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<CN>4. “.<\> <CT>“Nature Can Heal Itself”:<\> <CST>Divine Encounter, Lived Experience, and IndividualizedIndividual Interpretations of Climatic Change<\>

<AU>Georgina Drew, University of Adelaide<\>

Several decades of scholarship provide evidence that there is a relationship between the religious beliefs that people hold and how they see “the environment.”[1] A growing body of work builds uponon this knowledge base by exploring how religion shapes ways of understanding the biosphere–altering phenomena known as “climate change.” In these latter explorations, a key challenge is the question of how and where we locate religion as operational in the lives of those responding to climate change in a world characterized by hybridity. A main assertion of this essay is that a focus on individual interpretations and encounters helps us to illuminate not just “where religion lives,”” but also how religious belief shapes responses to the phenomena that aggregate to constitute climate change. This call requires keen attention to the ontological turns and postcolonial politics that are so important to contemporary scholarship. It also requires a willingness to acknowledge the ways in which religious beliefs and practices can at times diminish the concern that devotees might otherwise feel when they are exposed to climate science epistemologies alongside major weather disruptions.

To ground this discussion, the particular relationship of one man and his god is described in detail. The encounters that constitute the heart of this text explain how, and why, this Hindu-identified person believes in the power of the divine to correct the climatic imbalances underway in the Indian Himalaya despite his knowledge of relevant climate science. Also examined are the ways that other residents of the mountainous region to which this man belongs consider the role of moral deterioration as a factor in the ecological degradation that we are witnessing. These

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empirical observations, arising from a set of ethnographic data acquired through fieldwork in the Garhwal region of India's central Himalaya from 2007– to 2010, 2012, and 2014, indicate nuance in the ways that individuals make sense of ecological change while drawing from ~~localized~~local observations ~~as well as the~~and interpretations ~~that are~~ influenced by the Hindu faith. The act of looking for nuance in the religious dimensions of everyday practice, and the ensuing interpretations of ecological change that people produce, is significant for the potential that it has to "illuminate relations of religion and environment left hidden by a focus on the global traditions" (Jenkins and Chapple 2011~~:~~, 444).

<A>Religion, Environment, and Climate Change: An Evolving Confluence<\>

As the increasingly prominent work on religion and ecology attests, we are often tripped up by words, and the subtleties of their interpretation, in our efforts to understand the connection between beliefs and what might be called ~~"~~environmentally sound~~"~~ practices. Scholars of the relationship between Hinduism and ecology, for instance, will note that the very terms *Hindu* and *Hinduism* are problematic ~~as~~in that their use is associated with colonial bodies of knowledge, including the incessant census~~-~~taking ~~endeavours~~endeavors in colonial India that grouped people of diverse beliefs into camps that divided Hindu (or ~~"~~*Hindoo*~~"~~) from Buddhist and Muslim populations. This was and is problematic when one considers that the Hindu faith—sometimes referred to as Hinduism or as *sanatana dharma*—is a highly varied and amorphous set of beliefs and practices that have evolved over time. When we add in concerns of Hindu-identified populations for the environment and ~~"~~environmental sustainability~~,"~~ the study of the Hindu faith becomes even more complicated. Even though some Hindu texts urge what might be deemed environmentally sound behavior, many contemporary practices in relation to resources

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are unsustainable, as demonstrated by the iconic examples of pollution in the religiously revered Ganga and Yamuna Rivers. Pointing to the limitations that distinct Hindu beliefs and practices pose for the sound or ~~"~~sustainable~~"~~ management of the natural world, some scholars candidly suggest that religious precepts can as easily lead to the decline of the ~~"~~environment~~"~~ (Agarwal 2000; Alley 2000, 2002; Haberman 2006; Nagarajan 1998).

The difficult process of determining how conclusively religious practices support or degrade the environment means that scholars often start on ~~a backfoot~~~~an off-balance~~ a backfoot position when attempting to identify how religious beliefs and practices translate into understandings of, and reactions to, climate change. At the same time, a selection of preliminary investigations find that ~~while,~~ although some religions (including Hinduism) are mobilizing in response to climate change—either to promote mitigation or to facilitate adaptation—others are directly or indirectly obstructive (Veldman, Szasz, and Haluza-Delay 2014~~: 6~~). Further complicating our efforts, we are also discovering that both helpful and obstructive responses may be actively present within the same institutional religions, sparking "conflicts that reduce adherents' ability to adapt to climate change" (~~Ibid.:~~Veldman et al. 2014, 6–7). As a result, no ~~"~~simple~~"~~ or ~~"~~unidirectional~~"~~ relationship between religions and climate change can or should be presumed (~~Ibid.: 7~~Veldman et al. 2014).

Another challenge with the scholarship on religion and climate change is that it often tends to reproduce the assumptions made in the early scholarship on religion and ecology, which emphasized the ~~relevance~~ impact of scripture and ~~teachings for~~ sermons on human action without necessarily interrogating the contradictions and inconsistencies that are present in everyday life. Or, to put it differently, much of the literature on religion and climate change was~~/~~ and is "*theological* and *prescriptive*" (~~original emphasis,~~ Veldman~~, Szasz, and Haluza-Delay~~ et

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al. 2014~~:~~, 9; emphasis in original) rather than focused on how people live "complex lives" while still "evoking great powers and grand schemes" in ways that aspire, but often falter, in their adherence to scripture and teachings (Schielke and Debevec 2012~~:~~, 4). In the meantime, comparatively little of the existing literature could be characterized as empirical and based on grounded studies conducted with a social science approach—although recent efforts, including the contributions to this edited volume, attempt to correct previous omissions.[2] Grounded research is especially needed on the relationship between Hinduism and climate change, because it can help us move beyond assumptions of the ideal ways that people respond to systemic climatic disruptions while focusing on the revelatory power of lived experience. Despite the promise of such studies, and despite the centrality of climate ~~-~~change phenomena to the present ecological crisis, "the study of Hindus' engagement with the changed climate is still nascent" (Halperin 2017~~:~~, 74). If, moreover, we wish to form a better understanding of Hinduism's ecological worldview, then "we should explore the impact of changing climate conditions, rising temperatures, and precipitation irregularities on its contemporary foundations and practices" (~~Ibid.)~~Halperin 2017, 74). It is in the spirit of offering a ground-up view of the connection between ~~individualized~~individual Hindu beliefs and what we might term climate change that I offer, in the following section, an encounter between a man and a Himalayan mountain deity known as a ~~*devta*~~*devata*.

A conceptual point of inspiration for framing the ensuing encounter between one man and his god is the argument made by Marisol de la Cadena in 2010 that we need to disrupt our "conceptual comfort zones" when exploring human ~~engagement~~encounters with "earth-beings" (335). ~~These~~Such encounters, she argues, pose challenges for the political sphere~~, as well as~~ and for our ability to understand resource-related conflicts. A main effort of her intervention is to ask

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us to consider a new kind of politics that includes diverse ontological possibilities when engaging with ~~"~~non-Western~~"~~ cosmopolitics. ~~This~~Cosmopolitics is different from other forms of postcolonial politics; there is no room in de la Cadena's arguments for the kind of cosmopolitics that stop at a discursive ~~"~~respect~~"~~ for the potential existence of "more-than-human" entities that has characterized some efforts at ontological inclusion. What is needed, instead, is a radical affirmation of ~~these~~such perspectives as viable ways of being in and seeing the world. Following de la Cadena, the present discussion asks~~:~~, "Can we think about these presences as political actors . . . instead of brushing them away as excessive, residual or infantile? [And, if so,] How do we do that?" (~~ibid.:~~de la Cadena 2010, 335). If we ~~employ~~apply this query to the field of climate change, then the provocation forces our climate~~ -~~change politics to give serious consideration ~~of~~to diverse ontologies~~, as well as~~ and to the religious beliefs emphasizing ~~the~~their potency~~ of such ontologies~~. Furthermore, if we take the sentience of these beings as *really real* in an expanded ontological politics (de la Cadena 2015), then we are encouraged to revisit the challenge of efforts to mitigate climate change~~ mitigation efforts~~ when devotees contend that these beings have the power (omnipotence) and the knowledge (omniscience) to turn the tide of climate~~ -~~change phenomena should they so desire.

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In addition to the significance of the politics of ontology that de la Cadena flags, there are important postcolonial politics involved in our efforts to examine how the issue of climate change is perceived and experienced differently ~~from~~in different ~~socio-cultural~~sociocultural contexts. In his thought-provoking and revisionist book, *Provincializing Europe*, Dipesh Chakrabarty (2000) asserts that~~ while~~, although postcolonial politics examines the otherwise forgotten histories of the marginalized, it has faltered when interpreting aspects of what the ~~"~~peasant~~"~~ or ~~"~~subaltern~~"~~ subject might have said when it came to issues of the divine. The

secular and at times Marxian analyses of the early ~~post-colonial~~postcolonial iterations, in particular, did not make space for their subjects of study to rise up and take action on behalf of, or in conjunction with, their gods and goddesses. Consider Chakrabarty's commentary:

> <EXT>We need to move away from two of the ontological assumptions entailed in secular conceptions of the political and the social. The first is that the human exists in a frame of a single secular historical time that envelops other kinds of time. . . . The second assumption running through modern European political thought and the social sciences is that the human is ontologically singular, that gods and spirits are in the end "social facts," that the social somehow exists prior to them. . . . One empirically knows of no society in which humans have existed without gods and spirits accompanying them ~~(Ibid: 16).<\>~~. (Chakrabarty 2000, 16)<\>

The warning for us not to miss how our collaborators live their lives in dialogue and communion with the divine is one of the reasons ~~why~~that Chakrabarty deliberately refrains from reproducing any sociology of religion nor attempts to (over)analyze the motivations of the subjects he explores in his work. Indeed, he feels that the weakness of such efforts has been an inability to allow or honor the ~~"~~subaltern's~~"~~ understandings of the need to act in response to direction by a god or goddess. The underlying message is a challenge: Are we ready to truly hear the ~~"~~subaltern speak~~"~~ about the relationships they have with their gods and goddesses?[3]

In a move to think further with these two lenses, political ontology and postcolonial politics, I turn to an illustrative encounter demonstrating the ways that the divine guides how people interpret climatic change in the Garhwal Himalaya.

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<A>*Encounters with a ~~Devta~~Devata in Garhwal*<\>

The Garhwal Himalaya are part of the world's "~~Third Pole,"~~third pole" and are a ~~"~~hotspot~~"~~ of climate~~ ~~change phenomena. This mountainous terrain is also home to a variety of people who draw from their Hindu-influence beliefs and relationships with the divine to make sense of the changes at hand. Hindi and Garhwali speakers, in fact, characterize the region of Garhwal as a *dev bhoomi*—a land populated by numerous gods and goddesses. Residents living within this landscape in India's central Himalaya often say that these entities are so populous that there is a god (*~~devta~~devata*) or a goddess (*devi*) living on each hilltop, on numerous mountain ridges, and in the vicinity of the region's many villages. In the district of Uttarkashi, the ~~Goddess~~goddess Ganga is a source of spiritual sustenance for these minor gods and goddesses~~,~~ as well as for human residents. Flowing through this district from a glacial source upstream in the form of the River Ganga, the ~~Goddess~~goddess provides physically and spiritually cleansing waters that humans *as well as* regional gods and goddesses visit from time to time for their own purification rituals. When the mountain gods need to access ~~that~~the Ganga's waters, residents help by bringing them to the riverside in a palanquin (*dholi*) hung from two long wooden poles that must be carried on the shoulders of men.

In a context in which the continuity of the River Ganga's flow is threatened by glacial melt and a changing monsoon (Immerzeel et al. 2010~~;09~~; UNEP 20~~1~~09), we might anticipate that, along with humans, the gods and goddesses might be concerned with their ability to access the energizing powers of the ~~Goddess~~goddess Ganga in her liquid form. With that query in mind—which, beyond the regional particularities, is ultimately a question about perceptions and responses to climatic change—I sought out interactions with one of Garhwal's *~~devta~~devata* in

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July ~~of~~ 2012. I wanted to understand more about how relationships with the ~~*devta*~~*devata* and *devi* influence interpretations of change.

My main guide for my encounters with a particular ~~*devta*~~*devata*, which I will describe shortly, was a shopkeeper from Uttarkashi ~~who~~whom I will call Manmeet in order to flag his familial origins in the Indian plains of Panjab. I knew Manmeet through mutual friends and frequent visits to a main market in the district capital of Uttarkashi, which was often a home base for my extended stays in Garhwal. Manmeet was, and is, a college-educated businessman who volunteers for Red Cross International and is involved in water-~~-~~sanitation programs. ~~While~~ Manmeet and I had exchanged many pleasantries during the 2008~~–2009~~9 year that I lived full-time in Uttarkashi, but it was during the course of a rather remarkable interview with Manmeet in the summer of 2012 that I came to know that Manmeet was an ardent devotee of Uttarkashi's patron god. Known as Kandar ~~Devta~~Devata, this entity is said to know all ~~of~~ comings and goings of Uttarkashi residents. He is also said to be a rainmaker who helps maintain the region's hydrological balance. As I discovered in our 2012 interview, Manmeet took pride in his personal connection ~~to~~with this regional god. ~~Since~~Because he is a first-generation migrant to Garhwal, he considered it a special honor to experience a connection ~~to~~with a divine mountain entity, ~~as~~for these relationships are often passed down through the family lineage. Of course, he commented, nowadays not everyone in the mountains believes in the ~~*devta*~~*devata*, especially not in this ~~"~~modern~~"~~ age of technical advancements. ~~"This~~He shared that "this is a very common dialogue~~,"~~ ~~he shared. "~~. . . . They say 'America has reached the moon and you are talking about ~~*devta*~~*devata*s only? What rubbish!'" Chuckling as he finished this statement, he went on to say in a more somber tone that this position was foolhardy ~~as~~, because there was a lot to learn from the ~~*devta*~~*devata*.

I was familiar with Kandar ~~Devta~~Devata, so there was no need to stop Manmeet's train of thought when ~~this god was~~he mentioned this god. The ~~*devta*~~*devata* is well known within Uttarkashi and surrounding areas. He has shrines and temples spread across the Garhwal Himalaya, especially along regions through which the Ganga flows. There are, in fact, two principal temples to this ~~particular~~ ~~*devta*~~*devata* in the environs of Uttarkashi~~;~~: an older and substantial temple in the hills overlooking Uttarkashi and a newer temple that ~~was~~ opened near the center of town. The market temple was inaugurated when I first began fieldwork in the summer of 2007. In what my friends and neighbors considered an auspicious start to my residence, I attended a long ceremony that marked the opening of that temple, in which I received a blessing from the temple's priests after making offerings. This, to their minds, meant I indirectly petitioned the ~~*devta*~~*devata* for permission to work in Uttarkashi—much in the same way that a researcher working in a rural location might first go to a village leader to request permission to live among the villagers. Such a belief was reinforced whenever my fieldwork appeared to go well; ~~as~~ people would comment that, if I did not have the ~~*devta*~~*devata*'s blessing for my research, he would have put obstacles in my way. Residents held this conviction because people believe that Kandar ~~Devta~~Devata's blessings are needed for the success of all activities that take place in the regions that he oversees. Devotees must seek ~~out~~ his approval for success in education, business, love, marriage, and childbearing.

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As ~~the~~my discussion with Manmeet continued, I posed a series of questions about the relationship between religion, resource use, and climate change. Manmeet paused briefly before giving a lengthy response asserting the power of nature to provide "its own treatment" to the physical degradation that we are witnessing. If we really want to help nature, he argued, then we need to cooperate with "~~"~~nature~~."~~. Our duty, for instance, is not to put plastics, wastes, and

sewage into the sacred rivers such as the Ganga; our duty is to respect them as "~~Ma~~ma" or ~~Mother~~mother. But, he cautioned, we cannot ~~"~~treat~~"~~ those divine waters even if we want~~ed~~ to~~;~~ — we do not have the power, despite the advances in science. Rather, it is the role of the gods and goddesses—the ~~*devi*~~*devta**devatas*, and ~~*devta**devis*~~—to see where nature is imbalanced and to make corrections. "When the time comes, they balance it." And~~,~~ from time to time, they run awareness programs—sometimes in the form or earthquakes, landslides, and floods—to let people know that balance is needed. These events are telling us to ~~"~~wake up~~,~~ and be aware~~!"~~ and are reminders of our lack of control in light of great natural and cosmic forces. ~~Even~~Manmeet stressed that even though we may have visited the moon, ~~Manmeet stressed that~~ we are still bound by our relationships to, and our dependence on, the gods.

When I tried to push back on Manmeet's perspective about long-term ecological change~~,~~ and the threats associated with climate change, he pronounced confidently, "Nature can heal itself." This struck me as particularly interesting ~~given~~in light of Manmeet's knowledge ~~base~~ as an educated businessman who reads the news regularly. If there was anyone ~~that~~who I expected would be concerned about the impacts of climate change, it was the kind of mountain resident that matched his profile. At the time of my research, I assumed that those with knowledge of the term and its implications would speak readily about the proactive efforts needed to combat the disruptions ~~it~~climate change is causing. It was for this reason that the "nature can heal itself" statement surprised me.

Curious to know more about this perspective, as well as Manmeet's belief in the powers ~~held by~~of regional deities, I accepted an invitation to travel to one of abodes of Kandar ~~Devta~~Devata ~~located~~ in the hills surrounding Uttarkashi. On the day of our trip~~,~~ the foreboding pre-flood date of July 29~~,~~ Manmeet's car arrived at noon on the road above ~~my~~

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~~place of residence~~where I was staying. His wife and his nephew were with him for the journey. As we began the drive, Manmeet explained that we needed a car because our destination was a small temple ~~that is situated~~ in a distant village. When I asked why we did not visit one of the ~~devta~~*devata*'s main temples near Uttarkashi, Manmeet and his wife explained that they resonate most with the mountain god's spiritual force at the particular temple that was our destination. On the day of our journey, Manmeet and his wife wanted to ask the ~~devta~~*devata* about a few family matters and some problems that were occurring in the house. Such a visit was typical for them; Manmeet consults the ~~devta~~*devata* and requests guidance "before taking any decision whatsoever." For this visit, he was particularly worried about his daughter's education.

It was an hour's journey split between the car ride and a walk up a terraced mountainside. We took off our shoes after arriving at our destination and then proceeded barefoot onto the burnt ~~-~~orange tiles that adorn the temple's enclosed outdoor area. The temple, a square concrete structure painted white, was placed within ~~this~~the enclosure, but it was set to the back so as to leave room for worship (*puja*) and the movements that the god makes when in his palanquin (*dholi*). I was not able to go inside the small temple room, which Manmeet had an attendant unlock, because women are not allowed. Instead, Manmeet's wife and I bowed our heads and offered folded hands from outside the square wooden door. As ~~per custom~~is customary, I lowered my head ~~towards~~toward the ground. Manmeet's wife touched her forehead on the first and only step that one must cross to enter ~~into~~ the temple's inner sanctum. Looking inside to the back of the tight enclosure, I caught a glimpse of the ~~devta~~*devata*'s small metal statue, or *murti*, that in the dim light appeared to be a bronze color. To the right of the *murti*, I saw the *dholi*, which filled ~~up~~ the length of the space. Atop two long wooden poles was a square box with a

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~~triangle~~triangular top. It was dressed in red and saffron fabrics with thin white ~~thin~~ pieces of cloth crossing to the ~~pyramid like~~pyramidal point at the top of the structure.

Soon after our greetings, the carriers arrived. As they went inside to retrieve the *dholi*, Manmeet explained that Kandar ~~Devta~~Devata personally selected these men to carry his palanquin. While Manmeet said a few mantras, the men picked up the *dholi* and brought it outside onto the tiled patio, where they placed it on their shoulders. Within a minute, and without the sound of the drums or other invocations I have ~~seen~~experienced elsewhere, the *dholi* started to tilt and shake from side to side. The men's shoulders barely moved as the *dholi*'s ~~pyramid~~pyramidal top swayed back and forth like a pendulum. As the *dholi* moved energetically~~,~~, the men let out utterances such as "Hai Ram" to release some of the tension ~~incurred~~ from carrying the weight. At times, the left-hand pole would jump off a shoulder and move ~~downwards~~downward quickly, smashing the men on the chest as they deftly turned their torsos to the falling weight to absorb the shock. These signs were taken as divine utterances.

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Manmeet bowed down to the floor when he saw the *dholi* move. (See figure 4.1.) Then he got up~~,~~ and, with folded hands, put his head on top of the *dholi*. The ~~pyramid~~pyramidal top leaned ~~towards~~toward him to offer a blessing. Next, Manmeet began to speak to the ~~*devta*~~*devata*. The manner ~~by~~in which he addressed his god was striking. He had a way of asking questions and then speaking an answer soon thereafter in the form of a question. It was like an internal dialogue being spoken aloud. Or, as I wrote in my notebook: "Manmeet asked him (the ~~*devta*~~*devata*) several questions, intuited part of the answer, asked if he was correct, posed follow up queries,

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and waited to see if the ~~devta~~*devata* turned to the side or stood up in response." If the *dholi* bobbed from side to side, it meant ~~"Y~~yes~~"~~ in a rather casual sort of way. If the answer was more definitive, the same affirmation might involve a half tilt—or even a very rare full tilt that involved the ~~pyramid~~pyramidal top sweeping down ~~towards~~toward the floor. When the answer was ~~"N~~no,~~"~~ by contrast, the *dholi* tended to stay still. When the ~~devta~~*devata* appeared to not be ~~"Not~~ sure~~"~~, the *dholi* turned away from Manmeet ~~towards~~toward the *mandir* (the temple) in order to seek guidance from the *murti* inside. As Manmeet explained earlier, this action happens because the ~~devta~~*devata* resides in both the *murti* and the *dholi*—the *dholi* does not have to be carrying the *murti*, though it is equipped to do so and that is one of its main functions. The *dholi* is infused with divine power and it can speak for, and as, the ~~devta~~*devata*. That said, there is sometimes a delay for contemplation or message transmission.

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(Figure 4.01: Manmeet greeting Kandar Devata at a hillside temple. Photo by author, July 2012.)

Once a rapport was established, Manmeet asked about his daughter, wondering aloud ~~if~~whether she should ~~do an MBA,~~seek a master's degree. The ~~devta~~*devata* stood still. Next he asked ~~if~~whether she should do something in law. In response, the ~~devta~~*devata* tilted ~~towards~~toward Manmeet and bobbed side to side. "Should she do it abroad?" The ~~devta~~*devata* stood still. "Should she do it in India?" The ~~devta~~*devata* nodded. "In Bangalore?" The ~~devta~~*devata* nodded ~~adamantly~~insistently. "In Bangalore? O~~k~~K, Bangalore!" After conveying these pronouncements, Manmeet turned to his wife and conferred with her, saying that this confirmed his feeling that their daughter should not go abroad just yet. Then he asked: "If she

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studies in India, can she then go abroad later?" To this, the ~~*devta*~~*devata* nodded ~~generously~~adamantly. "See! Great," said Manmeet, "that is just as I thought."

When Manmeet was done asking questions, he gestured for me to approach the *dholi*. As I did ~~this~~so, the *dholi* tilted ~~towards~~toward him several times with slight bobs. Manmeet interpreted this and said, "She has been asking about you? Yes, she asked me about you the other day." To this, the *dholi* tilted ~~generously~~abundantly. Manmeet continued~~:~~, "You were talking through me? Yes? Yes!" Turning to me, Manmeet recalled our earlier interview when he spoke "without thinking," as if a force larger than him had taken hold of his body. "Whatever I said," he explained, "it was the ~~*devta*~~*devata* who was speaking through me. He was there with us in the shop that day!" When it was established that the ~~*devta*~~*devata* knew what I was up to, including the names of people I recently interviewed, Manmeet announced that I could ask Kandar ~~Devta~~Devata my own questions. I was initially baffled for what to say; how does one speak directly with the divine? After some consideration, I decided to establish his origins ~~as~~, because it was a point of disagreement among some devotees.

Facing the *dholi*, I queried~~:~~, "Were you always a ~~*devta*~~*devata*, or were you once a man?" To this, the *dholi* bobbed vigorously. Manmeet jumped in with excitement: "You were a man? Yes? Yes! Were you a spiritual practitioner (*sadhak*) who did a great ritual penance (*tapasya*) here and left your energy in this place? Yes? Yes!" Enthralled by this exchange, Manmeet turned and thanked me for asking this question, which he had been wanting to pose for some time. Then he instructed me to continue. Repeating the rumor~~,~~ I had heard, I asked, "And do you give rains when people ask for them?" Again came an ~~adamant~~insistent ~~"Y~~yes~~"~~ in the form of a deep nod. I then tried to verify the stories I had heard about the ~~*devta*~~*devata*'s powers to give but also to withhold rains when humans misbehave. "But to receive the rains, people first have to do the

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rituals you tell them to, right? And people don't always obey you, they do not always do as you say?" To this, the ~~devta~~*devata* nodded. "And do you get mad—do you punish them?" The ~~devta~~*devata* replied with vigorous nodding. These questions and their answers helped to establish the relationship between Kandar ~~Devta~~Devata, the water cycle, and human conduct.

I wanted to ask about climate change, but the term was not yet commonly used. In my previous efforts to shadow researchers working on climate change in the region, I noticed that the generic phrasing of "weather change" (*mausam badalna*) was more commonly used. Employing this science-~~-~~neutral language, I inquired about his thoughts. "In the future," I asked, "if the weather changes (*bhavishya mein agar mausam badalta hai*)~~. . .~~" Before I could even finish the sentence, the *dholi* began to lurch with fury at a 150-degree angle. The ~~pyramid~~pyramidal top nearly scrapped the ground as it dropped down only to swing back up to the ceiling before falling again ~~towards~~toward the floor. The intensity of these movements sent a chill up my spine. I continued: "When the weather changes~~. . .~~, will you continue to give rain?" In response, the range of the tilting got even bigger.

Still thinking about the climate-~~-~~change projections, including the predictions I had read that the Ganga's glacial source could melt by the end of the twenty-first century, I inquired about the river's fate. In what ended up being my final query, I asked~~:~~, "And what about Ganga—will she remain in the future?" The intensity of the movements ~~was maintained~~persisted in response to this question. I stepped back instinctively, bewildered by the wild movements the *dholi* was making. Interpreting these signs, Manmeet added enthusiastic commentary. "See, see, I told you! He was there in the shop with us!" Then he asked the ~~devta~~*devata*, "Is it like I said, Maharaj, that nature takes care of itself?"[4] When this query was met by vigorous nodding, he added, "And you

will take care of us (in our time of need)?" When Manmeet received a positive response, he exclaimed, "See, Gina ~~(~~[Georgina~~),~~], that is what I said, isn't it!"

<A>Climates of Change and ~~The~~the ~~Devta~~Devata's Omniscience<\>

The encounter with the ~~*devta*~~*devata* proved ominous. A week after the exchange with Kandar ~~Devta~~Devata on that rural hillside, disaster struck Uttarkashi District in the form of a major flash flood. I had left the region roughly ~~48~~forty-eight hours ~~previous~~previously, and so it was to my great surprise when I awoke in New Delhi on ~~4~~ August 4, 2012 ~~from~~, to a call from my research assistant. Breathing heavily as if he had been running, my assistant informed me that a massive wave of water hit the Assi Ganga and Bhagirathi Ganga valleys, washing away tracks of land as well as numerous bridges, homes, and buildings. Dozens, if not hundreds, of lives ~~have~~had been lost. Many of the main roads were now gone and the residents of Uttarkashi were effectively trapped ~~in the confines of~~within their town. As I turned on the television to a national news station, I saw videos of rushing waters and heavy rains moving through a landscape vastly different from the one I had just left. Along with this montage was an ostentatious replay of buildings toppling into a swollen Ganga.

Horrified, I started calling friends and contacts. Many phones were unreachable or switched off. The people I managed to reach spoke of their incomprehension in the face of the devastation. Uttarkashi is not recognizable, they told me. Looking at the footage that continued to loop on the television, I had the double sensation of understanding what they meant and also knowing that I could not understand what they meant without actually being there. What I did know was that in the coming days, the power would be off for an indeterminate amount of time, fresh water would be in short supply ~~as~~because some of the municipal lines ~~have~~had been

washed away in the floods, and everyone who was able would be involved in the rescue and emergency relief operations.

Just before the battery in his ~~mobile~~cell phone died, I reached Manmeet. He asked me ~~if~~whether I had heard the news. I ~~gave~~offered a lament for the devastation in place of an affirmation. He then quickly stated what is on his mind. "The ~~*devta*~~*devata*," he said, "this is what he was trying to tell us. He knew what was about to happen—remember when you asked about Gangaji?[5] I had never seen him move like that before." Hearing this, I recalled the chill that went up my spine when the *dholi* tilted furiously from floor to ceiling only a week earlier. The words I said to prompt this were~~,~~ "In the future, if the weather changes~~. . . "~~." "

As with other flooding and extreme weather events, it is difficult to definitively determine whether ~~or not~~ a specific incident can be associated with climate change (Schiermeier 2011). The early news reports on the topic certainly tried to inquire, and suggest, that there was a correlation. As news commentators suggested, other human-made problems—such as deforestation and land destabilizing development activities—also likely played a role in exacerbating the floods. Regardless of the cause, public and online commentary pleaded for action while requesting that the ~~Government~~government of India accelerate the implementation of its National Action Plan on Climate Change, which includes a section dedicated to ~~"Sustaining~~sustaining the Himalayan ~~Ecosystem"~~ecosystem and another section pertaining to the impacts of climate change on Himalayan glaciers (~~Government of India~~Minister's Council 2008~~:~~, 4 ~~&~~, 15).

~~Following~~After the 2012 floods, the possible correlation with climate change was further underscored by an even more extreme incident of flooding in the summer of 2013 that ~~decimated~~devastated large tracks of land along the Bhagirathi and Alakananda Valleys. Those

floods, the worst in ~~50~~fifty years, caused destruction on a much larger scale than those in 2012 and took at least ~~5,700~~fifty-seven hundred lives (Qiu 2013~~:~~, 14). Along with the devastating loss, the back-to-back flooding events left residents feeling on edge in anticipation of subsequent floods. Commenting on the risks of more extreme events in Uttarakhand and surrounding areas, an article in *Nature* argued that the emerging snapshot of weather-related disasters in the Himalaya suggests that~~,~~ "things are amiss on the roof of the world" (~~Ibid.).~~Qiu 2013, 14). The text drew from the caution of scientists to argue that "~~A~~as climate change tightens its grip," disasters will become increasingly frequent. Citing emerging studies of Himalayan climate change, the text continued:

~~<EXT>~~ "The Himalayas are getting warmer at a rate of 0.6 C each decade, three times the global average. Rainfall there is increasing at a rate of 65 millimetres per decade and the monsoon season is getting warmer. However, winters are getting drier. . . . As a result of the warming, most Himalayan glaciers are retreating rapidly. Glacier lakes are becoming more and more numerous, inundating pastures and threatening downstream communities ~~(Ibid.).<\>~~" (14).

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Similarly commenting on the threats at hand, a policy brief declared that ~~while~~although "~~C~~climatic disasters like these ~~(~~[Uttarakhand~~)~~] floods are projected to increase because of climate change," the developing countries most immediately ~~impacted~~affected are "ill prepared to deal with them effectively" (Azhar 2013~~: e135~~, E135). The commentary included the following suggestion: "Measures to ensure the success of . . . climate-compatible development strategies include an appropriate framework that incorporates legislative and regulatory measures; that integrates resilience building, developmental risk reduction, and low emissions

growth strategies; that ensures the transition to resilient low emissions growth is beneficial to poor people; and checks that the processes for planning for threats and opportunities are in line with international frameworks" (~~Ibid.).~~E135).

Manmeet was not necessarily opposed to the kinds of measures suggested by such commentators. In our ~~post flood~~postflood conversations, he concurred that preparation for the changes ahead are needed. He also agreed that deforestation and development activities have to be better managed. This did not change his belief, however, that "nature can heal itself." ~~This~~His conviction was deeply aligned with his interpretation of Kandar ~~Devta~~Devata's omniscience of the impending disaster(s). As he would later explain to me, the people living under the ~~*devta*~~*devata*'s reign are at his mercy. "Everything that happens," Manmeet declared, "is by his grace only." To be clear, Manmeet was not sure who or what caused the floods. His point was that it was only through a return to lives spent in communion and obedience to the gods that the scope of the disasters could be brought into greater balance. As a result, a subsequent visit to Uttarkashi found him increasing the scope of his practices of devotion to Kandar ~~Devta~~Devata. This ritual response to climate ~~-~~ change phenomena is something that Ehud Halperin (2017) similarly found in play during his long-term ethnographic fieldwork in the neighboring mountains of Himachal Pradesh.

Manmeet's comments show us instances in which the agency of the divine is seen to be as significant for devotees as the science on environmental change. This is not to say that people like Manmeet do not ~~"~~believe~~"~~ in climate change—in some cases, Manmeet and other residents did say they think there is good evidence that human ecological footprints are causing the temperatures and the earth's cycles to change. The point is that from some standpoints the omniscience and omnipotence of the divine is seen as predominant. According to the comments

of several mountain residents, in fact, the gods are allowing humans to destroy the planet in order to teach us a lesson about proper conduct and the repercussions ~~for~~of sin and moral degeneracy. If we are able to turn the tide of physical pollution and the internal states of corruption that it signals, then the gods have the ultimate power to take back the reigns and restore ecological balance. The implication puts the onus on us all to collectively adopt the upstanding behavior that could bring about ~~this~~such a change. This internal redirection, as some commented, cannot be forced through policy alone; we must also look to, and seek guidance from, the gods. Such statements are strong demands for what in the scholarship we often term the need for "ontological inclusion" within a scholarly move known as the ontological turn (Apf~~e~~ell-Marglin 2011; Goslinga 2012; Szerszynski 2017~~)~~).

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<A>(Climate) Change as a Morality Tale<\>

In January ~~of~~ 2014, I returned to Uttarkashi to see how my acquaintances, friends, and colleagues were faring in the aftermath of the floods. The landscape that I encountered was still in a state of devastation. Gone were two of the main bridges that people had daily used to cross ~~over the flow of~~ the Bhagirathi Ganga. Gone too was an entire row of housing; the buildings that had bordered the river's banks, erstwhile availing of sweeping scenic vistas, had crumbled into oblivion during the worst onslaught of the 2013 floods. The repair works, which ostensibly had been underway for ~~over~~more than six months prior to my arrival, seemed ~~slow~~to be moving slowly. When I mentioned ~~this~~my impression during the course of the month, nearly all ~~of~~ my contacts were quick to lament the rampant corruption that they claimed was the cause of the anemic disaster relief and reconstruction efforts.

To other mountain residents, it seemed that along with possible misdeeds in official quarters the response from ~~non-governmental~~nongovernmental organizations (NGOs) and civil society could also be considered circumspect. ~~While~~Conceding that the NGOs ~~themselves~~ may have had the best of intentions, ~~the critique was for~~residents criticized the lack of oversight ~~on how well the~~and coordination in the dissemination of supplies ~~they coordinated for delivery were disseminated within~~in the mountains. The truck drivers they hired, for instance, were accused of dumping cargo full of food rations and medical supplies "at the first convenient location" in the mountains. This meant that those most needing the supplies—the people cut off from the main roads—received very little of the relief that had been raised on their behalf. One long-time interlocutor, a middle-aged woman ~~who~~whom I would claim as a personal friend, also lamented the "brashness" of the district's well-do-do residents, who ~~queued~~lined up for relief supplies even when it reduced the supplies meant to keep alive the populations that the floods had rendered destitute. These people, she claimed, publicly stood in ration lines even though their neighbors and friends knew them to earn ~~high regional~~ salaries ~~based on~~high for the region because of the fixed rates ~~associated with~~determined nationally for their chosen professions. Commenting on this, my friend shared that she eventually told her family and social media contacts "not to give to the relief efforts" because the goods and money were squandered.

During my January 2014 discussions with Uttarkashi residents, the results were mixed on whether people thought that the floods were related to extreme (but not exceptional) monsoon events, the forces that we might term ~~"~~*climate change*~~,"~~ or the disciplining power of the gods who might be displeased with the current state of human conduct. When sharing the latter perspective, my collaborators pointed to the moral decay already outlined to say that the back-to-back summers of flooding had to be signs of divine displeasure. One of my long-time

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collaborators, for instance, attributed the floods to the anger that the ~~Goddess~~goddess Ganga must be feeling for what she saw as misguided efforts to build large hydroelectric dams on the last of her free-flowing tributaries. “Mother really scolded us,” this woman said with awe, for treating her so badly.

Other collaborators pointed beyond the questionable development practices and other instances of ~~“~~bad~~”~~ behavior to say that the gods were also displeased with the way that mountain residents across the landscape of Garhwal were abandoning ritual practices and turning away from a spiritual-religious dependence on the regional ~~*devta*~~*devata*. A Hindu ~~Swami~~swami I interviewed, for instance, lamented that even when people conduct the rituals that they are meant to perform, many of these practices are now done “without a soul.” Equating this with blind faith, or *andha vishwas*, he criticized what he saw as the rote enactment of rites, rituals, and religious acts without knowing the ~~“~~deeper meaning~~”~~ behind the acts themselves. And, he cautioned, much of Hindu religious ritual in ~~“~~modern society~~”~~ was beginning to fall into the category of unmoored and ill-understood practice.

This impression that the ritual- and faith-based elements of everyday life are in decline is something that I also documented prior to the floods, as a 2012 interview with the priest (~~Pandit~~pandit) of a village overlooking Uttarkashi attests. This man, who lives near and works in the main temple to Kandar ~~Devta~~Devata, spoke of the changes that he has seen over the years. In addition to a degraded environment~~,~~ ~~—~~his evidence for which ~~he pointed to by explaining that~~was the ~~village has~~village’s water- ~~-~~security problems and ~~that~~the “pollution” of Uttarkashi town ~~has become “polluted,” —~~ ~~-~~he said that people are doing less *puja* because they now have less faith (*aastha*). The following exchange between the ~~Pandit~~pandit and an assistant illustrates this position:

<EXT,D>Pandit: People had more faith in the ~~devta~~*devata* in the past. Now, they don't believe from the heart. . . . Our coming generations will have even less faith, in accordance with the *yug* [a cyclical period of time within Hindu cosmologies].

Assistant: Why do you think this is happening?

Pandit: It is because of our (impure) thinking.

Assistant: Is it because people think that the ~~devta~~*devata* can't do anything now?

Pandit: We haven't thought ~~of~~ that. It is something in ourselves that is wrong, which is why the faith has diminished. It is related to *kali yug* [the final of four cycles of time marked by moral and physical deterioration]. This is the first turn of *kali yug*.<\>

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In sharing these remarks about the decline of faith and ritual practices, the ~~Pandit~~pandit also pointed out that some things had gotten better. Villagers' lives are more ~~"~~comfortable,~~"~~ he said, and they no longer have to struggle for basic items like milk and ghee because they can buy them from the market with the wages they earn from ~~"~~service~~"~~ (cash employment). ~~This did~~It is not ~~mean~~ that the ~~Pandit~~pandit felt things would continue to improve. As he commented, "The future is not bright" (*bhavisya sahin nahin hai*). Even as he expressed a desire for "everything to be clean, safe, and for life to be good," he shared his doubts that this would be achieved anytime soon; in fact, he stated, it would take the end of the current cycle of time and the start of a new one for things to improve. In the meantime, he said, all that people could do is ~~"~~work hard.~~"~~

The emphasis on the decline of moral character within the age of spiritual and physical degeneration that is *kali yug* is one that I have highlighted elsewhere (Drew 2012, 2017). The issue of moral degeneration~~,~~ and the cosmic ~~as well as~~and ecological repercussions of human

error and sin is also one that other scholars operating in parallel parts of the Himalaya have documented (Gergan 2016). Ehud Halperin~~,~~ (2017), for instance, has observed that~~,~~ "w~~W~~hile villagers interpret climate changes as the outcome of their abandonment of older ways and values, this interpretation is still rooted in the traditional holistic perception of reality: moral decay has cosmic effects. Similarly the agency of goddesses and gods and their absolute power to control the weather is unquestioned in this line of reasoning, as is the agency of humans" (~~2017: 86~~). The correlation also has a converse result. As Halperin comments~~:~~, "Theoretically, at least, one can infer that if humans mended their ways, the climate could return to normal" (~~2017: 86~~).

<A>Concluding Remarks: Changing Practices in Ecologies of Change<\>

As Sarah J. King (2015) writes, "The study of human experience—of culture and religion—helps us to understand how and why we are stuck, and then to see how to create movement, to bring change" (~~2015: 427~~). Hers is a renewed affirmation for the ~~continued~~ongoing role of religious studies for grappling with the challenges associated with climate change~~,~~ and climate ~~-~~change "apocalypse." She ends her statement by suggesting that "the apocalypse is no closer than it ever was—nor is any miraculous salvation" (~~ibid.: 431~~). Instead, she cautions, we must engage in the messy, undisciplined, interdisciplinary work of understanding the world as it is~~,~~ and the complicated stories humans tell to make sense of it. ~~While~~Although the overall call is useful, we can also reflect critically on the claim that no miraculous salvation is near. If this is the stance that we take, then how clearly are we listening to the stories that we tell ourselves? Or, more ~~importantly~~important, how open ~~to listening~~ are we to listening, to hearing the stories that our collaborators are trying to tell us? ~~This is the point of~~

~~caution that~~ I want to end this discussion with this point of caution and by returning to Manmeet's story, along with other morals shared by mountain residents.

It is both because of the potency of political ontological insights and ~~post-colonial~~postcolonial politics that Manmeet's experiences and interpretations are compelling. His example shows how some people look for and interpret environmental disruptions through encounters with the divine. In his presentation, the gods are in constant communication with us whether we seek them out or not. ~~While~~Although it is our duty to adhere to upstanding conduct, which can include the sound treatment of resources, it is their duty to check and correct external imbalance and disturbance. These may ~~be~~occur naturally ~~occurring~~ or be caused by our hubris. His example demonstrates how religion is lived through relationships and encounters with the divine that shape perceptions of human conduct and possibility. It also serves as a reminder that, for many of our collaborators, the presence of the divine in their lives is a social fact (Chakrabarty 2000). If we miss or dismiss the presence of their god(s), then we fail to understand the key sources of motivation of our collaborators (~~de~~De la Cadena 2010; Szerszynski 2017). Furthermore, we would risk replicating the ~~staunch~~inflexible dichotomy between an ~~"~~*us*~~"~~ and a ~~"~~*them*~~"~~ that was a vital intellectual strategy of early colonial and ~~post-colonial~~postcolonial scholarship (Goslinga 2012~~:~~, 389). This would have profound consequences for the vital need to share knowledge, power, and ontological possibility through encounter with our collaborators (~~Ibid.:~~Goslinga 2012, 393). By contrast, providing more space (discursive, emotional, and even metaphysical) for appreciating what is really ~~"~~*real*~~"~~ for the people experiencing change through their prisms of belief and experience, we allow for a more revelatory and empowering exchange with the populations that were formerly referred to as ~~"~~*subalterns*~~".~~

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~~While reflection~~Reflection on the human capacity to recognize ~~varied~~various metaphysical potentialities is important, but it does not mean that people are incapable of revising their understandings of the wider set of forces that they perceive as powerful. In the Garhwal Himalaya, for instance, people are starting to consider more of the climate science even as they simultaneously continue to believe in the sentient beings that animate the landscapes in which they live. When I nowadays talk with people in Uttarkashi, they increasingly indicate nuance in the ways that they learn about and express concern for their embedded ecosystem. What appears to be an increasingly strong motivation for the kinds of actions that we might call ~~"~~*mitigation*~~"~~ or ~~"~~*sustainable resource management*~~"~~ are the livelihood concerns that people continually navigate in everyday life.[6] In many ways, the 2012 and 2013 Uttarakhand floods have resoundingly underscored the significance of longer-term rather than short-term planning and development. In the interim, the sense of heightened ~~precarity~~precariousness that many feel is contributing to a "politics of urgency" that Mabel Gergan (2016) has similarly ~~seen in observation~~observed in the eastern Indian Himalaya ~~(2016: 5).~~. To underscore a main point, however, such practical ~~socio-economic~~socioeconomic and environmental concerns continue to be joined with religious beliefs. It is in this way that we see the utility of an insight made by Manuel A. Vásquez~~,~~ (2009), who reminds us that religious flows are always "produced by individuals" (441) embedded in ~~socio-cultural~~sociocultural and ecological networks and relationships that shape, and are shaped by, a confluence of phenomena ~~(2009: 441). While~~. Although climate change continues to complicate the form and scope of the confluences at hand, personal and ~~individualized~~individual encounters and interpretations will remain significant ~~to~~in influencing how people respond.

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<ECB>References<\>

Agarwal, Anil. 2000. "Can Hindu Beliefs and Values ~~Helps~~Help India Meet Its Ecological Crisis?" ~~In Christopher Key Chapple and Mary Evelyn Tucker (eds),~~In *Hinduism and Ecology: The Intersection of Earth, Sky, and Water*, ~~pp.~~edited by Christopher Key Chapple and Mary Evelyn Tucker, 165–~~179~~79. Cambridge, MA: Harvard University Press.

Alley, Kelly D. 2000. "Separate Domains: Hinduism, Politics, and Environmental Pollution." ~~In Christopher Key Chapple and Mary Evelyn Tucker (eds),~~In *Hinduism and Ecology: The Intersection of Earth, Sky, and Water*, ~~pp.~~edited by Christopher Key Chapple and Mary Evelyn Tucker, 355–~~388~~88. Cambridge, MA: Harvard University Press.

———. 2002. *On the Banks of the Ganga: When Wastewater Meets a Sacred River*. Ann Arbor: University of Michigan Press.

Apf~~f~~el-Marglin, Frédérique. 2011. *Subversive Spiritualities: How Rituals Enact the World*. Cary, NC: Oxford University Press.

Azhar, Gulrez Shah. 2013. "The Need for Climate-Compatible Development: A Reminder from the Uttarakhand Floods~~. *The*~~." *Lancet: Global Health* 1 (3): e135. https://doi.org/10.1016/S2214-109X(13)70063-9.

Berry, Evan. 2015. *Devoted to Nature: The Religious Roots of American Environmentalism*. ~~Berkeley~~Oakland: University of California Press.

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~~Blaser, Mario. 2010. *Storytelling Globality: A Border Dialogue Ethnography of Paraguayan Chaco*. Durham, NC: Duke University.~~

Chakrabarty, Dipesh. 2000. *Provincializing Europe: Postcolonial Thought and Historical Difference*. Princeton, NJ: Princeton University Press.

Crate, Susan A. 2008. "Gone the Bull of Winter: Grappling with the Cultural Implications of and Anthropology's Role(s) in Global Climate Change." *Current Anthropology* 49 (4): 569–~~595~~95.

Crate, Susan A~~.~~, and Mark Nuttall, eds. 2009. "Introduction~~: Anthropology and Climate Change." In Susan A. Crate and Mark Nuttall (eds),~~ to *Anthropology and Climate Change: From Encounters to Actions*~~, pp. 9–37~~. ~~Walnut Creek, CA: Left Coast Press~~New York: Routledge.

~~de~~De la Cadena, Marisol. 2010. "Indigenous Cosmopolitics in the Andes: Conceptual Reflections beyond "~~"~~Politics~~",~~"" *Cultural Anthropology* 25 (2): 33244–370.

———. 2015. *Earth Beings: Ecologies of Practice across Andean Worlds*. Durham, NC: Duke University Press

Drew, Georgina. 2012. "A Retreating Goddess? Conflicting Perceptions of Ecological Change near the Gangotri-Gaumukh Glacier~~,~~." *Journal for the Study of Religion, Nature~~,~~ and Culture* 6 (3): 344–~~362~~62. https://doi.org/10.1558/jsmc.v6i3.344.

———. 2017. *River Dialogues: Hindu Faith and the Political Ecology of Dams on the Sacred Ganga*. ~~Tuscon~~Tucson: University of Arizona Press.

Gergan, Mabel Denzin. 2016. "Living with Earthquakes and Angry Deities at the Himalayan Borderlands~~.~~." *Annals of the American Association of Geographers* 107 (2): 490–~~498~~98.

Gosling, David L. 2001. *Religion and Ecology in India and Southeast Asia*. New York: Verso.

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Goslinga, Gillian. 2012. "Spirited Encounters: Notes on the Politics and Poetics of Representing the Uncanny in Anthropology." *Anthropological Theory* 12 (4): 386–406.

Government of India. 2008. *National Action Plan on Climate Change*. New Delhi: Prime Minister's Council on Climate Change. Available at: http://www.moef.nic.in/downloads/home/Pg01-52.pdf (accessed 13 October 2017).

Haberman, David L. 2006. *River of Love in an Age of Pollution: The Yamuna River of Northern India*. Berkeley: University of California Press.

———. 2013. *People Trees: Worship of Trees in Northern India*. New York: Oxford University Press.

Halperin, Ehud. 2017. "Winds of Change: Religion and Climate in the Western Himalayas." *Journal of the American Academy of Religion* 85 (1): 64–111.

Immerzeel, Walter W.;, P. H. Ludovicus; Marc. F. P. Bierkens. 2010. "Climate Change Will Affect the Asian Water Towers." *Science* 328: 1382–138585.

Jain, Pankaj. 20112. *Dharma and Ecology of Hindu Communities: Sustenance and Sustainability*. Farnham, Surrey: Ashgate.

Jenkins, Willis, and Christopher Key Chapple. 2011. "Religion and Environment." *Annual Review of Environment and Resources* 36: 441–463363.

King, Sarah J. 2015. "The End of the World as We Know It? Apocalypticism, Interdisciplinarity, and the Study of Religion." *Journal of the American Academy of Religion* 83 (2): 422–43131.

Minister's Council on Climate Change, Government of India. 2008. *National Action Plan on Climate Change*. New Delhi: Government of India, Prime Minister's Council on Climate Change. http://moef.gov.in/wp-

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Nagaranjan, Vijaya Rettakudi. 1998. "The Earth as Goddess Bhu Devi: TowardsToward a Theory of Embedded Ecologies in Folk Hinduism." In Lance E. Nelson (ed),In *Purifying the Earthly Body of God: Religion and Ecology in Hindu India*, pp.edited by Lance E. Nelson, 269–29696. Albany: State University of New York Press.

Obadia, Lionel. 2011. "Political Ecology and Buddhism: An Ambivalent Relationship." *International Social Science Journal* 62 (205–6): 313–23.

Orlove, Ben, Ellen Wiegandt, and Brian H. Luckman. 2008. "The Place of Glaciers in Natural and Cultural Landscapes. In Ben Orlove, Ellen Wiegandt, and Brian H. Luckman (eds),In *Darkening Peaks: Glacial Retreat, Science, and Society*, pp.edited by Ben Orlove, Ellen Wiegandt, and Brian H. Luckman, 3–19. Berkeley: University of California Press.

Obadia, Lionel. 2011. Political Ecology and Buddhism: An Ambivalent Relationship. *International Social Science Journal* 62(205–206): 313–323.

Qiu, Jane. 2013. "Floods Spur Mountain Study: Himalayan Nations Take Action in Response to Changing Climate and Its Deadly Effects.." *Nature: International Weekly Journal of Science* 501 (05 September 5): 14–15.

Schielke, Samuli, and Liza Debevec. 2012. Introduction to *Ordinary Lives and Grand Schemes: An Anthropology of Everyday Religion*. New York: Berghahn.

Schiermeier, Quirin. 2011. "Extreme Measures: Can Violent Hurricanes, Floods, and Droughts Be Pinned on Climate Change? Scientists areAre Beginning to Say Yes.." *Nature: International Weekly Journal of Science* 477 (08 September 8): 148–14949.

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http://moef.gov.in/division/environment-divisions/climate-changecc-2/national-action-plan-on-climate-change/

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Schielke, Samuli and Liza Debevec. 2012. 'Introduction'. In Samuli Schielke and Liza Debevec (eds), *Ordinary Lives and Grand Schemes: An Anthropology of Everyday Religion*, pp. 1–16. New York: Bergdhahn Books.

Spivak, Gayatri Chakravorty Spivak. 1988. "Can the Subaltern Speak? In Cary Nelso and Lawrence Grossberg (eds),?" In *Marxism and the Interpretation of Culture*, pp.edited by Cary Nelson and Lawrence Grossberg, 271–313. Chicago: University of Chicago Press, 1988.

Szerszynski, Bronislaw. 2017. "Gods of the Anthropocene: Geo-Spiritual Formations in the Earth's New Epoch.," *Theory, Culture &and Society* 34 (2–3): 253–27575.

Taylor, Bron. 2010. *Dark Green Religion: Nature Spirituality and the Planetary Future*. Berkeley: University of California Press.

———. 2016. "The Greening of Religion Hypothesis (Part One): From Lynn White, Jr and Claims thatThat Religions Can Promote Environmentally Destructive Attitudes and Behaviors to Assertions They areAre Becoming Environmentally Friendly.," *Journal for the Study of Religion, Nature, and Culture* 10 (3): 268–305. https://doi.org/10.1558/jsrnc.v10i3.29010.

United Nations Environment Programme (UNEP). 2009. *Recent Trends in Melting Glaciers, Tropospheric Temperatures over the Himalayas and Summer Monsoon Rainfall over India*, www.unep.org/dewa/Portals/67/pdf/Himalayas.pdf,. Nairobi, Kenya: UNEP. https://wedocs.unep.org/bitstream/handle/20.500.11822/8536/-Recent%20trends%20in%20melting%20glaciers,%20tropospheric%20temperatures%20over%20the%20Himalayas%20and%20Summer%20Monsoon%20Rainfall%20over%20India%20-2009Himalayas.pdf?sequence=3&amp%3BisAllowed=.

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~~accessed February 3, 2010.~~

Vásquez, Manuel A. 2009. "The Limits and Hydrodynamics of Religion~~.~~." *Journal of the American Academy of Religion* 77 (2): 434~~: 445–45~~.

Veldman, Robin Globus, Andrew Szasz~~,~~ and Randolph Haluza-Delay. 2014. "Social Science, Religions, and Climate Change~~. In Robin Globus Veldman, Andrew Szasz, and Randolph Haluza-Delay (eds),~~." In *How the World's Religions ~~are Repsonding~~Are Responding to Climate Change: Social Science Investigations*, ~~pp.~~edited by Robin Globus Veldman, Andrew Szasz, and Randolph Haluza-Delay, 3–19. New York: Routledge.

White, Lynn Townsend, Jr. 1967. "The Historical Roots of Our Ecological Crisis~~.~~." *Science* 155 (3767): 1203–~~07~~7.

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[1] To explore just a few of the relevant texts, readers might refer to the work of Kelly Alley (2002), Evan Berry (2015), David Gosling (2001), David Haberman (2006, 2013), Pankaj Jain (2011~~2~~); Bron Taylor (2010, 2016); Lynn White (1967). Also relevant are a series of edited volumes published by Harvard University Press on the topic ~~of "Religions~~religions of the ~~World~~world and ~~Ecology"~~ecology (see~~:~~ http://www.hup.harvard.edu/collection.php?cpk=1057).

[2] Three seminal texts come to mind in this regard within the discipline of anthropology. Two of ~~these~~them are the long-term efforts of Susan A. Crate (2008) to understand the impacts of climate change on the ~~livelihoods~~livelihood-maintaining Siberian deity known as the "bull of winter" and the subsequent efforts of ~~Susan A.~~ Crate and Mark Nuttall to compile a series of empirical and ethnographic chapters on cultural responses to climate change ~~in~~their 2009 book ~~entitled,~~ *Anthropology and Climate Change: From Encounters to Actions*. ~~A~~The third is the work by Orlove, ~~et al.~~Wiegandt, and Luckman (2008) to understand how melting glaciers ~~impact upon~~affect cultural and religious practices in the Andean mountains.

[3] The phrasing of this query is a nod ~~towards~~toward the landmark provocation for subaltern studies posed by Gayatri Chakravorty Spivak (1988).

[4] Maharaj means "Your Holiness" and is a respectful way of addressing a deity.

[5] In Hindi, the suffix ~~"~~ *ji*~~"~~ is often added to proper names to express deference and respect.

[6] Lionel Obadia (2011), for instance, argues that despite top-down calls to protect the flora and fauna of the Himalaya, numerous ~~"~~pragmatic concerns~~"~~ have encouraged mountain residents to engage in environmentally sound activities.

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