton (2009) indicates that, centuries ago, "the natural environment of the Jordan River was such that easy crossings of the river could not be made at points other than at well-known fords" (pp. 5–6, 44). His analysis resonates with the environmental history described by Daniel Hillel (1994, 2006), in which the Jordan River was a formidable flow that, more often than not, resisted easy passage.

Hutton finds that, across the texts that comprise the Hebrew Bible, the transJordanian motif depicts a "set of emotional and cognitive relationships bound up with the

⁴ The frequency increases when referred to simply as "the river," although not every use of the term "river" in the Hebrew Bible refers to the Jordan.

physical topography" (p. 35). He also observes that the productivity of the transJordanian motif

did not end with the closure of the corpus of Hebrew Scriptures ... The motif continued to be fruitful in the Jewish community, as is proved by the movement of John the Baptist to the Jordan River and of the ensuing baptism of Jesus in the Gospels ... Even in modern times, the Jordan holds symbolic significance and retains a certain degree of cultural and political importance (p. 45).

Jewish studies scholar Rachel Havrelock, in *The River Jordan: The Mythology of a Dividing Line*, takes a different approach. Her important book traces the diachronic narration of the river as an identity-generating border—from the succession of prophets to the baptism of Jesus, through writings by later Jewish and Christian thinkers, and, eventually, into the contemporary socio-political situation that flanks the Jordan River.

Interlude: theorizing the Jordan as *ideational landscape* and *myth*

How does the Jordan River mediate meaning? In what ways does it persist in cultural imaginations? Hutton and Havrelock adopt distinct approaches, both of which illuminate the possibility of disjuncture between the symbolic stature of the Jordan River and its environmentally degraded status.

Hutton employs a tripartite landscape hermeneutic drawn from archaeological theorists B.A. Knapp and W. Ashmore in order to adumbrate the significance of the transJordanian motif (Hutton 2009, pp. 34–35). Most important for our purposes is the category of "ideational landscape," which refers back to a particular geographical, topographical terrain, but is not necessarily equivalent with or reducible to physical topography. Instead, ideational landscape is "imaginative and emotional," comprising "emotionally important and evocative landscapes" (Hutton 2009, pp. 34–35).

Havrelock (2011) invokes the anthropological and folkloric category of myth in her analysis of the Jordan River's symbolic mediations, and she "focuses on how each myth describes the Jordan River and on how different expressions of the nation Israel result from these articulations of a border" (pp. 7–8). For Havrelock (2011), myth is not to be understood as illusory or false; to the contrary, it is "an expression of what people hold to be most true" (p. 3). In Havrelock's (2011) synopsis, "[m]yth speaks to a truth whose authority stems from a source outside of or beyond the present. Distancing techniques allow myth to relate intimately to the present without purporting to reflect the present" (p. 4, note 1). Through a variety of literary and cultural devices, mythic stature and material reality may diverge, while both retain elements of truth as mediated through discursive communities Thus, like the term "ideational landscape," the category of "myth" allows us strategically to decouple received, religious ideas from material, environmental reality.

This mode of analysis demonstrates how the Jordan River, as signifier, can evoke ideas that are loosely linked to but also radically diverge from topographical reality. Thus, even as the Jordan River is a real riparian system, it is also a powerful mythic, ideational landscape. Therein lies the disjointedness of the Jordan River's sociopolitical, environmental, and religious significations. Hillel (1994) tersely summarizes the issue: "Popular lore has magnified the Jordan in the minds of millions out of all proportion to its actual size" (p. 156).

There are plausible causes for those persistent disjunctures. It seems likely that one, rather straightforward, factor is the phenomenon of Jewish and Christian diaspora. Historically, of course, Judaism and Christianity emerged in a particular place. However, that physical geography is no longer the home of the majority of the world's Christians and Jews. Furthermore, many Christians and Jews have never visited the Jordan River. This means that knowledge about the Jordan River is frequently transmitted through biblical texts and cultural traditions-more so than through experience of the physical river. As a result, religious understandings of the Jordan River are not necessarily linked to its current material status. The Jordan River becomes a mythic force, an ideational landscape that overshadows its contemporary physical reality. This disjuncture becomes even more pronounced in light of the significance of the Jordan River in the New Testament and early Christian art and ritual.

The Jordan River in the New Testament, early Christian art and ritual

In the New Testament, there are 11 explicit references to the Jordan River, mostly in the context of the baptism of Jesus. One cluster of New Testament texts refers to the charismatic John on the banks of the Jordan, proclaiming a baptism of repentance to people who streamed in from Jerusalem and the Judean countryside (Matthew 3:5–6, Mark 1:5, John 1:28). The Gospels of Matthew and Mark also report the arrival of Jesus at the waters of the Jordan, his baptism by John, and the descent of the Spirit of God identifying him as "my Son, the Beloved" (Matthew 3:13, Mark 1:9). The baptism of Jesus is one of the few events mentioned in all four gospels of the New Testament. In addition, the Jordan occasionally figures as a geographic referent for events in Jesus' ministry (as in Matthew 19:1, Mark 10:1, John 10:40) or as a region, "beyond [or across] the Jordan," from which

people came to witness Jesus' teachings (Matthew 4:15, 25; Mark 10:1). Contemporary scholarship continues to explore the historical, textual, and theological significance of these references (Earl 2009, pp. 279–294).

Liturgical, artistic, and textual reports of Jesus' baptism shaped eastern and western forms of Christianity. Beginning "no later than the 4th century," the Jordan River "was a destination for Christian pilgrims, many of them seeking baptism, presuming its waters to be particularly blessed" (Jensen 2011, p. 121). There is also evidence for the commemoration of Jesus' baptism, called Epiphany or Theophany, as early as the second century C. E. The theological and ritual commemoration of Jesus' baptism was attested by Gregory of Nyssa, Origen, and the early Christian church community at Alexandria. By contrast, Nativity (that is, Christmas) did not gain prominence until the fourth century (Usener 1899).

Among early Church figures, Origen's writings are particularly evocative with regard to the importance of the Jordan River. In liturgical theologian Jean Danielou's (1956) synopsis, for Origen, "the Jordan is a figure of the Word Himself. Thus, to plunge into the Jordan means to immerse oneself in Christ" (p. 101). Danielou (1956) explains how "the Epiphany [was] above all the feast of the Baptism of Christ, and ... this feast focused attention especially on the water of the Jordan. ... Furthermore, the essential rite of the day is not, as at Easter, Baptism itself, but rather the consecration of the water" (p. 100). Still today this liturgical celebration occurs in churches worldwide, most explicitly as the Orthodox feast of Theophany in early January (Denysenko 2012). The Jordan River remains a conceptual locus of the ritual.

The Jordan River is by no means an inert figure in the history of Christian liturgies and artistic representations. To the contrary, the river was vividly personified in early Christian art. According to Robin Jensen,

The Jordan River found its place in Christian iconography as nature's witness to Christ's baptism. ... his [the Jordan's] presence is an affirmation of Creation's awareness of divine events. ... As candidates enter the font they symbolically enter that very river to receive its unique benefits (Jensen 2011, p. 123).

Examples of this imagistic connection can be found at the Orthodox baptistery of Ravenna, as well as in "particular souvenir *ampullae* or medals with scenes of Jesus' life, including his baptism" (Jensen 2011, p. 122). At the Ravenna baptistery, for example, the personified Jordan River—sporting a beard and long hair, and carrying a tall reed against the well-defined musculature of his shoulder and bicep—is clearly identifiable thanks to the inscription, "in bright letters, above his head: IORDANN" (Kostof 1965, p. 85). Thus according to Jensen,

He witnesses the descent of the holy into his watery realm. These details emphasize the extraordinary character of Jesus' baptism and its interpretation as a theophanic moment (Jensen 2011, p. 88).⁵

Back then, the river was "nature's witness" to divine action. What type of witness does it offer today?

"A coin of almost worldwide currency"

References to the Jordan River and its crossing permeate contemporary culture. For example, the symbolism of the Jordan River—especially the liberation entailed in its crossing, whether to freedom or death—has been an enduring motif in literature, poetry, and the gospel music that was birthed from American slave experience and found voice in spirituals, such as "Deep River" or "Get Away, Jordan." The vitality of the Jordan River as a metaphor in these spirituals remains strong for African American congregations (see Cone 1972; Kirk-Duggan 1997; Komunyakaa 2007; Smith 2006).

The symbolic stature of the Jordan River overflows even religious realms, becoming—in Hutton's (2009) phrase—"a common coin of almost worldwide currency" (p. 47). For example, the hit television show, "Crossing Jordan"—which aired 117 episodes over six seasons in the USA between 2001 and 2007—had as its title character a forensic pathologist named Dr. Jordan Cavanaugh. Each show depicted her quest to reconstruct, mentally and often painstakingly, the events leading to a murder. In this show, Jordan literally maps the sequence of events bridging life and death.

In another media-friendly example, the bestselling autobiography of Queen Noor of Jordan contains a number of references to the significance of the Jordan River as a dividing line and identity marker (Noor 2003). Similarly, the Jordan River Foundation (2002), currently chaired by Noor's daughter-inlaw, Queen Rania, "aims to promote and preserve the cultural and natural heritage of the [King Hussein Bridge] and the surrounding area" of the Jordan River, due to its importance in Jordanian culture, economy and national identity (p. 3).

The Jordan River also functions as a symbol of homeland and exile, as Havrelock (2011) has pointed out. For many Palestinians and Jordanians, it is also ambivalent. During the 1948 relocation of Palestinians from the newly formed state of Israel, "King Abdullah's Arab Legion Army opened fords over the river for those who could not find the money to travel by bus" (Havrelock 2011, p. 203). The King Hussein bridge

⁵ She adds that in several of these contexts, "[t]he personification of the Jordan bears similarities to the figure of Neptune or the river god," but she disagrees with previous interpreters who would read the figure of the Jordan as a competing deity (Jensen 2011, p. 95).

was also a major artery for both voluntary and forced transport. Havrelock has adroitly depicted how the Jordan River permeates identity discourse in the Middle East, especially for Israelis, Palestinians, and Jordanians living in the Jordan River Valley. Amidst the vexed history of territorial disputes, displacement, and settlement in the Middle East, the Jordan River remains a very important—but diversely deployed—marker of boundary and identity.

The Jordan River is a sociopolitically contested entity and an international border. It is an environmentally degraded riparian system. It is preserved in palimpsests as a textual relic, personified in baptistery iconography and invoked in baptismal rites and contemporary Orthodox feast days. It is a living, slippery, polysemic flow for which simplistic or reductionist frameworks do not suffice. What then do we make of the disjuncture between the symbolic stature of the river and its materially degraded status?

Inhabiting the disjuncture: Why the degraded material status of a symbolic, storied river is ethically significant

Over time, and through repeated use, metaphors can dry up. To date, this has not been true of the symbolic potency of the Jordan River. On the contrary, for centuries the river has served as a versatile, wide-ranging symbol and littoral lifeblood. The problem is that the river is itself beleaguered, while its symbolism-its mythic stature, its ideational landscaperemains robust. Thus, the sociopolitically contested and environmentally degraded shape of the contemporary Jordan River presents a challenge to the symbolic (and often bucolic) assumptions about the river that have been transmitted through the idioms of scripture, tradition, and cultural imagination. At this disjuncture of symbolism and materiality a range of possible quandaries arise. Who or what defines the "reality" of the Jordan River? What is at stake in its narration? What is the sociopolitical, environmental, or religious value of a healthy river? By way of conclusion, I propose three thematic immersions in the Jordan River that can orient reflection about the riparian confluence of environmental and religious, especially Christian, ethics.

Bodies of water

Water is life. Human beings wither and die without clean, fresh water, and the same is true of societies, nations, and ecosystems. Without water, there is no survival, much less flourishing.

In the valley that shrouds the Jordan River, fresh water is contested, zealously watched, and unevenly distributed. The waters of the Jordan are important components of national security for Israel and the Hashemite Kingdom of Jordan. The river fuels agriculture, industry, and domestic demand on both sides of the river. Like many other rivers worldwide, the Jordan could be a powerful source of collaboration or a potent site of discord. Over the twentieth century, and now into the twenty-first, it has been both. Moreover, as Rachel Havrelock has pointed out, variant narrations of the Jordan River mediate identity for Israelis and Palestinians. Both historically and in the present day, especially for Palestinians, the river "symbolizes the border between home and exile" (Havrelock 2011, p. 261). More than environmental well-being is at stake in the shape of the river, for the waters of the Jordan saturate the body politic.

In a strictly hydrological sense, the Jordan River of the twenty-first century will continue to be beset with agricultural and domestic demand from both sides of the river. Questions and concerns that received some attention in the 1994 treaty will become ever more important: Who owns the waters of the Jordan? What rights and duties pertain to the issue of access to, and distribution of, fresh water? What possibilities exist for preservation of the riparian ecosystem, whether for the integrity of the environment or for the long-term benefit of human populations? Such questions surface frequently in environmental ethics, but the sociopolitical particularities of the Jordan River add a level of complexity and sensitivity that is, at times, frankly daunting (see Phillips 2012; Thorpe 2011). In the words of Daniel Hillel,

As the rivalry over common waters between neighboring states and territories intensifies, the Middle East is poised literally on a precarious watershed divide, ... For just as water in nature can be either a bearer of life or an agent of death, so in a desperately thirsty region the issue of water can either bring the parties together or set them apart (Hillel 1994, p. 283).

It is crucial to remember that it is not only the bodies politic that depend on water in this region. The distribution of water significantly impacts the livelihoods and life possibilities for individuals, communities, and ecosystems on both sides of the river. Who is entitled to what forms of water, and for what reasons, are undercurrents that already present major quandaries in the Jordan River Valley. It is imperative that clean, fresh water be available for all people in the region. The bodies politic should not wield access to water as a weapon. The moral challenges will only intensify—at the Jordan and in other arid regions—as the twenty-first century ushers in fresh water scarcity amidst ongoing sociopolitical, cultural, and ethnic tensions.

Waters of memory

Scholars in a range of disciplines have made connections between waters and memory. Cultural studies scholar Melissa K. Nelson has recently observed that rivers hold a special metaphorical advantage for exploring and understanding memory. Memory is not a static phenomenon but is constantly changing depending on perspective, context, and other factors. Memories, like rivers, have sources in time and have a history. ... [for] peoples who practice an oral tradition, the land and waters hold important memories (Nelson 2008, p. 79).

In the prologue to *Rivers of Eden*, Hillel recounts his experience of the Jordan River's daunting ferocity in the 1920s.⁶ During the summertime, "the ultimate in daring," he recalls,

was to trek downstream, past the dam [just south of the Sea of Galilee], to where the river began its sinuous course ... In late spring, when the dam was opened, and the river was in spate and flowed full force, we would throw ourselves into the gushing current and be swept around the curve of a nearly circular meander, then grab onto the overhanging tamarisk branches ... The whirlpools were treacherous, ... so the entire deed was a rather foolhardy test of youthful courage. But we did all this with sheer delight and heady abandon, completely mindless of the river's epic past and sacred significance (Hillel 1994, p. 4).

In 2008, I asked Dr. Hillel how the memory recounted above relates to his view of the current state of the river. He paused before describing how the sight of his old swimming site was nothing short of bewildering—even tragic. Once a fierce spot for youthful feats of bravery and adolescent invincibility, the river is now completely different. Yet, he admitted, it is that original memory—of a feisty, rollicking flow—that, despite his years of witnessing the river's decline, still shapes his sense of the Jordan. When a river no longer exists as once it did, whether in cultural imagination or personal memory, is it something to be mourned? Resisted? Or merely accepted as a perhaps unhappy but nonetheless inevitable reality?

Neither waters nor memory are uniform, singular, or static. Hillel's experience, while uniquely broad in chronology and expertise, is still but one partial account. Yet it is worth pausing on the linkage between waters and memory. What is the significance of memory for the contemporary state of storied rivers? This inquiry may be a species of the relationship between ethics and memory more generally (Miller 2009).

In an era characterized by drought, uneven distribution of water resources, and environmental degradation, the memories of those individuals who have experienced a different Jordan River could form an important horizon of possibility—if only to indicate that the river can, and perhaps should, flow in a better way. Generations are growing up that will know only the limited, polluted flow of the Jordan River. Will they care? Should they? Who will tell them that it can be otherwise? The politicians will not. The environmentalists are trying. And those who remember another time, another river that used to flow here, will not be long with us. Whose memory of the river's flow will stay with us? Which account will be enshrined in history books? And what will define the Jordan River for generations to come?

Holy waters

Given the Jordan River's significance in historical, scriptural, liturgical, and theological realms, the disjuncture between symbolic stature and material status seems particularly salient for Christian religious imagination. The Jordan is, after all, the river in which the ministry of Jesus is said to have begun. For centuries, Christian pilgrims have flocked to sites where the historical Jesus might have been baptized. The current triad of sites vying for historical authenticity and primacy as tourist destinations indicates the continued importance of the river to Christian pilgrims, as well as to the nations of Israel and Jordan (Havrelock 2011, chap. 10).

Indeed, the number of tourists and pilgrims at the Jordan River's multiple purported baptism sites both reveals and generates the river's continued cultural significance. According to the Episcopal Diocese of Jerusalem, approximately 400,000 people visited the Bethany-Beyond-the-Jordan/Al Maghtas baptism site in 1 year. And upon receiving permission to build a church and retreat center at the site, the Anglican Archbishop of Jerusalem noted that "[w]e stand...in a region that had witnessed a great happening in Christian life and history as recorded in the Holy Scriptures" (*Christian Century* 2008, p. 18). Jesus' baptism is, still today, vibrant enough in religious memory to draw hundreds of thousands of pilgrims, to justify a land grant from the Kingdom of Jordan to the Anglican Diocese, and to catalyze a multi-million dollar building project at Qasr el-Yehud.

For Palestinian Christians in the region, even more is imbued in the Jordan River. In Havrelock's (2011) words, "the Jordan is doubly connected to their origin as the site of the baptism of Jesus Christ as well as a barrier crossed in the migration of their ancestors," and it plays an important contemporary religious role through "an annual pilgrimage to honor the Feast of John the Baptist" (p. 245).

⁶ Daniel Hillel's personal and professional histories with the Jordan River span most of the twentieth century and continue into the twenty-first. As a soil scientist, Hillel has written scholarly books on hydrology and agriculture; as an Israeli and self-proclaimed citizen of the region (not just the Israeli state), he has witnessed the changing shape and allotments of the river. His writings also provide glimpses into what personal—not necessarily religious—memories have to do with the twentieth century changes in the Jordan River.

Given the meanings mediated by the Jordan River, does the river's polluted, degraded state pose a theological or ethical problem? That is, should it matter for Christians that the original font of baptism is polluted and degraded? Catholic theologian John Hart has suggested of polluted water generally that, if used in baptism,

The symbolism of the ritual would be subverted by the use of the polluted water in the sacramental moment and might well endanger the health or even life of the recipient of the sacrament. The person spiritually bathed in, blessed by, and cleansed through such water would be distracted from appreciating its spiritual significance because of its polluted material condition (Hart 2006, p. 90).

One might therefore infer that the pollution and degradation of the Jordan would—or at least, should—be of particular concern to Christians. Thus far, however, there has been little Christian ethical engagement with the waters of the Jordan.

Indeed online purveyors hawk "genuine purifying Holy Water from the Jordan River" (Crown of Thorns n.d.). One infers that the water's purifying powers refer to its spiritual connotations, not its actual environmental status. Indeed, here we find a parallel with David Haberman's work on the Yamuna River in northern India, for in both cases a polluted, degraded river nonetheless both signifies and confers a type of purity. Is it possible that the material and symbolic status of the river might be drawn together more tightly than at present?

Conclusion: depicting the river

The symbol of the Jordan River has shaped the lives and religious frameworks of millions of people all over the world, most of whom have never been to the river itself. Yet the material Jordan River is precariously hemmed in by flagrant demand and entrenched political contestations. Whether the Jordan River may return to an environmentally and sociopolitically sustainable state, or whether it will trickle into a salty myth whose vibrancy exists only in collective memory, we do not know. Like other beleaguered rivers in the twenty-first century, the hydrological future of the Jordan River and the well-being of the region's inhabitants depend, at least in part, on how the river's symbolic stature intersects with contemporary sociopolitical conditions and ongoing environmental degradation.

Hovering in the Jordan's polysemic eddies, we find quandaries that are epistemic as well as ethical: Who or what defines the Jordan River? What is its value? What is at stake in its narration? This essay suggests that three ethical locibodies of water, waters of memory, and holy water—are especially important sites for further reflection and analysis.

The Jordan River is a crucible. Might living waters be forged there once more?

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