

# Hydro-heritage for healing? Examining the gendered experience of water in post-conflict Swat, Pakistan

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## Abstract

Water has been formulated as a resource or a hazard within water resources geography. We propose that reframing of water as hydro-heritage opens up richer analytical possibilities for

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examining the pluriverses and multiple ontologies that animate gendered experience of water. We are concerned with how hydro-heritage has or could have contributed to healing in the post-conflict Swat valley of Pakistan. We highlight how the Taliban insurgency and the reconstruction following its military defeat displaced people's worlds of meaning in Swat. We find that the pre-conflict mountain springs were a site for an enchanted affective encounter between humans and non-humans, where a multifaceted gendered experience of water was enacted. The developmental imaginaries of the Pakistan state in the post-conflict reconstruction phase and the accompanying social changes deracinated water and springs from their pluriversal moorings towards 'modern water' with damaging material and emotional consequences for the people of Swat. This was particularly pronounced in terms of gendered access to water, health and mobility. We suggest that water as hydro-heritage has the potential to heal, provided people's worlds of meaning and experience of water are recentred in developmental imaginaries.

### **Keywords**

Conflict, reconstruction, development, gender, affect, water

## **Introduction: Beyond water access to experience**

Water has predominantly been analytically engaged with as a 'resource' within Anglo-American geography. Be it as a basis of life, livelihood, culture, society or ecology or its incarnation as a hazard, water has mostly been thought of and written about in terms of its material utility or hazardness (e.g. see Gaile & Wilmott, 2004; Sultana & Loftus, 2020). Others, however, have pointed to the cultural meaning (Linton, 2010), emotional and affective aspects (Mustafa & Halvorson, 2020) and the experience (Wescoat, 2021) of water. Our concern in this paper is to understand how water bodies, such as springs, when engaged with through an affectual heritage lens, open up avenues for exploring sense of place, geographical scale from local to national, and gender roles in the post-conflict environment of Swat valley in Northern Pakistan. We argue that heritage is relationally produced and does not exist in itself. It exists in relation to the material and discursive power structures that in turn produce the affective and emotional geographies, wherein some places are designated heritage, and others not. The process is in a continuous state of flux, and this is the tale of water springs as sites of affective practices associated with heritage sites and communities' own needs, imaginaries, aspirations and projects (De Nardi, 2019a, b). Importantly, heritage is not recognized, experienced or even physically accessed equally across gender, class, ethnicity and age lines (Voss, 2008). Heritage politics is fraught, characterized by disagreement on the nature and agency of heritage assets (Logan and Reeves, 2009). The consensus on the worth and prescribed interpretation of remnants of the past have been at the centre of debate for decades (Lowenthal, 2003; Macdonald, 1997; Meskell, 2002; Smith and Campbell, 2011; Waterton, 2015). Our emphasis is on the gender aspect of water in its many forms and perceptions, which inevitably also accounts for the intersectional nature of the gendered interactions with and experience of, what we call hydro-heritage after Mukherjee (2022).

Swat became one of the epicentres of the Global War on Terror (GWOT), when it was practically taken over by Taliban from 2007 to 2009 (Khan, 2023). The intense military operation undertaken by the Pakistan Army in 2009 led to the displacement of more than 3 million people. As the army operation reached somewhat of a successful conclusion in 2010 after dislodging the Taliban, the internally displaced people made their way back to the valley (Caron and Khan, 2022). The Pakistani military

led an ambitious reconstruction and de-Talibanization programme to re-establish the writ of the Pakistani state in the troubled valley (Khan, 2019; Marsden and Hopkins, 2013; Shah et al., 2020). We will elaborate upon the features of that programme directed towards ‘modernization’ and upgradation of the infrastructure in the valley as a pathway to healing a traumatized population. But the developmental imaginary illustrated by that reconstruction turned a previously rural valley into a largely urbanized and peri-urbanized society, much more strongly integrated into the larger economy of Pakistan than was the case earlier. Mountain springs, which were exemplars and locus of local cosmologies, also underwent a process of dis-enchantment and often physical degradation. The post trauma healing qualities of water bodies and infrastructure and their role in reinforcing and solidifying local social and cultural capital have been documented in the literature (Mustafa & Qazi, 2007; Wescoat, 2007). We explore the tension between modernizing reconstruction led by the Pakistani military and urbanization, and emergent production of a national-scale mode of being, whilst undermining the local-scale cosmologies, and subjectivities.

Springs perform multiple practical, ideological and mythical functions including healing, recreation, sites of romance, mythologies, providing for household needs, offering water for drinking, bathing and ablutions (in Islamic societies). These multiple functions of springs highlight entanglements of water in sometimes intertwined, and at other times conflicting, emotional and even ontological registers. To explore the emotional and affective dimensions of springs in the Swat valley of Pakistan, we heed Wescoat (2021: 238–239) who regards ‘experience as a continuous process of inquiring, feeling, acting, and understanding. Some types of experiences are problem-driven while other occur through an openness to spontaneous wonder’ (pp. 238–39). We are particularly interested in the experiential accounts of local community members. Experience of encounter with water entails a succession of both stable and transitory emotions (Wescoat, 2021: 246). We therefore maintain that experiential processes of cultural habitus, which ultimately shape cultural identities, are dominant in shaping emotional encounters (Dallman et al., 2013).

As the gendered emotional and affective geography of springs in the Swat valley is shaped by embodied human encounters with and around water, we treat water as vibrant matter, as productive potentiality rather than fixed substance (Bennett, 2010). Against this backdrop, we ask, What is the gendered experience of water in Swat? How does the evolving ontological configuration of springs change gendered affective encounters with, and around water? What implications do neoliberal developments, and their twin sibling of increasingly conservative Islamic influence (Caron and Khan 2022), have for the ontology, and therefore affective atmosphere of springs? And hence how are they spatially contributive towards healing or not? More broadly, what can we learn from engaging with water as a lively matter framed as hydro-heritage and not just a resource to be managed?

## Hydro-heritage in post-conflict landscapes

Water has had a settled ontological identity as a compound with two hydrogen and one oxygen atom (H<sub>2</sub>O), in modernist imagination and practice. However, Linton (2010) rightly destabilizes this modernist certainty by explaining how throughout history and contemporaneously, human societies have interacted with water through such varied material, cultural, spiritual and aesthetic valences to render the notion of a unitary meaning of water meaningless. In fact, pure water as H<sub>2</sub>O can barely exist outside of the rarefied confines of a laboratory. Still, in the modernist imagination, predominantly water has been engaged scholastically and practically as a ‘resource’. That register is predicated upon an ontological sleight of hand similar to (and related to) focusing only on an objectified chemical identity for water, one with little real material or social relevance. As water is imbricated in the social and ecological fabric of life, a relational understanding of it

must go beyond its molecular structure to understand it in relation to its socio-ecological interactions with humans and non-humans (Mustafa et al., 2021; Walsh, 2018).

The waterscape concept by Swyngedouw (1999) provides us with a politicized framing for understanding water's myriad socio-political valences. While the waterscape literature has been attentive to the political economic, and technological relations actuated through water (e.g. see Karpouzoglou and Vij, 2017; Loftus and Lumsden, 2008; Mustafa et al., 2021), Acharya (2015) goes a step further, and describes waterscapes as assemblages of practices, technologies, emotions and world views – a veritable repository of symbolic and material practices, a mode of being in which water is a vital part. The attention to the emotional and symbolic aspect of waterscapes inevitably invites us back to contemplate the symbols, and also affects and other presubjective, pre-cognitive knowledges, enacted through water. After all, what is a symbol without affect? Mustafa et al. (2021) document the affective and symbolic meaning of Indigenous waterscapes among the Indigenous Diné and Musahar people in the United States and Nepal, respectively, premised upon non-Western ontologies of person and environment. Gladfelter (2022) on the other hand describe how irrigation development in Nepal leads to the marginalization of local people's worlds of meaning/being in the Tarai region of Nepal. In a non-Western context of Swat, Pakistan too, we argue symbols, affects and practices are not necessarily embedded in the naturalistic ontology of a singular world, knowable through objectification. In fact, during the post-conflict reconstruction and development, the local mountain springs have become a locus for the experience of an ontological dissonance between a national- and international-scale modernity and local-scale place-based imaginaries.

The modern naturalist ontology posits the existence of a singular world out there that is knowable. The conceit of this ontology Blaser and de la Cadena (2018) call extractivism: the accelerated extraction of global resources in the name of economic growth. They argue for revisiting and recentring of ontological pluralism of indigenous and local people which reorients the 'course of one-world world' and, following the Zapatista people in Mexico's declaration, allows for the

practice of a world of many worlds, or what we call pluriverse: heterogenous worlding coming together as a political ecology of practices, negotiating their difficult being together in heterogeneity. (p. 4)

Multiple ontologies as associated with the Indigenous People (Coombes et al., 2012) in our experience also have resonance within the worlding practices of rural and peri-urban local people at the economic and cultural margins of their societies, but who do not legally or analytically fit into the category of Indigenous People, within the literature (e.g. see Menjil, 2019; Merlan, 2009; Radcliffe, 2017; Radcliffe, 2018; Shaw et al., 2006). In a transitional society like Swat, we argue that gendered interactions with the springs were exemplars of spaces for practice of a world of many worlds. The extractivism ushered in by the one world induced 'development' transformed the affective geographies around springs, in such a way as to have an opposite effect to healing from the trauma of war, than was anticipated.

A brief note on affect is order here; it is more than emotion. Following Laszczkowski and Reeves (2018, pp. 4–5) we understand that:

While emotion describes the subjective experiences of an individual, affect is an intersubjective (or, as some say, presubjective) intensity...a domain of feeling that comes before or beyond its narration as an emotion.

Pile (2010) goes further to remind us that while emotional geography puts a premium upon expressed emotions, non-representational theory focuses on affects that are themselves inexpressible. But affect is not just personal or interpersonal, it is within and between bodies. Therefore,

affectual geographies (where affect is experienced spatially) privilege relational ontology (multiple worlds emerging in relationship to each other), proximity and intimacy in their accounts, and in the ethnographic method (Pile 2010). In deploying affective geographies in our engagement with springs in a post-conflict environment, we seek to highlight how hydro-heritage as an affect and practice and its social healing potentialities are an outcome of interactions between people's cosmologies and practices and the materiality of the springs and their appurtenant landscapes and infrastructure (Laszczkowski & Reeves, 2018; Navaro-Yashin, 2012).

The importance of the encounter with heritage and its role in post-conflict reconstruction has been increasingly at the centre of heated debate, as new conflicts intersect old ones in creating landscapes of precarity and fragile balances of reconstruction and reconciliation (see Matthews et al., 2020). More broadly, heritage research had already been interrogating the wellbeing potential held by people's engagement with heritage, historical and archaeological assets. This research has increasingly explored the societal and cultural implications of the embeddedness of heritage into the everyday or leisure time of communities. Specifically, scholars have started debating on the positive impacts of active involvement in archaeology and heritage on key wellbeing indicators (see, for instance, Pennington et al., 2019; Sayer, 2015). What is most of interest here is the link of heritage and natural resources that also embody deeply held cultural meanings and ways of being, and the impact of change in these things upon the communities and individuals they help constitute. For instance, De Nardi's research (2014) identified profound emotional and healing experiences through engagement with heritage landscapes. This research explored the cultural and personal growth potential of living near, or amidst, *longue durée* historical landscapes that were held as meaningful even without a detailed knowledge of the 'data' that makes them strictly 'historical', heritage-worthy, or of scholarly interest.

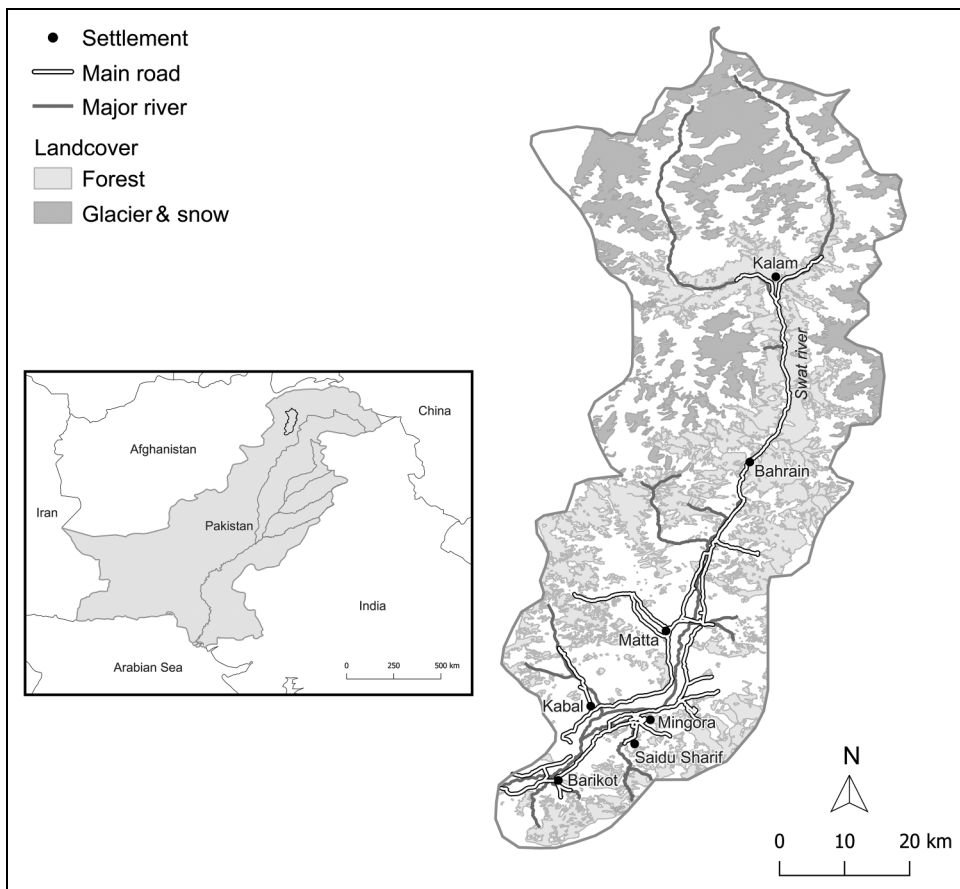
The nature of water lends itself to even more significant lore-making social and cultural processes. Since prehistory, more than human value has been endowed to bodies of water: from the liminality of rivers and water's ontological paradoxes between life and death in the Roman empire of antiquity (e.g. Bradley, 1990; Kamash, 2008), to identity derived through water (Ruru, 2012), to the generative nature of springs, human societies have perceived a higher (or deeper) relationship between water and cosmological contexts. Wescoat (2021) argues that there is a continuity between aesthetic and environmental experience, and following him, we posit that the aesthetic or affective experience of water itself has important political–ecological implications. Heritage after all is steeped in affective politics of what and where, of geographies that may or may not, be considered relevant to the history and identity, and hence social practices of communities at and across spatial scales. Accordingly, we posit 'hydro-heritage' as a formative concept for engaging with the politics of reconstruction and development in the context of Swat.

The Taliban occupation of Swat between 2007 and 2009 was characterized by extreme spectacular violence, directed towards constricting spaces for plurality, worldliness and public togetherness (Mustafa & Brown, 2010). The Taliban's wrath was in particular focused on women's mobility, as in their world view women were 'imperfectible'. Women's 'essence' as an embodied root source of *fitna* (psycho–social–political disorder among believers) made them unfit for the public sphere; therefore, their proper place was in the cloistered depths of the private sphere (Mustafa et al., 2013). More generally, the society overall underwent extreme trauma as a consequence of Taliban violence, which aimed at creating both ideational and material rupture with past modes of being (Caron and Khan 2022). The way this mode of violence fundamentally transformed humans' place in the material experienced environment, is illustrated by the quote below (M is the code for male research participant):

In Mingora I witnessed two dead bodies lying in *mullah baba* stream and streets dogs were eating their flesh. Whole bazar was looking like a jungle. *dera ziyata khamoshi ba wa, sirf spee ba paki wu, insaan*

*ba paki nao* [there was complete silence in Mingora, only dogs were roaming in bazars]. The dogs were chasing people to eat because they had eaten many dead bodies. They [dogs] were also starving – they were looking wild. Thank God, that time passed, and peace came again. There was an elder person who was telling us, *har makham pasi sahar razi, hark hazan pasi bahar razi* [a bright day comes after every dark evening, and spring comes after every autumn]. (M22, 13/7/2021)

While affective politics of the Taliban were enacted through spectacular violence, the Pakistani state's reaction led by the military was also based upon overwhelming kinetic warfare causing considerable damage to life and property in the region. As the military operation came to its successful conclusion in terms of uprooting the Taliban from the valley, follow-up reconstruction efforts were also embedded in the military's deeply masculinist affective politics (Khoja-Moolji, 2021). The Pakistani state too, exacerbated by the military's dominance of it, has a deeply violent necropolitical logic at its heart (Mbembe 2016; Rashid, 2020). In 2022, at the writing of this manuscript, that same necropolitical logic steeped in the realpolitik decision to support the Taliban government in Afghanistan is now reportedly leading to resurgence of Taliban activity in Swat (Khan, 2022). The bright day and the return to spring that the above quote speaks of, remain elusive in Swat.



**Figure 1.** General map of Swat district/valley within Pakistan (cartography by Aiden Byrne).

The reconstruction process following the end of the violent conflict was largely led by the military, which has gone on to establish a permanent presence in the valley (Figure 1) where previously it had none. The reconstruction efforts were informed by the twin logics of creating patriotic ‘Pakistani’ subjects of the Swat population, who presumably were not Pakistani enough to avoid being led astray by the Taliban, and undertaking ‘development’ to integrate them into the Pakistani polity. The affective ‘Pakistaniat’ part (Jabbar, 2019) – that is, fostering attachment to the claimant of sovereignty, the Pakistani state – meant deploying a whole set of affective messaging strategies like requiring prominent displays of the Pakistani flags everywhere (Figure 2), military sponsorship of patriotic music festivals, and a propaganda offensive through print, electronic and social media. In addition, the ongoing policy of promoting and encouraging establishment of Islamic madrassas continued apace, to not only provide foot soldiers for the Pakistani supported insurgency in Kashmir but also align the population to the officially sanctioned Islamic identity of the Pakistani state (Ahmed, 2008).

The ‘development’ part translated into building of roads, water supply schemes, schools, bus stops (with no government buses) and even a golf course. The golf course particularly became a source of resentment by the local population as it appropriated a considerable amount of arable land, in a mountainous environment where arable land is scarce. The golf course also has only six members from the entire region (The Golf Course Administrator, personal communication, 21/08/2021). The military led infrastructure-based development also converged with the greater rural to urban migration, especially in the aftermath of the war, and greater influx of remittances to the Swat valley, mostly from the Persian Gulf countries. The consequences of two have been peri-urbanization and population diversification of previously rural communities and greater



**Figure 2.** A series of shop shutters painted in the Pakistan flag in Kabal, Swat (photo courtesy: James Caron).

inroads of high to medium end retail and recreational opportunities in the valley. The water supply schemes and peri-urbanization are the core concern for us, insofar as they have changed not only the geography of access to water but also the affective geographies around springs conceptualized as hydro-heritage.

### Methodology

We empirically engage with the everyday experiences of men and women of Swat and their encounters with and around water. We map spatial, material, social and political reconfiguration of springs to understand their emotional and affective geography in Swat. We empirically explore this through analyzing 79 semi-structured interviews conducted with men ( $n = 45$ ) and women ( $n = 34$ ) of Swat, informal conversations and photographic evidence generated during our fieldwork. Swat valley has thousands of springs (locally called *cheena*) of various size and types; for this paper, we selected four sites: Nagoha Cheena, Saidu Baba Cheena, Gulligram and its surrounding springs and Shumbailay Cheena that represent geographic diversity, social complexity and material and spatial reconfiguration. It should be noted here that Swat is an ethnically mixed society with many caste and class-based cleavages, e.g. Swat is home to various Pashtun tribes like Yusufzai, Shinwari, Akhund Khel, and Tarkalani in addition to non-Pashtuns like Torwali, Gujjars, Kohistanis, and Mullahs. The ethnic, class and caste-based interactions are relevant to how gendered access and affective environment of the springs changed in the aftermath of the Swat conflict, as we shall discuss later. Springs have a distinct recent gendered history in the context of human and non-human affective encounters, which is unlike other gendered spaces in the Swat valley which focus primarily on inter-human encounters. Unlike archaeological sites that are predominantly men's spaces (Khan & De Nardi, 2022) and women's markets, that are expanding with increasing women's mobility (Khan, 2023), springs are evolving from culturally accepted space for women's activities to a restricted space with decreased women's mobility and decreased ties to the non-human environment as a result. We map the affective geography of water with a focus on springs within this historic, cultural, geographic and spatial context.

The field research informing this manuscript was conducted intermittently between October 2020 and March 2022, because of COVID-19-related lockdowns and restrictions. The bulk of the fieldwork was undertaken by post-graduate researchers (man and woman) based at the partner institution of the University of Malakand. They were native to the neighbouring districts of Swat and largely hailed from lower middle-class backgrounds. Three of the co-authors who participated in field interviews and focus groups are natives of Swat valley, while the another had worked as an archaeologist in Swat valley from 2010 to 2017. The other two co-authors, one of them a native of Pakistan, visited episodically but were mostly involved in data analysis, strategic direction and textual analysis. Field researchers were trained in social science field methods and were made aware of questions of differential power and positionality from the very outset to allow for ethical, free and open exchange of ideas. Throughout the conduct of the fieldwork, the researchers were debriefed and provided feedback on conducting ethical research as per the guidelines of the Research Ethics Office at King's College, London.

Intersubjective encounters and the affective relationality of springs were not incorporated in our interview guide at an early stage (Fox and Alldred, 2022). Affectivity of springs, embodied and gendered encounters of humans with them, and social experiences within which springs are embedded were thematically developed from the accounts of our interviewees. Initially, we were interested in springs as local heritage and their role in the post-conflict healing. However, a distinct (from other spaces) history of gendered spatial reconfiguration of springs, their affective, mythical, political and developmental imaginaries along with embodied experiential, practical and affective



encounters at the quotidian level, forced us to think about the vital materiality of springs in the post-conflict Swat.

### Springs as affective sites of enchantment

*Cheenas* (springs) were intimately tied with what Wescoat (2021) called the experience of water in Swat. The experience of water that he spoke of was in the spatial context of Nagaur Fort complex in Rajasthan, India, a sprawling example of what he calls India's Islamicate architectural and landscaping sensibilities. Mountain springs in Swat although deemed to be natural are however also deeply human-modified waterworks in far less monumental but no less aesthetically and functionally rich cultural contexts (Figure 3).

All *cheenas* in Swat, like most mountain springs, have deeply human and spiritual creation myths. Those myths almost invariably centred around a holy person or a patron saint of the local village hitting the ground with their walking sticks in times immemorial, leading to the water flowing from the ground to quench the thirst of spiritual votaries of those saints to whom most communities (certainly the ones claiming elite or indigenous status) trace their spiritual or ethnic genealogy, e.g. as a local man described the creation myth of Kokrai Cheena (spring):



**Figure 3.** Randa Cheena, near Nagoha, Swat Valley, Pakistan, illustrating the engineering traditionally undertaken to improve springs (photo courtesy: Izhar Khan).

Peer Baba said, it's time for prayer. His companion responded, sir, there is no water. Mian Hassan Baba, hit the ground with his stick and water came out of the ground. So, they were *awalya kiram* [spiritual people], now people are sinners. Have you heard people often say, that I tried to dig a well but no water came out? It's all about faith and beliefs. (M9, 12/7/2021)

The storyline was repeated in practically every village that we visited. The experience of water was embedded in the historical and mythological imaginaries of the local people. It is through these creation myths that *cheena* became materially tied to the spiritual heritage of an idealized purer times and a more pristine Muslim society of the past. The creation myth also echoes the stories told in the Quran 2:60 and Bible (Ex 17:6, Num 20:9), possibly filtered through the ages into local lore. The hydro-heritage is imbricated with the spiritual heritage of the community, making spring water much more than the utilitarian modern water. The contemporary wells in the same narrative are associated with spiritual impurity and sin. Health becomes an important register for carrying over the historical imaginary of sanctity, purity and impurity in interactions with *cheena* and modern water of pumps and wells, not unlike the sacred healing and therapeutic waterscapes described by Ray (2020 & 2021), e.g. as the following quotes from a woman and a man, respectively, describe (W is the code for a woman research participant):

Previously there were no wells and tap water; everyone was taking water from the spring, so people were healthy. Now it's wells and tap water, and everyone is sick. (W18, 13/8, 2021)

This [spring] is a sacred place and the water is sacred. Once a person from Mingora [Swat valley's main city] who had acute skin problems came wearing just a *lungi* [Punjabi loin cloth that people of this area never wear]. Because of his acute skin disease he couldn't wear proper clothes. But he visited the *cheena* three times and he was healed. His illness was completely cured by Allah through this water. (M7, 12/7/2021)

Women's back-breaking labour was involved in fetching water from springs, which has been considerably eased with the advent of piped and pumped water, as confirmed by many women participants in the research. Yet, the springs continue to be associated with carefree life, moral purity and a decidedly feminine space by both women and men:

In the old days in my childhood women were washing clothes in the spring, they were bringing cans and lit fires to warm the water for washing clothes. We played in the streams. Some women washed utensils, while others were fetching water. There was a 'Taal' [swing] in an old tree which we played on [for hours]. Mother would send for us to come home, but we would not. My mother used to say *taso da qayamat pori na loyeagai* [you are not growing up even by the end of the world]. (W17, 11/8/2021)

NO! [I don't go to the spring anymore.] When I go there, I regret the loss of the past. I say, (alas!) *afsos da dey*, if it was the past, you [young men] would not have played tambals here [in the surrounding of spring]. (M36, 26/7/2021)

But the historical imaginary is not just limited to some ascribed masculinist spirituality of holy men or contemporary regret on the loss of a gender segregationist moral order. Springs are also associated with romantic and enchanted sensibilities.

If love and romance has the potential to deterritorialize a subject such that in an amorous, joyful state it can transform and connect to other humans and non-humans, then romance has to be the most enchanting of affects (Pyry & Aiava, 2020). *Cheena* then has been a site where solidarity

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Godar ta zam rapasi rasha mangi mi dwa di narai mla rala matawi na	I'm going to the godar; follow me – My two water pitchers are breaking my delicate back
Pa godar jang da jinako day mangi yi mat kro pa gato weshtal kawi na.	The girls are fighting at the godar – Their pitchers are broken from throwing stones
Godar ta zam rapasi rasha ma pa mangi ke paratay rawari di na	I'm going to the godar; follow me – I've brought parathas to eat, in my pitcher
Khdaya ma da godar gat kay chi jinkai rabandi pundi spinawi na	Oh God, make me a stone at the godar – So girls will use me to scrub their feet white
Godar ta braghi khwendi raghlay yaw weshtal kai bala ghashi tolawi na	Two sisters arrived at the godar together – One fires arrows and the other picks them up

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and attachment to the human and the non-human usher in new possibilities and connection. Afterall, within human geography 'enchantment has been most obviously accentuated by the bringing together of materiality and affect' (Woodyer & Geoghegan, 2012, p. 203). The materiality of the cheena with its water and stones becomes interwoven with romance, including the idea of female exuberance, in the local musical genre of *tappa* (poem), e.g. as per the *tappas* narrated by a local person:

A *tappa* is a composition of two verses with unequal metres. It lives primarily in the oral tradition and is often improvisational, although many individual *tappas* have gained widespread circulation if they speak to wide enough sensibilities. Among these sensibilities, the *tappa* has emerged as a genre specifically known for what some describe as social subversion, critique or resistance (Imran et al. 2020; Griswold 2014), stereotypically among women. However, it would be more precise to say that it expresses counter-normative affects of anti-structural desires, as numerous scholars have noted (Layiq, 1984; Majrouh, 2003; Nichols, 2000), and *tappas* are created and circulated by men as well. In effect, both *tappas* and *springs* are places where virtues counter to normative patriarchal regulation can have a home, for women and men alike; the affective significance of *springs* and *tappas* have reinforced each other in their deterritorial possibilities and their openness to multivariate modes of connection. The above series of *tappas* about the *godar*, which is essentially a place for gathering drinking-water, are both from a woman and man's perspective. The first one links sensual physicality and the *godar*, while the second and third ones speak of a playful fight between girls and their invitation to their presumed amors to share *paratha* (battered bread), thereby pointing to *godar* as a site both of women's sociability and of romantic trysts. The fourth and fifth *tappas* speak from a man's perspective, with the former desiring physical communion with the women as a stone in the *godar* and the second one evoking cupid's arrows.

The overall poetic mood of *spring tappas* is obviously of a sensual sociability, where the non-human *godar* and its stones become allegorically the mediums through which desires are both explored and consummated. In fact, the themes of the *tappas* were repeated as truth by many of the local women and men, for example:

Yes, girls [coming to the spring] were involved with boys, but they were keeping the affairs secret and not telling anyone. (W18, 11/8/2021)

Beyond a sort of symbolic-poetic affinity with objects of the spring, the possibility of aleatory human connection to the non-human was further mediated at *springs* by the *djinns* (spirits) who made the *springs* their home and linked the life of the non-human landscape to people:

This [Sairai cheena] was a very scary place. There were trees and people were fearful of it. We've seen many people collapsing from fear. *Aksar ba pe ghuta rala, ao chaghy ba westy* [people were going into trances, and crying out]. *De peryanu asarat ham wu kana* [That was the effect of djinns, you see]...a *djinn* possessed anyone who visited the spring. And then a local mullah had to do a *dum* [exorcism] on them. Now the population has increased, trees have been cut (there are no maple or olive trees anymore), and the djinns are gone too. (M23, 13/8/2021)

The djinns are incorporeal, yet active, creatures who were deemed to have been inhabiting local spaces, particularly spaces like graveyards, ruins, orchards, forests, or wastelands: border spaces like springs too, where human environments and natural worlds meet. The affect of ecstatic connection with the non-human and with the gendered other speaks of ontological pluralism that was enacted and embodied at springs, and that has defined the local-scale hydro-heritage of Swat. Development with its modern technology, national integration, environmental impact and overcrowding have all been noted by respondents as instrumental in producing fundamental changes to what the cheena is. With the non-human landscape increasingly refigured through technical modes of thinking and of development, links to worlds beyond human subjectivity are lost. The pre-conflict society in Swat provided for the agency of spirits, stones and springs in its worlding practices, which is not to suggest that there was a tidy rupture or that something innocent was lost as Sinha et al. (1997) cautioned earlier on. It is just that where the affect changed from an enchanted to a utilitarian one, it had material consequences. The extractivist worlding of post-conflict development is taking Swat in a direction where springs become just an inert water hole from which use value of water can be realized, to the exclusion of other multiple values. In the following section, we review the conduits for that transition from the pluriverse of Blaser and de la Cadena (2018), towards the developmental universe concretized (pun intended) by the Pakistani state.

## Modern water in post-conflict reconstruction

The causes for the Taliban insurgency have been attributed to many factors by scholars, chief amongst them being failures of governance, especially in delivery of justice, and less so to any developmental lags or poverty relative to the rest of Pakistan (Rabia, 2011; Khan et al., 2020). The Pakistani state, while recognizing the governance failure as a cause of the conflict, laid out a three-pronged strategy of dialogue, development and deterrence for post-conflict stabilization of Swat (Avis, 2016). Of the three pillars, the dialogue part has manifested itself primarily in dialogue with the Taliban and the religious right and not the ordinary people or their elected representatives. The deterrence part, in addition to the military-run de-radicalization programmes (Azam & Fatima, 2017), has manifested itself in military presence, security checkposts, patrolling, occupation of public and private buildings, the building of a cantonment, and – quite painfully for the people – the cutting of roadside trees and orchards and limits to the growing of maize, for example, which may provide hiding places for militants (Rome, 2011). Development manifested itself in reconstruction of destroyed infrastructure but greatly expanded upon it with wider roads, bypasses to major urban areas, and water supply schemes. Our interviews show that the destruction and degradation of a familiar landscape permeated with living non-human heritage, especially hydro-heritage, have been a major source of unexamined trauma and a barrier to healing in post-conflict Swat.

The large-scale displacement of people during the Swat conflict meant that many ended up settling where they had been displaced because their homes and communities had been destroyed by the war from 2007 to 2009. The mixing of people from different ethnicities, classes and caste affiliations changed the level of trust and camaraderie within communities to the detriment of women's mobility, especially to springs and water bodies:

They [women] used to go [to the springs] for socialising. My daughters also used to go with friends. But now the environment has changed. There are some people who associate girls [visiting springs] with a bad reputation. I don't want anyone to discuss my daughters in bad language. (W16, 2/7/2021)

We used to go to the spring even five or six years back but since the crisis, when people of Upper Swat migrated to our village and settled here, we stopped going there because now different people of different background are living here. (W5, 15/6/2021)

The hydro-heritage of springs was not just a memory but a lived heritage providing joy and solace to women, the enjoyment of which was now vigorously proscribed for some:

I felt as if my heart had opened when I would see my friends there [at the spring]. It made me happy...I really wish I could go now but my husband says 'You will not go to the spring'. (W6, 2/7/2021)

This social fragmentation was one reason for gendered alienation from hydro-heritage. The construction of mosques and madrassas (religious seminaries almost invariably for boys) was another. The patriarchal ethos of Swat's society, with its emphasis on women's chastity, became a social barrier to women's interaction with hydro-heritage once reinforced by the tendency towards fixity of a developmentalist paradigm that views water as primarily a resource: this view sees little value in spaces that are productive of unpredictable sorts of counter-normative connectivity and non-human agency. An equally patriarchal, state-endorsed religiosity, emphasizing prominent display of symbols such as mosque-building but also an absolute, anti-contextual prescription for the correct performance of Islamic habitus, became another physical barrier to women's access to springs. The Pakistani state, especially in periods of military rule, cultivated the religious right as a catalyst for nation-building as well as to meet its geostrategic objectives of liberating Kashmir and dominating Afghanistan through outsourced proxies (Abbas, 2005; Zahoor & Rumi, 2019). The result has been greater projection of conservative Islamic values, through educational curricula as well as through patronage of conservative religious leadership (Ahmad, 2004). These state-projected



**Figure 4.** A mosque built right next to Sairai cheena (photo courtesy: Izhar Khan).

conservative values have been internalized by the peri-urban and rural society in Swat and manifest themselves in burgeoning construction of mosques everywhere, especially by influential people, as a display of their piety and cultural capital. In the case of the Sairae Cheena, the mosque was built right on the cheena (Figure 4) as a research participant reported: ‘My cousin built this mosque for the sake of [divine] reward in the hereafter’ (M7, 12/07/2021). That person’s reward on the hereafter makes it impossible for women to maintain their traditional access to the *cheena*, especially during prayer times; mosques are an exclusively male space in Swat.

As mentioned above, springs for women were not just a place to draw water but also a space of leisure and sociability. For women, building mosques and madrassas on top of springs is particularly rankling:

Before the construction of this madrassa, women use to go there for enjoyment. In summer you know we have load shedding and the power supply remain suspended for hours. So, women and children would go to this spring for bathing. But now you see there is a mosque and a house constructed for the *mualim* (religious teacher) so we don’t have space to sit there...It is good they have constructed a madrassa, so people can gain religious knowledge. However, they should have been constructed it at some other place than the spring. That spring was a picnic spot for people. (W4, 15 June 2021)

This research participant is clearly conflicted between her endorsement of piety and her desire to assert the right to enjoy her hydro-heritage. The physical presence of logocentric male institutions like mosques and madrassas create hard gendered barriers between women and hydro-heritage. And there are also softer barriers that manifest themselves in the form of the ecological and cosmological degradation of the springs. People specifically attributed the reduced access of women to springs to the conflict in Swat, in the same breath as they index a reduction of water to its instrumentality, or as they describe the breaking of connectivity between humans generally:

After the Swat *halaat* [a local word to refer to the Taliban-military conflict] men’s numbers have increased, but the women’s numbers have decreased. Women rarely go to the spring unless they have some skin related problem [the local *cheena* being known for its therapeutic water]...Now everyone has their own water pump. Look how many pipes you can see. After the water motors the *godar* concept changed. (M7, 12 July 2021)

In this area you could find springs and streams everywhere. But now the streams are polluted, there is sewerage contamination and people throw garbage in them. In the past it was very clean. We cleaned our houses and threw garbage at designated place – *deran*...Nowadays even at my age [82 years] as a woman I can’t go out to the *deran*. The society has changed, and people don’t respect each other. (W15, 7 August 2021)

In sum, as part of sociological changes like increasing urbanization and a breakdown of local community bonds, modern water (Linton 2010) has replaced a far richer hydro-heritage. The *cheena/godar*/spring, like the human, has been deracinated from its cultural, historic and affective meaning, leaving behind only the utilitarian materiality of it. This deracination for the springs has been effected through pumps, pipes and pollution. The *cheena* or *godar* was firmly embedded in the local scale as hydro-heritage. Modern water, with its inert materiality and mediating technology, becomes a location of the national-scale developmental state and provides inroads for the supremacy of unrooted transnational-scale modes of Muslim piety through mosques and madrassas – modes that, much like neoliberal developmentalism, overwrite embodied cosmology that was previously viewed as equally Islamic, as the springs’ origin stories suggest. With these transitions, instead of playing a healing role, hydro-heritage has morphed into an additional source of stress,

especially for women, because of their alienation from their traditional spaces of outdoor sociability, romance, and leisure.

## Conclusion

The global water justice movement declares water to be the common heritage of humans *and* other species. It calls for water to be treated as a public trust, not appropriated for personal profit or denied to anyone for inability to pay (Sultana & Loftus, 2012). To the above, we will add that water as public trust may not be appropriated for profit, monetary or spiritual, or denied to anyone based upon class and/or gender. Extant debates on water around concepts of a ‘right to water’ may be steeped in conservative economic and political individualism (Bakker, 2012). Other tropes such as waterscapes or hydro-social cycles may very rightly call for a politicized view of water where intra-human and inter-species justice and power relations take centre stage (Linton, 2012; Linton & Jessica, 2014). Our hydro-heritage lens, consistent with Walsh’s (2018) plea in the context of bath houses and mineral springs in Mexico, however, explicitly distances water from any liberal individualism or modern extractivism, while expanding and deepening the meaning of water in a politicized sense, towards intersectional diversity of experience, affect, culture, memory and human–non-human solidarity.

The springs of Swat, as we have shown, were a site for human and non-human encounters, sociability, and affect, all producing gender processes very different from those prescribed by either the military-developmental state or right-wing petite bourgeoisie. Their continuity as hydro-heritage could have been a conduit for healing in a traumatized society. Their alienation and degradation have had the opposite effect of accentuating social fragmentation, resentment and the festering of trauma from conflict. The *cheena/godar* of Swat has become a locus of affective politics around replacement of local-scale, place-based cosmologies and experiences by national-scale developmental technologies, imaginaries and practices, as well as transnational-scale politics of piety, all of them with deleterious consequences for women’s mobility and wellbeing. Healing, it appears, will have to await another time and a different, yet familiar, *zeitgeist*.

In conclusion, we are reminded of a passage from Rajmohan Gandhi’s (1999) passage as cited by Wescoat (2007: 53):

Delhi’s djinns, its great load of unrepented cruelty and unshared sorrow...Can Delhi’s accumulated offences be washed away? Can some atonement or penance – or some God-sent blessing or grace – expiate the guilt of centuries, and generate a breeze of forgiveness that blows away the smells of torture and revenge?

He then answers the question thus:

Every tree planted, or cubic foot of water conserved is a celebration of life, a proclamation of the worth of the future, and a garden or a river may calm sad or angry hearts. Every caring act of fellowship, considerateness, nursing, apology, forgiveness, greening, or flowering – perhaps heals something of Delhi’s torment, maybe calms one of its djinns, and a healing process in Delhi might speak to all of South Asia (410).

The tormentor djinns may still be at work in Delhi. But the enchanting djinns have left Swat.

## Highlights

1. Viewing water through a hydro-heritage lens opens up analytical possibilities for examining the multiple ontologies associated with it.
2. Heritage, especially hydro-heritage, can be a conduit for healing in post-conflict situations.



3. In the context of mountain springs, Pakistani state's developmental imaginaries have replaced the enchanted experience of water with modern water.
4. Hydro-heritage as a lived heritage has important gendered dimensions which are subverted by modern water.
5. Women's limited access to springs has limited their opportunities for sociability, romance and leisure around them.

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### References

- Abbas H (2005) *Pakistan's Drift into Extremism: Allah, the Army, and America's War on Terror*. Armonk, NY: M. E. Sharpe.
- Acharya A (2015) The cultural politics of waterscapes. In: Bryant RL (eds) *International Handbook of Political Ecology*. Cheltenham: Edward Elgar, 373–386.
- Ahmad I (2004) Islam, democracy and citizenship education: An examination of the social studies curriculum in Pakistan. *Current Issues in Contemporary Education* 7(1): 39–49.
- Ahmed R (2008) *Pakistan on the Brink*. New York, NY: Viking Press.
- Avis W (2016) *Drivers of Conflict in the Swat Valley, Pakistan*. Birmingham, UK: GSDRC.
- Azam Z and Fatima SB (2017) Mishal: A case study of a deradicalization and emancipation program in Swat valley, Pakistan. *Journal for Deradicalization* 11(Summer): 1–29.
- Bakker K (2012) Commons versus commodities: Debating the human right to water. In: Sultana F and Loftus A (eds) *The Right to Water: Politics, Governance and Social Struggles*. New York, NY: Earthscan, 19–44.
- Bennett J (2010) *Vibrant matter: A political ecology of things*. Durham, NC: Duke University Press.
- Blaser M and de la Cadena M (2018) Pluriverse: Proposals for a world of many worlds. In: de la Cadena M and Blaser M (eds) *A World of Many Worlds*. Durham: Duke University Press, 1–22.
- Bradley R (1990) *A Passage of Arms: An Archaeological Analysis of Prehistoric Hoards and Votive Deposits*. Oxford: Oxbow Books.
- Caron J and Khan MS (2022) Writing war, and the politics of poetic conversation. *Critical Asian Studies* 54(2): 149–170.
- Coomes B, Johnson JT and Howitt R (2012) Indigenous geographies I: Mere resource conflicts? The complexities in indigenous land and environmental claims. *Progress in Human Geography* 36(6): 810–821.
- Dallman S, Ngo M, Laris P, et al. (2013) Political ecology of emotion and sacred space: The Winnemem Wintu struggles with California water policy. *Emotion, Space and Society* 6: 33–43.
- De Nardi S (2014) Senses of place, senses of the past: Making experiential maps as part of community heritage fieldwork. *Journal of Community Archaeology & Heritage* 1(1): 5–22.
- De Nardi S (2019a) Everyday heritage activism in Swat valley: Ethnographic reflections on a politics of hope. *Heritage and Society* 10(3): 237–258.
- De Nardi S (2019b) *Visualising Place, Memory and the Imagined*. New York: Routledge.



- Fox NI and Alldred P (2022) Doing new materialist data analysis: A Spinozo–Deleuzian ethological toolkit. *International Journal of Social Research Methodology* 25(5): 625–638.
- Gaile GL and Wilmott CJ (2004) *Geography in America at the Dawn of the 21st Century*. Oxford: Oxford University Press.
- Gandhi R (1999) *Revenge and Reconciliation: Understanding South Asian History*. New Delhi: Penguin Books.
- Gladfelter S (2022) Imposing worlds: Ontological marginalization and reclamation through irrigation infrastructure in Rajapur, Nepal. *Annals of the American Association of Geographers* 112(7): 1994–2011.
- Griswold E (2014) *I am the Beggar of the World*. New York: Farrar, Strauss, and Giroux.
- Inran M, Chen Y, Wei XM, et al. (2020) Veiled courage: Inside the women’s resistance against violence through their writings. *Asian Journal of Women’s Studies* 26(1): 74–93.
- Jabbar J (2019) *What is Pakistani: 41 elements of the Unique Pakistani Identity*. s.l.:Paramount Books.
- Kamash Z (2008) What lies beneath? Perceptions of the ontological paradox of water. *World Archaeology* 40(2): 224–237.
- Karpouzoglou T and Vij S (2017) Waterscapes: a perspective for understanding the contested geography of water. *WIREs Water* 4(3): e1210.
- Khan MS (2023) Women’s markets: The everyday affective dimensions of Taliban’s violence in Swat, Pakistan. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 138: 103674.
- Khan MS and De Nardi S (2022) The affectual–social ecology of cultural artefacts: Illegal markets and religious vandalism in Swat Valley, Pakistan. *Forum for Social Economics*: 1–18. <https://doi.org/10.1080/07360932.2022.2084440>.
- Khan S (2019) Analysing local perceptions of post-conflict livelihood interventions in Swat, Pakistan. *Development Policy Review* 37: O274–O292.
- Khan SU, Khalid A and Elahi N (2020) Old wine in new bottle: Governance, fragility and armed conflict in Swat Valley. *Pakistan. Cogent Social Sciences* 6(1): 1770432 <https://doi.org/10.1080/23311886.2020.1770432>.
- Khan T (2022) Why and how is the TTP resurfacing in Swat?. *Dawn*, 12 October, pp. <https://www.dawn.com/news/1714506/why-and-how-is-the-ttp-resurfacing-in-swat>.
- Khoja-Moolji S (2021) *Sovereign Attachments*. Oakland, CA: University of California Press.
- Laszczkowski M and Reeves M (2018) *Affective States: Entanglements, Suspensions, Suspicions*. Oxford: Berghahn Books.
- Layiq S (1984) *Landey*. Kabul: Afghanistan Academy of Sciences.
- Loftus A and Lumsden F (2008) Reworking hegemony in the urban waterscape. *Transactions of the Institute of British Geographers* 33(1): 109–126.
- Linton J (2010) *What is Water? The History of a Modern Abstraction*. Vancouver and Toronto: UBC Press.
- Linton J (2012) Human right to what? In: Sultana F and Loftus A (eds) *The Right to Water: Politics, Governance and Social Struggles*. New York, NY: Earthscan, 45–60.
- Linton J and Jessica B (2014) The hydrosocial cycle: Defining and mobilizing a relational-dialectic approach to water. *Geoforum; Journal of Physical, Human, and Regional Geosciences* 57: 170–180.
- Logan W and Reeves K (Eds.) (2009) *Places of Pain and Shame: Dealing with “Difficult Heritage*. Abington: Routledge.
- Lowenthal D (2003) *The Heritage Crusade and the Spoils of History*. Cambridge: Cambridge University Press.
- Macdonald S (1997) A people’s story: Heritage, identity and authenticity. In: Rojek C and Urry J (eds) *Touring Cultures: Transformations of Travel and Theory*. London/New York: Routledge, 155–175.
- Majrouh SB (2003) *Songs of Love and War: Afghan Women’s Poetry*. (Marjolijn de Jager, Trans.). New York: Other Press.
- Marsden M and Hopkins B (2013) *Fragments of the Afghan Frontier*. London: Hurst and Co.
- Matthews R, Rasheed QH, Fernández MP, et al. (2020) Heritage and cultural healing: Iraq in a post-Daesh era. *International Journal of Heritage Studies* 26(2): 120–141.
- Mbembe A (2016) *Necropolitics*. Durham, NC: Duke University Press.
- Menjil TV (2019) Doing indigenous epistemology: Internal debates about inside knowledge in Maori society. *Current Anthropology* 60(2): 155–173.

- Merlan F (2009) Indigeneity. *Current Anthropology* 50(3): 303–333.
- Meskell L (2002) Negative heritage and past mastering in archaeology. *In Anthropological Quarterly* 75(3): 557–574.
- Mukherjee A (2022) *Riverine Systems: Understanding the Hydrological, Hydrosocial and Hydro-Heritage Dynamics*. New Delhi: Springer.
- Mustafa D and Brown KE (2010) The Taliban, public space, and terror in Pakistan. *Eurasian Geography and Economics* 51(4): 496–512.
- Mustafa D, Brown KE and Tillotson M (2013) Antipode to terror: Spaces of performative politics. *Antipode* 45(5): 1110–1127.
- Mustafa D and Halvorson SJ (2020) Critical water geographies: From histories to affect. *Water* 12(7): 2001.
- Mustafa D and Qazi U (2007) Transition from Karez to Tubewell irrigation: Development, modernization, and social capital in Balochistan, Pakistan. *World Development* 35(10): 1796–1813.
- Mustafa D, Nyaupane G, Shrestha K, Buzinde K, Thanet DR and Vandever V (2021) Scalar politics of Indigenous waterscapes in Navajo Nation and Nepal: Conflict conservation and development. *Environment and Planning E: Nature and Space*: 25148486211007853.
- Navaro-Yashin Y (2012) *The Make-Believe Space: Affective Geographies in a Postwar Polity*. Durham: Duke University Press.
- Nichols R (2000) *Settling the Frontier: Land, Law and Society in the Peshawar Valley, 1500–1900*. Karachi: Oxford University Press.
- Pennington A, Jones R, Bagnall A, et al. (2019) “Heritage and Wellbeing: The Impact of Historic Places and Assets on Community Wellbeing – A Scoping Review”. London: What Works Centre for Wellbeing. At <https://whatworkswellbeing.org/product/heritage-and-wellbeing-full-scoping-review/>. [Accessed 12 December 2021].
- Pile S (2010) Emotions and affect in recent human geography. *Transactions of the Institute of British Geographers* 35(1): 5–20.
- Pyry N and Aiava R (2020) Enchantment as fundamental encounter: Wonder and the radical reordering of subject/world. *Cultural Geographies* 27(4): 581–595.
- Rabia Z (2011) Development and the battle for Swat. In: *Al Nakhlah. The Fletcher School Online Journal*. Spring. [https://ciaotest.cc.columbia.edu/journals/aln/aln804/f\\_0021637\\_17900.pdf](https://ciaotest.cc.columbia.edu/journals/aln/aln804/f_0021637_17900.pdf).
- Radcliffe SA (2017) Geography and indigeneity I: Indigeneity, coloniality and knowledge. *Progress in Human Geography* 41(2): 220–229.
- Radcliffe S (2018) Geography and indigeneity II: Critical geographies of indigenous body politics. *Progress in Human Geography* 42(3): 436–445.
- Rashid M (2020) *Dying to Serve: Militarism, Affect, and the Politics of Sacrifice in the Pakistan Army*. Stanford, CA: Stanford University Press.
- Ray C (ed.) (2020) *A Cross-Cultural Compendium of Hallowed Springs and Holy Wells*. London: Routledge.
- Ray C (2021) Editorial introduction: Waters of life. Aquatic sacred natural sites. *Etnoska Tribina* 51(44): 3–11.
- Rome S-i- (2011) Crisis and reconciliation in Swat. *Pakistaniaat: A Journal of Pakistan Studies* 3(1): 53–79.
- Ruru J (2012) The right to water as the right to identity: Legal struggles of indigenous peoples of Aotearoa New Zealand. In: Sultana F and Loftus A (eds) *The Right to Water: Politics, Governance and Social Struggles*. New York, NY: Earthscan, 110–122.
- Sayer F (2015) Can digging make you happy? Archaeological excavations, happiness and heritage. *Arts and Health* 7(3): 247–260.
- Shah QA, Nawab B and Mehmood T (2020) The role of stakeholders in post-conflict peacebuilding in Swat, Pakistan. *Lex Localis: Journal of Local Self-Government* 18(1): 211–229.
- Shaw WS, Herman RDK and Dobbs GR (2006) Encountering indigeneity: Re-imagining and decolonizing geography. *Geografiska Annaler: Series B, Human Geography* 88(2): 267–276.
- Sinha S, Gururani S and Greenberg B (1997) The ‘new traditionalist’ discourse of Indian environmentalism. *The Journal of Peasant Studies* 24(3): 65–99.
- Smith L and Campbell G (2011) Don’t mourn, organize: Heritage, recognition and memory in Castleford, West Yorkshire. In: Smith L, Shackel P and Campbell G (eds) *Heritage, Labour and the Working Class*. London: Routledge, 85–105.

- Sultana F and Loftus A (2012) The right to water: Prospects and possibilities. In: Sultana F and Loftus A (eds) *The Right to Water: Politics, Governance and Social Struggles*. New York, NY: Earthscan, 1–18.
- Sultana F and Loftus A (2020) *Water Politics: Governance, Justice and the Right to Water*. New York: EarthScan.
- Swyngedouw E (1999) Modernity and hybridity: Nature, regeneracionismo, and the production of the Spanish Waterscape, 1890–1930. *Annals of the Association of American Geographers* 89(3): 443–465.
- Voss B (2008) Domesticating imperialism: Sexual politics and the archaeology of empire. *American Anthropologist* 110(2): 191–203.
- Walsh C (2018) *Virtuous Waters: Mineral Springs, Bathing, and Infrastructure in Mexico*. Oakland, CA: University of California Press.
- Waterton E (2015) Heritage and community engagement. In: Ireland T and Schofield J (eds) *The Ethics of Cultural Heritage*. London: Springer, 53–67.
- Wescoat JL (2007) The Indo-Islamic garden: Conflict, conservation and conciliation in Gujarat, India. In: *Cultural Heritage and Human Rights*. New York: Springer, 53–77.
- Wescoat JL (2021) Conservation of Indo-Islamic water experience. In: Chalana M and Krishna A (eds) *Heritage Conservation in Postcolonial India: Approaches and Challenges*. New York: Routledge, 235–251.
- Woodyer T and Geoghegan H (2012) (Re)enchanted geography? The nature of being critical and the character of critique in human geography. *Progress in Human Geography* 37(2): 195–214.
- Zahoor B and Rumi R (eds.) (2019) *Rethinking Pakistan: A 21st Century Perspective*. Lahore: Folio Books.