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Article in *TOPIA Canadian Journal of Cultural Studies* · May 2009

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## Bodies of Water, Human Rights and the Hydrocommons

### ABSTRACT

Our own bodies, which are primarily composed of water, elucidate the problem of thinking about bodies in binaristic terms as either “natural” or “cultural.” We are both materially and semiotically entwined with other bodies of water in a gestating, differentiating and interpermeating relation. This paper begins by laying out this relation as an “onto-logic” of amniotics, which is in part clarified through Gilles Deleuze’s theory of difference and repetition. I move on to propose that thinking about our amniotic relations to other human and more-than-human watery bodies can help us reconsider the rapid development of new hydrological technologies, water commodification and other stresses on our water resources. While these mounting crises have led to international calls for recognizing water as a human right, I suggest that the promotion of a radically embodied “hydrocommons” might be better suited for negotiating the interbeing of bodies of water on this planet.

### RÉSUMÉ

Nos corps, dont la matière première est l’eau, nous permettent d’écarter le problème consistant à penser le corps en termes binaires, soit « naturel », soit « culturel ».

Nous sommes à la fois matériellement et sémiotiquement liés à d'autres corps d'eau dans une relation de gestation, de différenciation et d'inter imprégnation. Cet article commence par exposer cette relation comme une « ontologie de l'amniotique », idée éclaircie en partie par la théorie de Gilles Deleuze sur la différence et la répétition. Je suggère ensuite que le fait de penser nos relations amniotiques aux autres corps d'eau, humains et plus qu'humains, peut nous aider à reconsidérer le rapide développement des nouvelles technologies hydrologiques, la commercialisation de l'eau et les autres phénomènes pesant sur les ressources en eau. Tandis que des crises de plus en plus graves ont suscité une prise de conscience internationale pour que l'eau soit considérée comme un droit humain, je propose de valoriser le concept radical de « communauté hydrique », qui serait peut-être mieux adapté pour négocier la coexistence de corps d'eau sur cette planète.

✕

There is a glass of water on the table beside you. You pick it up and take a sip. This water will feed your blood and nourish your muscles, cradle your organs and serve as vital conduit and communicator between your farthest flung bodily outposts. But it will not remain yours for long. This water will leave you, spreading across your skin when you sweat, rolling down your cheeks when you cry and expressing your ecstasy when you love. It will begin its journey to the filtration plant the next time you go to the bathroom. And, in all of these leave-takings, this water will carry small meanings and materialities of you with it. Which of your emotions will be diverted or dammed when this water is converted into hydroelectric power, displacing the caribou and the Cree? Which of your senses will dry up as this water is relentlessly extracted from its centuries-old home in an underground aquifer northwest of Toronto? Which of your thoughts will be polluted and poisoned while two to four barrels of water is irremediably damaged to wash every barrel of bitumen extracted in Northern Alberta? Which of your movements will be squeezed from the earth, along with this water, so that they may be bottled and sold by those who claim ownership? All of this biology, all of this chemistry, all of this affect, politics, economics and ethics—all of this is in that glass of water from which you sip.

Our bodies thus reveal to us the problem with any reductive dichotomization of water as natural or cultural. While the 60-90 per cent of ourselves that is comprised of water is undoubtedly biological, we nonetheless live our bodies of water as brimming with economic, cultural and otherwise semiotic potentiality. The “nature” of our bodily water is meaningful and meaning-making, just as the porosity, fluidity and leakiness of our selves are no mere metaphors. Our bodies have cultural or social meaning not despite their wateriness, but rather because of and through their watery constitution: water animates our limbs, expresses our emotions, enables our reproductive proliferation. But moreover, our bodies of water open up to and intertwine with the other bodies of water with whom we share

this planet—those bodies in which we bathe, from which we drink, into which we excrete, which grace our gardens and constitute our multitudinous companion species.<sup>1</sup> Our bodies of water are necessarily inaugurated into a relationship with the rest of the earth's water that is neither merely biological nor only social or cultural. But just because such a “naturalcultural”<sup>2</sup> relation inevitably persists does not mean that we, as human bodies of water, are necessarily adept at cultivating or nurturing this relationship in a responsible way.

In this paper, I first explore how the biological materiality of our bodies is inextricably bound up in their cultural or philosophical meanings. I undertake this exploration by describing one logic according to which our bodies of water express themselves, which I call an onto-logic of *amniotics*. I propose that this onto-logic can help us reconsider the precarious relation between human bodies of water and the other-than-human bodies of water to whom we are intimately connected. The problematic nature of this relation is becoming increasingly clear in contemporary water crises and the suspect ways in which we are managing this planet's water resources. While these crises have led to international calls for recognizing water as a human right, an onto-logic of amniotics requires us to rethink this ecopolitics; I suggest that the promotion of a “hydrocommons” might be better suited for negotiating the interbeing of bodies of water on this planet.

## An Onto-logic of Amniotics

An amnion is the innermost membrane that encloses the embryo of a mammal, bird or reptile (animals otherwise known as amniotes), and it contains the amniotic fluid that surrounds the gestating fetuses of these amniotes. In other words, the amnion facilitates the watery world necessary for the gestation of all life for those creatures that have left water in favour of a terrestrial habitat (even if some, like whales, have since returned to the sea). The amnion literally establishes the watery gestational habitat necessary for the proliferation of life.

This understanding of the amnion and its purpose, location and relations suggests to me a certain logic—or a specific modality of being—in which bodies of water partake. As bodies of water, our being is facilitated by a watery environment, but as bodies of water we necessarily incorporate that gestational element within us.<sup>3</sup> We are thus a repetition of the water that gestates us, but a repetition that also differentiates a body from its gestational habitat. So as we repeat as bodies of water, we also express difference. In an amniotic relation, the membrane that separates the gestational body from the proliferating body of repetition and difference is not a divisive barrier, but rather an interval of passage: the amnion is solid enough to differentiate, but permeable enough to facilitate exchange. Furthermore, this interpermeation is never symmetrically reciprocal. The amniotic interval rather establishes a relation of gift, debt, relinquishment and mutual response. The very asymmetry of these relations is what accounts for the necessary difference between

the two bodies and the active proliferation of life that accompanies their relation. We are created in water, we gestate in water, we are born into an atmosphere of diffuse water, we drink water, we harbour it, it sustains and protects us, it leaves us—we are always, to some extent, in it. The passage from body of water to body of water is never merely metaphoric, but rather radically material. The watery condition of being literally flows into, out of and from beings themselves in a multiplicitous hydrological cycle of becoming—evolutions of gestation, repetition, differentiation and interpermeation. Although this narrative is in one sense blandly scientific, this amniotic relation also opens up a philosophical proposition: these watery becomings also suggest an onto-logic of bodies of water that I call “amniotics.”<sup>4</sup>

An onto-logic is a common way of being expressed across a difference of beings. As opposed to the way in which ontology is traditionally understood, an onto-logic does not propose to solve the question of Being, nor does it purport to reveal or describe all of being’s facets or potential expressions. Like a template, an onto-logic can highlight something that helps us understand a common *how*, *where*, *when* and *thanks to whom* that seemingly disparate beings share. Though the amnion technically belongs to a specific group of animals, the onto-logic suggested by this amniotic relationship reveals the commonality of watery bodies, amniote or otherwise. These bodies include human and other-than-human animals, plant life, fungi, bacteria and protists, as well as elemental and geophysical bodies of water. As we shall see, this onto-logic even holds for some technological bodies of water. In short, the onto-logic of amniotics can be applied to any material choreography primarily composed of water, and human bodies are but one, albeit a philosophically significant example, among these watery bodies. As an onto-logic, amniotics does not suggest that all of these bodies of water are the same in terms of their being, but rather that bodies of water share a connected *way* of being because they are bodies of water. Nor, it must be noted, is amniotics the only onto-logic that watery bodies or relations of bodies might express.<sup>5</sup> Amniotics specifically suggests that one way of watery being involves the aforementioned cycles of gestation, differentiation, repetition and interpermeation.

Moreover, it should be stressed that the onto-logic of amniotics is suggested by bodies of water themselves. As an onto-logic, amniotics is not a theory I try to apply to bodies, but rather a radically material, immanent expression of life for which I am seeking an adequate philosophical formulation. While scientific accounts can explain these watery processes and relations on their own terms, and while social, cultural, ethical or political relations could never be definitively severed from the biological materiality of water, I am wondering what the interbeing of watery bodies might teach us about what it means to be a body of water in philosophical and cultural terms. What sort of ethical and political relations are inaugurated among specifically human bodies of water, and between human and non-human bodies of water? How is the natural expressed through the cultural, and how is

the cultural indebted to the natural? Exploring our bodies of water through the notion of a materially grounded onto-logic allows me to ask such questions, and sketch out one way in which the matter of our watery bodies does indeed “matter.” Insight into this “mattering” can be gained by more explicitly thinking through the other-than-biological meaning of the hydrological cycles in which our bodies of water participate.

## Deleuze and the Difference and Repetition of Water

As Deleuze’s theory of difference and repetition teaches us, our common understanding of repetition leads us to conceptualize repetition primarily in terms of the identical—what repeats is the same, only at a different time, perhaps in a different place. Yet such an understanding of repetition, Deleuze explains, conceals the way in which, through distribution and temporal displacement, difference, or the force of differentiation, is all that can truly repeat. Through repetition, difference is selected and distributed. Accordingly, there is nothing that unifies “the different” except its repetition, or force of becoming, or capacity to produce (Deleuze 1994: 28, 41). For Deleuze, then, repetition is a cyclical force, but what returns through this cycle is always different.

Deleuze’s theory of difference and repetition helps us understand how our bodies of water express an onto-logic of amniotics: although the water we are is always coming from somewhere and moving somewhere new, this water is always different—perhaps not in its chemical scientific properties, but in terms of its forms, rhythms, meanings and gestational potential. Each return takes up singular expressions: evaporation, condensation, precipitation, transpiration; the water I drink, the water that carries nutrients to my foetal body, the water that cushions my body as I bump into a chair, the water that protects the body within my body; the water I excrete and expel, and which returns, always differing, becoming different, to other strata—ebbing, dripping, raining, flushing. Our planet produces no water in addition to that which was always already here, yet it is not in spite of, but rather because of water’s “closed” system that the difference of water continues to generate itself. Because this water is always becoming, it is always seeking out differentiation, even as its brute materiality, one might say, seemingly repeats.

Deleuze also elaborates the concepts of virtuality and the embryonic to help elucidate this concept of differentiation. For Deleuze, this process of differentiation is a form of gestation. He uses the image of the embryo to describe the latent potential held by a becoming body that is never exhausted in the process of repetition (Deleuze 1994: 118, 214-15, 250-51). The embryo expresses the virtual, or that cloud of indetermination that is attached to every actual, yet which nonetheless is part of its material “reality”; this virtual potential is as “real” (and as ontologically substantial) as the actual body (Deleuze 1994; Deleuze and Parnet 2002). The gestational virtual helps us understand the creative, proliferative cap-

acity of water as a life force. Even though our planetary water might be thought of as a closed system, this does not mean that what is gestated by this materiality is predictable or knowable in advance. This embryonic unknowability seeps from all of water's gestational potential already held latent within its materiality. The virtual is inexhaustible, and hence water might be better described as an "open/closed" system. Even as water continues to cycle through endless repetitions, differentiation always remains a creative force.

This description of watery difference and repetition further complicates any understanding of the water of our bodies as mere biological function or mechanical animator of anatomic form. By appreciating the way in which a Deleuzian scaffold of difference and repetition can be mapped on and through these same bodies, we can apprehend the water of our bodies emerging as a proliferative life force, teeming below and seeping through and across our surfaces, as differentiator and connector of our meaningful interbeing. We see more clearly how amniotics not only describes a singular relational instance in the gestation of an amniote, but suggests an onto-logic for the interbeing of bodies of water more generally. Moreover, this onto-logic powerfully challenges our traditional Western metaphysical presuppositions of Being as concomitant with anthropocentric humanistic individualism, as self-realized, as discrete in space and time. Following from this, I propose, the onto-logic of amniotics can offer new grounds for thinking about how vastly different bodies of water can sustain and nurture one another. If we acknowledge that we all, as bodies of water, repeatedly gestate, interpermeate with and differentiate from our watery others through this radically embodied hydrological cycle—that is, if we acknowledge that we are neither materially nor semiotically discrete from one another, even as we maintain our difference—what sort of social and political responses to other watery bodies are demanded of us? How might we give thanks to our gestational habitats at the same time as we nurture those same habitats within us? How can we cultivate the further proliferation of watery life? How might we account for our differences while demanding our interconnection? What are our specific responsibilities as *human* bodies of water?

In the remainder of this paper, I explore how an onto-logic of amniotics might help us rethink our ecopolitical paradigms and strategies for ensuring protection of our planet's water as a necessary resource for life. How does amniotics resist the call for explicit recognition of water as a human right? How does amniotics open to a reframing of "the commons"? To lead into this discussion, let us first briefly remind ourselves of the situation that has necessitated such ecopolitical endeavours in the first place.

## New Hydrological Technologies and Amniotic Imbalance

The water crisis our planet is currently facing is, like the hydrological cycle itself, not one coherent crisis, but rather a series of overlapping crises that exacerbate each other. While popular opinion assumes that the world is running out of water, the total amount of water on earth is in fact basically unchanged since prehistoric times. But this does not mean we do not have a crisis of freshwater supply: around the globe, on every inhabited continent, streams and rivers run dry, lakes are drastically shrinking, and deep and ancient aquifers are being critically depleted. This water is not disappearing, but being transformed and rerouted, most often in ways that render it unusable for our current human and many companion species' needs. Importantly, the crisis of supply is intimately linked to the crisis of water quality: Is our water fresh or increasingly salty? Frozen or flowing? Where we need it or where we don't? Clear or clouded? Disease-free or cholera-ridden? Home to healthy fish populations, or only crude oil tailings? And, even if usable water is abundant, further crises assert themselves in terms of control and management, privatization and profiteering. We need to ask not only whether one has access to water, but who has access to water, and at what cost—financial and otherwise.

While a fraught and tenuous relation to our planet's geophysical bodies of water is certainly nothing new in terms of the evolutionary history of species on this planet, the magnitude, global scale and acceleration of our current crises are unprecedented in human history (de Villiers 2003: 6-18; Postel 1997: xi-xii). Moreover, although contemporary water thinkers and writers express varying views on the potential of technology to remedy our woes, virtually all nonetheless agree that our current crises have been significantly exacerbated by some of our human technological projects, and specifically new hydrological technologies.

This choice of phrase—new hydrological technologies—underlines the fact that hydrological engineering is nothing new. At least as old as the beaver, hydrological technologies have existed until recently with little adverse impact on our planetary ecosystems. In fact, technological bodies of water may also partake in the ontology of amniotics I describe above. For example, the traditional acequia systems, or irrigation ditches, of the upper Rio Grande Valley in Colorado embody the proliferative life force of water. These acequia express the relation of gestation (as soils, plants and animals flourish), differentiation (through strengthening biodiversity), repetition (the sustainability of the long-standing system perseveres although the water flowing through the ditches continually moves on to other, new expressions) and interpermeation (as the meaningful connections between the human, non-human, vegetable and geological participants in San Luis and the surrounding community are sustained).<sup>6</sup> Technologies such as these acequia, along with the drip irrigation systems of Israel and India (de Villiers 2003: 387-89; Pearce 2006: 373-76), or the blue, garden roofscapes that are increasingly



appearing in cities such as Vancouver and Montreal (Rose 2007: 58-60), nourish the balance of the amniotic relations I described above.

But many new hydrotechnologies (or NHTs, as I refer to them below) do not sustain this same relation. Rather than supporting our onto-logic of interpermeation, gestation, repetition and differentiation, many NHTs are stretching this balanced logic to untenable limits and critically rechoreographing our planet's many geophysical bodies of water. For example, under the influence of NHTs, if geophysical bodies of water can collect enough means to sustain themselves, they have nothing left to give to gestation. This is the story of corporatized water mining by Coca Cola in India (Mathiason 2006) and industrial irrigation that has led to droughts and aquifer depletions in Pakistan, Egypt and Nevada, U.S.A. (de Villiers 2003: 152-58). Under the influence of NHTs, a body of water's routes of interconnectivity may be so radically rearranged that gestation loses its proliferative, differentiating rhythm. This is the story of the monumental dams over the Volga in Russia and the Narmada in India (de Villiers 2003: 127-51; Roy 2001: 62-86), the James Bay hydroelectric projects in Northern Quebec (Richardson 2008) and the manufactured Aral Sea canals in Central Asia (de Villiers 2003: 113-26; Young 2006: 183). Such grand feats of engineering seek to "bring water to the people" (Pearce 2006: 289-301), but remain ignorant of the bodies of water they leave behind, or literally in their wake. This is also the story of golf courses, fountains and green lawns in the middle of a southwestern U.S. desert that feed one human desire while denying the benefits of this onto-logic to other bodies of water, human or otherwise (Barlow and Clark 2002: 238; de Villiers 2003: 17). Under the influence of NHTs, if bodies of water enter a cycle of repetition, these bodies return in identical, invasive and homogenizing replicas. This is the story of straightening out rivers to facilitate shipping lanes on the Mississippi (Bijker 2007; Protevi 2006), or mining and commodifying water to facilitate that ubiquitous plastic bottle far too many of us have at hand (Barlow and Clarke 2002: 142-50; Glennon 2003). Largely thanks to such NHTs and the trend toward the commodification of water that spurs them on, an estimated 5.5 billion people, or more than two-thirds of the world's population, will have inadequate access to water by the year 2025 (Shrybman 2007: 1).

### On How to Respond: Human Rights or Common Wealth?

As feminist philosopher Nancy Tuana so aptly notes, "[i]t is easier to posit an ontology than to practice it" (2008: 209). In other words, even if we acknowledge that our own watery selves are neither ontologically discrete nor self-sufficient, we still might not know how to respond adequately to other watery bodies with whom we are gestationally and differentially intertwined. Even while we have been responding to our morphing geophysical bodies of water all the time—for example, through wastewater management plans, water rights regimes,<sup>7</sup>

privatization schemes and disaster preparedness plans—these ecopolitical tools and the paradigms upon which they are built are mostly narrow in focus; they offer only a limited appreciation of the role and meaning of geophysical water in relation to other bodies of water.

Attempts have been made, nonetheless, to offer paradigms of response that could embrace the multifaceted ways in which we relate to, rely on and reciprocally affect bodies of water. In the remainder of this paper, I want to briefly examine two such responses: the growing international call to recognize water as a human right; and the call to support a water commons. Both discourses and practices of human rights and commons could be analyzed according to a variety of important criteria, including their political effectiveness, practicability and—not least—their remedy of social injustice. My interest here, however, is to examine the extent to which these paradigms are able to cultivate an onto-logic of amniotics. As we will see, each of these responses creates different possibilities for taking up the challenge of actually “doing” an onto-logic of amniotics.

In the shadow of increasing recognition of the troubling impact of many NHTs, we are now hearing an escalating call from water activists around the world to recognize water as a human right: both as a moral right that should be guaranteed to all humans, and also as a legal right that should be explicitly protected in the expanding machinery of international human rights law. Arguably, because water is a basic human need, it must be concomitantly recognized as a fundamental human right (Gleick 1996; 1998). Although the right to water is currently not spelled out as such in any of the major United Nations treaties or conventions,<sup>8</sup> some progress towards this recognition has already been made. Notably, General Comment 15 of the United Nations Committee on Economic, Social and Cultural Rights of 2002 recognizes the right to water as the cornerstone for realizing all other human rights. This comment, as well as the legal scholarship of many experts, outlines how the right to water is already implicit in the internationally declared and legally enshrined right to life, right to food, the right to health, and the right to dignity, among others (Young 2006; Gleick 1998; Scanlon et al. 2004). That water is necessarily a human right is also implicitly recognized in the constitutional law of more than fifty countries, through either a right to safe drinking water or the right to a healthy environment (Scanlon et al. 2004: 42-50). South Africa, and more recently Uruguay, are globally distinguished in their recognition of an explicit right to water in their constitutional law (Bakker 2007: 438; Young 2006: 64; Scanlon et al. 2004: 50). Despite these positive steps, rights-proponents argue that these efforts need to be consolidated in the explicit recognition of water as a human right in a specific, binding, international treaty. Such a move would not only alleviate the burden of the water-poor, but also pressure governments as the assumed custodians of water and their populations’ well-being to manage our planet’s water more thoughtfully, effectively and equitably through specific national means of implementation.

The campaign for the right to water is gaining ground, spurred on particularly by Canada's own Council of Canadians and the Polaris Institute, but joined by many activist and grassroots organizations throughout the world. The 2008 appointment of Canadian Maude Barlow—one of the world's most vocal advocates for the right to water—as the UN's first Senior Advisor on water issues underlines this momentum. Yet not all view the promise of the right to water so unequivocally. Some criticisms are lodged less against the right to water specifically, as they are aimed at the inefficacy of the international human rights machinery and its dubious enforcement mechanisms more generally. Thus the question is raised as to whether enshrining a more explicit right to water would remedy much in real terms (cf. Bakker 2007: 438; Young 2006: 64). But my specific question here is: how effectively can the paradigm of human rights sustain and nurture an ontology of amniotics? My exploration of this question draws on various specific critiques of the right to water, while also engaging in a critical naturalcultural analysis of international human rights jurisprudence.

The first problem with the human right to water concerns the grounding of this right in terms of quantitative “access to a basic water requirement” (Gleick 1996; 1998). In South Africa, for example, the right to water has been implemented variously through a series of “trickler” taps that regulate the amount of free water that can run through a home's taps (e.g., 50 litres per day, per resident), or prepaid water meter cards that provide a certain amount of “free” water (e.g., six kilolitres per month, per household). Yet in such cases substantial needs remain unmet, either because of the cost of the water card itself, homelessness (and hence taplessness), or the brute insufficiency of the free water allotment (Bond n.d.). Such problems may be interpreted as bad faith on the part of the government, or simply as insufficient solutions to a solvable problem. However, South African water specialist and anti-privatization advocate Patrick Bond notes that the optimal way to guarantee the right to water in South Africa would be to provide a larger free lifeline amount of water to each person, while luxury use (above a certain amount) should be taxed. In other words, a guaranteed quantity remains the cornerstone of implementation. Bond is not alone in his conclusions; because of the widespread conviction among rights-advocates that “[t]here is enough fresh water on earth to meet all of human needs,” many rights-advocates insist that the focus must be on equitable management to meet quantifiable basic needs (Filmer-Wilson 2005: 229).

From the standpoint of amniotics, the ethical motivation of such calls cannot be faulted, and the question of management indeed requires urgent attention. But this quantifiable basic needs approach raises other questions in relation to our naturalcultural watery bodies. While UN General Comment 15 recognizes the importance of water for our cultural, social and spiritual well-being, the seemingly inevitable slip of such declarations into “minimum lifeline amounts” appears unable to legislate for these same non-quantifiable dimensions of our reliance on

and relation to water. We are thus left with an understanding of water that looks merely and primarily to our physiological basic needs. How could a guaranteed amount of water address the central importance of certain bodies of water to First Nations people? For example, the Echamamish River that “flows-both-ways” has served as a sacred site for the Cree long before the arrival of Europeans in what is now called Manitoba (Canadian Heritage Rivers Board 2000: 14; Petersen 2006). Despite declared intentions to the contrary, a human rights platform with a basic needs approach quantifies water independent of context and situatedness that imbue water with far more than quantifiable use-value. We survive in more ways than one, and our basic water needs are not only physiological, but indeed, naturalcultural. Our implication within the hydrological cycle is not only biological, but social, ethical, political and cultural.

Similarly, a human rights paradigm is unable to accommodate the various interpermeations of our bodies of water. The first of these is the fluid ontology of the geophysical bodies of water from which we draw in order to satisfy our basic needs. If we examine the legal machineries that would be required to guarantee a right to water, we see how our interpermeating water sources refuse to be contained by them. In such machineries, enforcement is premised on the sovereignty of the nation state, whereby nation states are responsible for ensuring protection of human rights within their borders. Even if the international human rights machinery could hold states accountable for what goes on in their territories, how could this machinery address problems that defy the notion of sovereign state boundaries altogether? How can the state, as the ultimately accountable entity for ensuring the right to water to its population, regulate a resource that refuses to be contained? Bodies of water—of all kinds—are not stable or discrete bodies, but bodies that move, flow, become, evaporate, while also interpermeating all other bodies of water. Guaranteeing water for bodies within an arbitrarily bounded territory defies the onto-logic according to which bodies of water express themselves. As long as geopolitical nation states remain the primary guarantor of human rights, this paradigm will be unable to respond to a relational ontology of leaks and flows.<sup>9</sup>

Interpermeation continues to challenge the logic of the right to water when we consider the fact that within the human rights paradigm, priority is granted to the individual as the subject of rights. Even in cases (such as the 1986 United Nations Declaration on the Right to Development) where the rights of peoples to natural resources are also foregrounded, human rights jurisprudence nonetheless grants primacy to the discrete individual as the beneficiary of any right (Panikkar 1982; Sengupta 2000: 3). Hence the call for explicitly granting a right to water to each human individual, according to human rights jurisprudence, must prioritize the needs of the thirsty individual before the law at any given time over the needs of the watery web of beings that gestated and sustained that individual, and which she must gestate and sustain in return. I am not arguing that we ignore the

thirsty individual, but only that quenching this thirst without attending to the river, the tree, or the land itself that may also be thirsty is not sustainable.<sup>10</sup> The co-implication and interpermeation of amniotic relations are silenced under the individualistic humanism of human rights jurisprudence.

The problems with such individualistic humanism are further highlighted if we consider how in many instances, states such as South Africa have attempted, at least in part, to guarantee the quantifiable right to water through privatization. Indeed, as Bakker (2007) points out, there is nothing in the notion of rights that necessarily rejects the privatization, commodification and corporatization of water resources if a government feels these to be appropriate means for satisfying the right to water. In fact, Bakker remarks, the campaign for the right to water has been joined by some very strange bedfellows, including the World Bank, the World Water Council (viewed by many anti-privatization activists as pro-privatization) and many large multinational corporations advocating for the privatization of water services (Bakker 2007: 439-40). Such defenders of the right to water insist on the importance of ends rather than means. But while the coupling of human rights and privatization/commodification may seem an unlikely alliance, we must remember that private property was one of the first rights to be considered in the Western evolution of human rights, and the contemporary doctrine of national sovereignty over a nation's own resources continues this tradition.<sup>11</sup> In many ways the notion of rights and the claim to private property by the individual human have always gone hand-in-hand. Yet the onto-logic of our bodies of water defies the very notion of private property. Our bodies of water are inherently public, common and shared. Perhaps we should ask whether the human rights tradition could ever be adequate to this onto-logic?

Moreover, alongside our many interpermeations we have also noted that differentiation is a simultaneous movement of an onto-logic of amniotics. This poses a further problem in terms of the subject positions established in human rights law, and the philosophy that grounds it. Just as the notion of the discrete individual is a cornerstone for human rights law, this paradigm also rests upon the fundamental principle of non-discrimination. While non-discrimination has never been ultimately fulfilled in the implementation of human rights law, it nonetheless remains the key sentiment to which this law aspires.<sup>12</sup> We are apparently all "born free and equal in dignity and rights" (UN Universal Declaration of Human Rights, Article 1), and our entitlement to these rights is "without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status" (Article 2). At the same time, the need for more explicitly articulated treaty rights (on racial non-discrimination, the rights of women, or the rights of the child, for example) establishes an irresolvable tension in human rights jurisprudence between the equal rights of all and the differentiated rights of some; hence the impossibility of equality reveals itself under human rights' own roof. Indeed, many

argue that the human rights paradigm has been ruefully unable to adequately address the question of difference *as difference*. Without this capacity, a human rights paradigm is hard-pressed to accommodate the necessary interpermeation of difference that the onto-logic of amniotics reveals to us. Simply put, a human rights paradigm may be unable to listen to difference, much less respond to it.

If this is the case in terms of differentiated human bodies of water, it is even more the case with non-human bodies of water. Unfortunately, viewing access to water as a human right is undeniable anthropocentric. Bodies of water, as an amniotic onto-logic illustrates, are far more than human bodies, but include other animal bodies as well. How can granting the right to water to people address non-human watery bodies—bodies that not only depend upon the water we humans replicate and differentiate through biological and technological processes, but on whom we humans also depend for our own gestation, sustenance and proliferation? In other words, this is not just a case of granting equal consideration to the interests of non-human animals—which is to say, it would not be sufficient to simply extend “the right to water” to non-human bodies. Rather, we must recognize that the interests of all bodies of water are co-implicated. Human bodies of water exist only because animal bodies of water have gestated us. This symbiotic-evolutionary gestation points to an imbrication of bodies that goes beyond a consideration of different but equally worthy interests. The current paradigm of human rights, on its own, is poorly equipped to attend to the importance of such interpermeations.

Additionally, thinking about our mutual interdependence as companion species leads to further complications with a rights-based approach. Although rights-activists stress the notion of duties and responsibilities that are inherent in the concept of rights (e.g., Filmer-Wilson 2005; Gleick 1998: 499), in practise these responsibilities are not altogether clear (cf. Young 2006: 64-65). How can ensuring the right of a human population to water simultaneously ensure that our responsibility toward that water is addressed? What if ensuring a right to water means drilling increasingly deeper wells, or plumbing increasingly shallow riverbeds? What of the right to water for industrial or livelihood purposes that result in its pollution or exploitation? How in turn does ensuring a human right to water affect a body of water’s gestational capacity in an (unknowable) future? Moreover, even if responsibility is indeed implicit in human rights jurisprudence, this responsibility is bound by the present, that is, by the sovereign territory of the state and the discrete human individual before the law, both contained within their presumably impermeable borders and both understood in their present (knowable) articulation. However, bodies of water, in their actuality and gestational virtuality, seep through such borders and show the inability of human rights discourses to fully account for them.

Water is moving, continuously proliferating in new beings, new forms of life. How can we know how the balance of fresh and salt water might shift in the years

to come? How can we know how the needs of watery bodies might change, grow or transform? Our increasing global population, the increasing sophistication of our hydrological technologies and the amazing ability of bodies of water to adapt to unfamiliar circumstances all indicate the difficulty of answering such questions. To base the strategy for the future life of our bodies of water on what we know *now* seems inadequate to the latent potential of our bodies of water. Again, I do not wish to claim that important social justice gains would not be inaugurated by insisting on a right of all human beings to a specified amount of water; indeed, many water-poor individuals could gain something here. I am rather suggesting that such a paradigm is limited in its focus, both temporally and in terms of the various bodies it seeks to address. Is there another ecopolitical approach we might look to that could extend an amniotic relation between all bodies of water, rather than circumscribing it?

One alternative is the call for the recognition of water as a commons. Broadly speaking, the concept of the commons refers to any creations of nature or culture that we inherit jointly or freely (Friends of the Commons 2004: 3). A commons implies not only common use of a resource, but also common responsibility. This means ensuring that our inheritance is appropriately managed so that it may be passed on to future generations undiminished, while also acknowledging that various models and systems of commons management exist (cf. Stern et al. 2002; Hanna 1990). Hence, the notion of a water commons concerns not only the management of the water supply that comes from our wells or taps or other localized delivery systems, but also common decision-making on the best use of geophysical bodies of water that we may not need for our personal use. Water commons management is about making decisions about the further proliferation of NHTs in all their forms and about allowing certain bodies of water their own rights—the right to proliferate, flow, gestate, differentiate. Nor is commons management a *laissez-faire* response; it might be better appreciated as an active form of non-ownership that lets other bodies of water be, at least to the greatest extent possible.

Despite Garrett Hardin's now infamous invocation of the inevitable "tragedy of the commons" (1968), past and ongoing management experience of water and other commons shows that indeed such tragedy is not a foregone conclusion. Even if Hardin's descriptions of the pollution and over-extraction of what were once common resources ring true in many respects, his diagnosis of the failure of the commons misses its mark. While the non-ownership of resources has sometimes resulted in their exploitation, of greater concern should be our failure to prevent the commodification of the commons and its appropriation for the benefit of a minority of privileged bodies.

In fact, as Shiva (2002) details, examples of ancient practices of local, communal water use and management practices illustrate the ways in which such systems are

able to thrive, in comparison to centralized and privatized systems whose failures continue to mount.<sup>13</sup> The success of a water commons paradigm is in part thanks to its insistence on the primacy of local community responsibility and management (Bakker 2007; Postel 1997; Shiva 2002). As trustees of a local commons, communities are best equipped to appreciate the unique qualities of water—its flowing nature, its essential role in the ecosystem, its important cultural and spiritual dimensions (Bakker 2007: 442). Yet, at the same time, to understand one’s local resources as held in trust (as opposed to having a right to that resource) implicitly acknowledges a responsibility to the ways in which that resource extends far deeper and farther than that community itself—out into and through a global water commons, thus collapsing the dichotomy of local and global.

In some ways, however, the commons is perhaps less an alternative to rights than it is a re-mapping of rights. Certainly, many of those who support the global water commons project are equally vocal in their call for the recognition of water as a human right.<sup>14</sup> Yet it seems mostly clear that advocates of a water commons reject the concept of water as a right as articulated through the individualistic, speciesist and private property-advocating aspects of this paradigm that were outlined above.<sup>15</sup> Shiva, for example, acknowledges the concept of water as a natural right, connected to the right to life and the resources needed to sustain it (2002: 20–21). She also acknowledges the significance of certain riparian systems, based on usufructuary rights and grounded in “the notion of sharing and conserving a common water source” (21), both as precursors to and examples of contemporary water democracies. Similarly, the Treaty Initiative to Share and Protect the Global Water Commons, drafted by Maude Barlow and Jeremy Rifkin, states “[t]he global fresh water supply is a shared legacy, a public trust and a fundamental human right and, therefore, a collective responsibility” (Blue Planet Project 2001). From the standpoint of a global water commons, then, rights can only be articulated in concert with a global and local responsibility that transcends both sovereign boundaries and private interests.

Moreover, although it could be argued that commons are established primarily to further *human* interest in sustainable maintenance of a resource upon which we depend, a notion of the commons nonetheless decentres the individual human subject, and explicitly recognizes the interests of the differentiated human, animal or vegetable other who may also rely on this water. Again, the treaty initiative notes explicitly that “the Earth’s fresh water belongs to the earth and all species.” Similarly, Shiva’s principles of water democracy, based on the notion of a commons, state that “all species and ecosystems have a right to their share of water on the planet” and notes that “water connects all beings and all parts of the planet through the water cycle” (2002: 35). While human rights law insists on the equality of all those before it, a commons explicitly connects those who have, seemingly, “nothing in common” as a common body. In short, a commons, unlike the notion of the individual right, recognizes the gestationality of bodies of water that implicates



them in interconnected cycles of difference and repetition. In a commons, attention extends beyond the human, and beyond the present. Users are not owners but custodians, and not of an individual instance or expression of water, but of its very right to flow: to gestate, to differentiate, to repeat and connect.

## Conclusion: Towards Radical Embodiment of the Hydrocommons

Perhaps the time of the commons is upon us. In current radical democratic political theory, the notion of the commons, or the common, is being increasingly invoked as a new paradigm for civil society—as both a place for action that can find commonality among difference, and as a counterstrategy to the globalized privatization of everything from spaces, to ideas, to forms of life (Dyer-Witthoford 2006; Felsenstein 1993; Friends of the Commons 2004; Hardt and Negri 2000, 2004; Klein 2001).

Despite the radical democracy that the notion of the commons seems to offer, there remains, however, the sense that current invocations thereof do not quite account for the reality of our bodies of water, and the vast and complex web of interbeing through which they flow, and which they themselves gestate and proliferate. While these calls for a return to the notion of commons are inspiring and encouraging, what one finds striking in the academic and activist literature on the new commons, particularly surrounding information and knowledge commons, is a stunning somatophobia—a fear of our fleshy material bodies which hold great untapped political and ethical potential.

For example, Hardt and Negri's latest work of political theory, *Multitude* (2004), outlines a theory of the common which they, like activists for a global water common, claim is necessary to counter the enclosure of not only material goods and terrestrial places, but of what they call "immaterial goods" (ideas, codes, affects), and forms of life itself. Significantly, Hardt and Negri claim that this new, contemporary common needs to be actively produced by us, so that through an expansion of the common the possibility of global democracy can be realized. What we need to do, according to Hardt and Negri, is "create a new social body" to mobilize the common (Hardt and Negri 2000: 204; 2004: 190, 192). Yet, at best, this seems to be a metaphoric body and certainly a flesh-less body that already transcends our material bodies. This dematerialization persists, moreover, despite Hardt and Negri's astute analysis of the ways in which the logic of enclosure profoundly affects material bodies, all the way to our DNA. Where, I wonder, are our fleshy, material and *watery* bodies in these political strategies? What might shift if we more overtly acknowledged our bodies, not only as objects of enclosure, but as agents and tools of resistance, as gestational matter for the commons to come? In other words, perhaps thinking about bodies of water "in common" offers not only an ecopolitical alternative to a human rights paradigm, but also provides a key opening for embodied radicalization of the commons more broadly.

In chapter six of her book *Water Wars*, Vandana Shiva discusses the possibility of “creating abundance out of scarcity.” She describes various local and decentralized systems of water management in India that have been able to use scarce water resources responsibly and effectively to meet the needs of local populations. In one such example, she writes about the water management strategies of the semi-arid province of Rajasthan. Here, Shiva quotes Anupam Mishra, who writes:

The people of Rajasthan did not mourn the lack of rain Nature bestowed upon them. Instead they took it up as a challenge and decided to face it in such a way that from top to toe the people internalized the nature of water in its simplicity and fluidity. (Qtd. in Shiva 2002: 119-20)

Mishra continues: “Rajasthan’s priceless drops of water are covered with sweat.” While Mishra might be speaking in metaphors, his words embody the reality upon which his figurative language relies: the water of his commons is literally internalized—incorporated and ingested, and thereafter expelled in sweat and tears and excrement. As bodies of water, we do not live as *bodies* on the one hand that require *water* on the other, but rather we live this formulation indivisibly; we are intimately bound up, both physiologically and semiotically, in our wateriness. Our bodies are the global commons that we seek to build—woven into it, dependent on it, and very much contributing to the gestation of its difference and repetition. The strategies of the commons that Shiva outlines implicitly recognize this connection. She concludes chapter six of *Water Wars* by noting, for example, that “the real solution to the water crisis lies in people’s energy, labor, time, care, and solidarity” (127). In other words, although our human bodies of water have exacerbated the situation, our human bodies of water also have the potential—and responsibility—to cultivate new relations with our watery others.

Like a traditional environmental ethic stresses a logic of preservation or conservation (cf. Evernden 1985: 4). The onto-logic of our bodies of water suggests movements of nurture, care and sustenance. Yet amniotics also reminds us that regardless of our human foibles or efforts, bodies will continue to differentiate, to proliferate. All watery bodies are moving (flowing, melting, evaporating) at one speed or another. Hence it seems we must pursue an ecopolitics that can accommodate the seeming contradiction at the heart of an onto-logic of amniotics: endurance and energy, sustainability and proliferation. Instead of contradiction, perhaps our watery bodies can teach us that the endurance that is also a life-proliferating force is rather a necessary tension, perched at the hinge of preservation and creation. This is a tension gently managed by the acequia irrigation systems in New Mexico, by the waterscaped roof garden in the middle of a concrete city or, more generally, in the cultivation of a water commons as a means of doing the onto-logic of amniotics. This tension is at the same time pushed beyond the brink of sustainability when we bottle water and sell it, or even claim that it is ours by (human) right.

This paper began with a description of the way in which water, in all of its political, economic and cultural meaning, is not outside of us, but rather cycles through and beyond us, bringing moments of our meaningful materiality along with it. I conclude now by suggesting that to operationalize the potential of the commons, we need also to understand and acknowledge the ways in which the commons does not stop at our skin. Our ecopolitical strategies must incorporate the ontologies of our material bodies, rather than deny them. Water is not for us, nor for other bodies of water, not a mere biological function. As the gestational matter of our being, water also expresses our actual responsibility and our virtual potential. Does not, then, our own wateriness ask that we find strategies for dealing with our water crises that, rather than spurring us on to the next newest life-destroying hydrological technology, would instead be adequate to the potential of the amniotic onto-logic inherent in us all?

If we seek to counter the trends to privatize, enclose or otherwise remove the earth's geophysical bodies of water from their amniotic relation with other bodies of water, then we must acknowledge that our bodies are active, productive and integral aspects of whatever commons we seek to cultivate. We must also acknowledge our bodies' concomitant potential and responsibility. This is how the nature of our watery bodies will continue to matter.

## Notes

1. I borrow the term "companion species" from Donna Haraway (2003) to designate all of the other-than-human species with whom we are co-implicated—that is, "organic beings as rice, bees, tulips, intestinal flora, all of whom make life for humans what it is—and vice versa," where "the machinic and textual are internal to the organic and vice versa in irreversible ways" as well (15).
2. My use of the terms "naturalcultural" and "natureculture" is indebted to Donna Haraway (e.g., 2003, 2004), who adopts the term from Bruno Latour (1993) to illustrate the co-implication of what our Western imagination terms nature and culture. This elision suggests on one hand the inextricability of these terms, but on the other hand does not entirely efface the semiotic distinction between them.
3. My understanding of gestationality owes a substantial debt to Chandler's (2008) theorization of this term.
4. I am indebted to David Morris's (2007) accounts of the logic of faces and animal logic as "onto-logics" for my own suggestion that amniotics can be understood as an onto-logic. Morris is keen to stress that "logic" in this sense is not a formulaic theory used after the fact to explain something, but rather is more closely related to the Greek notion of *logos* whereby logic is a being's inherent accounting for itself.
5. As we shall see, amniotics is specifically concerned with the life-proliferating and differentiating movements and relations of water. But watery bodies can also be destructive or catastrophic in their velocity and overabundance. Thinking through the onto-logics expressed by such (often geophysical and meteorological) bodies of water, particularly in terms of the ways they both choreograph and are choreographed by relations to human bodies of water, is another equally important task. See Berland (2005), Protevi (2005) and Tuana (2008) for thought-provoking naturalcultural accounts of water's more disastrous onto-logics.

6. See Garcia (2007) and Shiva (2002: 27-28) for a description of these acequia systems and the threat they are currently facing.

7. Note that “water rights” are property rights, and are distinct from the “human right to water,” discussed below.

8. Two possible exceptions are the UN Convention on the Rights of the Child, which includes access to clean drinking water as a necessary provision for the highest attainable standard of health (UN Article 24[2][c]) and the UN Convention on the Elimination of All Forms of Discrimination Against Women, which proclaims rural women’s rights to adequate living conditions, including in relation to electricity and water supply (UN Article 14[2][h]).

9. Gleick suggests that potential transnational conflict arising from the inability of a state to meet its basic water needs would be addressed by the UN 1997 Convention on the Law of the Non-Navigational uses of International Watercourses (Gleick 1998: 500). Gleick concludes that “a country is thus not permitted to exploit a shared water resource in a manner that deprives individuals in a neighboring country of access to their basic human needs” (500). However, while the 1997 Convention deals with upstream water uses for the purposes of economic development, it does not address questions of non-riparian neighbours meeting their own basic needs. In other words, would a country like Canada be obliged to provide frozen Arctic freshwater to the U.S. if the latter could not meet its basic needs? And in the unlikely event that Canada could not meet its own needs, how would this dilemma be resolved? Gleick conveniently sidesteps these difficult questions. Moreover, he adds that “in practice, this kind of conflict is unlikely to arise” because almost all nations have sufficient water to meet their basic needs (500). Just ten years after the publication of this article, such a statement seems increasingly dubious, particularly in water-strapped areas such as the Jordan River basin, where water-related conflict is intimately embroiled in political conflict. Young (2006: 65) similarly dismisses the likelihood of such disputes, which is particularly puzzling, given the inventory of transborder water conflicts Young’s hefty report later lays out (Water: A Shared Responsibility, chapter 11). Again, even if the current situation is such that no country lacks water to meet its basic needs, the terrestrial network of bodies of water holds out no guarantee for such a future. I am grateful to an anonymous reviewer of this paper for suggesting that certain transborder organizations, such as the Inuit Circumpolar Council, or the International Joint Commission dealing with Great Lakes issues between the U.S. and Canada, might offer promise for resolving water conflict across borders. However, the efficacy of such organizations, if water tensions dramatically escalate, remains to be seen.

10. Bond (n.d.), despite his call for a quantifiable solution to South Africa’s right to water dilemma, himself acknowledges that a rights-based approach must be complemented with an eco-socialist perspective, whereby we would see “an increasing convergence of green, brown, feminist, racial/ethnic justice, and class politics.”

11. John Locke, whose writings are among the most important precursors of contemporary articulations of human rights, explicitly argued that ownership of property is a natural right. This view has carried over into our current pre-eminent human rights instruments (e.g., Article 17 of the UN Universal Declaration of Human Rights).

12. Charlesworth et al. (1991) provide an astute overview of the ways in which the principle of non-discrimination has never guaranteed women’s equality in the context of the law, echoing how so-called Third World concerns are marginalized and undermined in this masculinist legal structure and paradigm.

13. Notable examples of such failures include Bechtel's ousting in Cochabamba (Shiva 2002: 102-103) and the privatization and subsequent de-privatization of water services in 1995-1996 and 2004 in Hamilton, ON (Carty 2003; Moist 2006).

14. See for example the Council of Canadian's Blue Planet Project Treaty Initiative To Share and Protect the Global Water Commons, which recognizes access to the global fresh water supply as a "fundamental human right" (Blue Planet Project 2001).

15. I say "mostly clear" as certain inconsistencies still work themselves into the call for a global water commons. For example, the Blue Planet Project's treaty initiative still locates the responsibility for protecting the water commons with national governments, yet a water commons governed and managed at the national level is unlikely to sidestep many of the jurisprudential problems outlined above in terms of human rights. Moreover, the guarantee of state sovereignty upheld in the wording of the treaty initiative may not only take decision-making power away from local communities of users, but may also open the door to public-private partnerships, despite the initiative's explicit rejection of the commodification, sale and for-profit trading in water.

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