

The Rights of Nature: An Emerging Transformation Opportunity for Evaluation

Louise Gallagher

Institute for Environmental Sciences, University of Geneva

Zenda Ofir

Honorary Professor, School for Public Leadership, Stellenbosch University, South Africa;

Richard von Weizsäcker Fellow, Robert Bosch Academy, Berlin

Abstract: *“Building back better” in the post-COVID-19 Anthropocene era requires novel ideas and ways of working to truly challenge “business as usual” and contribute to urgently needed systems transformations. This article invites post-normal evaluation professionals to engage with the concept of the Rights of Nature, a generative form of institutional innovation that recognizes ecosystems and natural communities as entities that have an independent right to exist and flourish that can be enforced under legal or social norms. Pathways are suggested to use evaluation as values-driven practice to reflect on and encourage human-nature relationships founded on mutual dependence, cooperation, and synergy.*

Keywords: *environmental evaluation, institutional innovation, post-normal evaluation, Rights of Nature, transformation*

Résumé : *Pour “reconstruire en mieux” à l’ère de l’Anthropocène post-COVID-19, il faut de nouvelles idées et méthodes de travail qui nous permettent véritablement de remettre en question le “business as usual” et de contribuer aux transformations systémiques nécessaires et urgentes. Cet article invite les professionnels de l’évaluation de l’ère « post-normale » à s’engager dans le concept des droits de la nature, une forme générative d’innovation institutionnelle qui reconnaît les écosystèmes et les communautés naturelles comme des entités ayant un droit indépendant à l’existence et à l’épanouissement qui peut être appliqué en vertu de normes juridiques ou sociales. Des pistes sont suggérées pour utiliser l’évaluation comme une pratique axée sur les valeurs afin de réfléchir aux relations entre l’humain et la nature, fondées sur la dépendance mutuelle, la coopération et la synergie, et de les encourager.*

Mots clés : *Droits de la nature, transformation, évaluation post-normale, évaluation environnementale, innovation institutionnelle.*

Corresponding author: Louise Gallagher, Institute for Environmental Sciences, University of Geneva, 66 boulevard Carl-Vogt, 1205 Geneva, Switzerland; louise.gallagher@unige.ch

The view that well-being in contemporary human societies must be pursued within a paradigm of inclusiveness and equity for all living within planetary boundaries was gathering momentum even before the COVID-19 pandemic (e.g., [Pope Francis, 2015](#); [UN, 2015a, 2015b](#)). In 2020, the pandemic, climate change, ecosystem degradation, and social inequity crises intersected to show us just how urgently change is needed.

The United Nations, among others, is calling on governments, the private sector, and civil society to “build back better”—to transform our societies for a healthier and more resilient future for people and nature. The degree of legitimacy for current and new actions on climate change, biodiversity loss, and sustainable development is high—but not sufficient in and of itself. True transformations must be profound enough to shift societies and systems into fundamentally new forms, and so onto fundamentally different development pathways that accelerate us toward climate-neutral and resilient development ([GIZ, 2020](#); [Nalau & Handmer, 2015](#); [O’Brien, 2018](#)). This implies deep changes in the values, paradigms, institutions, and behaviour governing ecosystems.

We make a three-part argument in this article. First, we argue that a thoughtful consideration of a concept called “Rights of Nature”—recognizing ecosystems and natural communities not as property that can be owned but as entities that have an independent right to exist and flourish that can be enforced under legal or social norms ([Global Alliance for the Rights of Nature, n.d.](#))—is a transformation opportunity. Second, evaluations that aim to support transformative action can engage with the Rights of Nature in evolving evaluation practice towards one fit for the Anthropocene. Third, evaluators who are interested in working with the concept of Rights of Nature already have some clear pathways to follow.

THE RIGHTS OF NATURE AS A TRANSFORMATION OPPORTUNITY: A THEORETICAL FRAMEWORK

Good progress has been made in establishing a global environmental rule of law regime ([UNEP, 2019](#)). However, tangible transformational actions for the re-visioning of human-nature relations—defined for this article as the drastic, fundamental shifts in values, worldviews, and actions that can convert current ecological, social, political, economic, scientific, or technological systems to different structures and behaviours needed for a flourishing future ([Abson et al., 2017](#); [GIZ, 2020](#); [Hickel & Kallis, 2020](#))—have yet to happen at scale.

Many of our natural systems are already severely compromised at planetary and more local scales ([IPBES, 2019](#)). They risk coming under additional pressures, even as we aim for equitable post-COVID recoveries grounded in the ecological realities of the Anthropocene ([Hamilton et al., 2015](#)). We have imperfectly applied different approaches to “establish, improve or maintain good relations with nature” in contemporary environmental and biodiversity conservation action since the 1960s ([Sandbrook, 2015](#), p. 565)—yet continue to lose keystone species and ecosystems. Despite the proliferation of environmental law in over

187 countries since the 1970s, fragmented coverage and implementation have prevailed (UNEP, 2019). Environmental sustainability is entering the mainstream, but dominant worldviews, values, and institutions that have produced our current paradigm of unsustainable development still need to be dislodged (Hickel & Kallis, 2020).

Institutions are formal and informal systems of rules, including organizations (Hodgson, 2015; North, 1990), that structure predictable relationships and behaviours of and between members of society for many dimensions of life, including governing access to and managing environmental public goods (Ostrom, 1990). Successful institutions are produced over time, become or are designed relatively stable and resistant to change, and endure through processes of path-dependency informed by—and upholding—preceding values, beliefs, technologies, and organizational models (Hindriks & Guala, 2015; Kingston & Caballero, 2009). Simply put, they are integral to the capacity of societies to adapt and persist, to transform, or to stagnate (Vatn, 2005).

The Rights of Nature is a values-driven philosophy embedded in both traditional and contemporary Indigenous governance that is slowly being pioneered in twenty-first-century jurisprudential theory and law in a similar way to human rights (Schoukens, 2019; Stone, 1996). It can be viewed as a collective action to generate institutional change (complex and poorly understood process as that may be; Kingston & Caballero, 2009). The judiciary is central to the creation of new formal rules, and changing these can be a catalytic form of social change (Capra & Mattei, 2015; Toboso, 1995). Beyond formal legal reform, the notion of nature having rights is in itself a deliberate attempt, a collective political act, to alter the ways in which access and use rights in ecosystems are negotiated, thus constituting a generative form of institutional innovation and change (Hargrave & Van de Ven, 2006; Raffaelli & Glynn, 2015). Dominant power reinforces or reproduces institutions and can slow or speed up the impetus toward transformational change (Avelino, 2017; Scoones et al., 2015). As such, whether formal or informal, the mere notion of Rights of Nature can also be understood as an attempt change power relations by according nature more “power-to” refuse human interference and encourage human-nature relationships founded on mutual dependence, co-operation, and synergy (Avelino, 2017).

Rights of Nature is about legal rights, ethics, principles, spirituality, and seeing the world as interconnected—but it is also about the pragmatism needed for working successfully within complexity for long-term resilience (Ansell & Geyer, 2017; Rowe, 2021, p. 46). The key idea is that if Rights of Nature are established in national law or in guiding ethical principles and frameworks, human values, interests, and rights must make space for nonhuman values, interests, and rights at the center of evaluating decision trade-offs and synergies. That idea proposes a radical revision of human values and stances toward nature, with the potential to stimulate new narratives around human-nature interconnections. It provokes a reframing of nature and humans as part of one creation, both deserving to be afforded dignity, respect, and the right to thrive together. And it weakens narratives

about nature as property, input or resource, or something to be stewarded and managed (Capra & Mattei, 2015).

Christopher Stone asked in 1972, “What would a radically different law-driven consciousness look like? . . . One in which Nature had rights . . . Yes, rivers, lakes . . . trees . . . animals . . . How would such a posture in law affect a community’s view of itself?” (cited in Burdon, 2010, p. 69). Imagine how extractive industry, natural resource and environmental management or transition management—or evaluation—would be tempered if required to look to nature’s legal interests and be prepared to negotiate or compensate—or be sued by—nature’s elements and entities. Ultimately, establishing legal and ethical Rights of Nature proposes a change in values, beliefs, social, and legal norms so that an older, more balanced order in human-nature relationships, with a greater probability of producing sustainable development, can emerge.

THE RIGHTS OF NATURE TODAY

The Rights of Nature is part of both traditional and new forms of Indigenous governance (Moore & Nesterova, 2020; Richardson, 2008; Robinson & Raven, 2020) and championed by various civil society groups (CELDF, n.d.; Earth Law Center, n.d.; Global Alliance for the Rights of Nature, n.d.). By bringing more ancient views of nature-human relationships into contemporary law and deliberations on environmental justice, the Rights of Nature reaches well beyond the rights to a healthy environment and environmental protection already embedded in the national constitutions of 150 countries (UNEP, 2019). What is noteworthy is the creation of legal reforms and jurisprudential theory that support the creation of a legal personality for nature and for individual natural elements that recognize interests, rights, and obligations for nonhuman entities that can be defined and defended through legal recourse and public discourse.

In nations with common law, most direct provisions in constitutions or in other areas of national environmental law focus on the duties and rights of humans in relation to nature (Boyd, 2011). Efforts to integrate the environment into constitutions in these countries fall into a category of environmental human rights or defense of property rights, most often protected through various environmental laws and regulations. In civil law systems, the tendency is to adopt environmental rights provisions directly into national constitutions with much debate as to whose duties these are and how they are to be enforced (Boyd, 2011).

Leading countries relevant in such efforts are Ecuador, Bolivia, Colombia, India, Mexico, New Zealand, and Australia (Chapron et al., 2019; Espinosa, 2019). Ecuador was the first country in the world to include the Rights of Nature in constitutional law, referencing the right of Pachamama “to exist, persist, maintain and regenerate” (Republic of Ecuador, 2008, Art. 71). The drafting of a new constitution in 2007–2008 provided the opening for advocacy by civil society groups for the inclusion of direct provisions for the Rights of Nature, with high-level support

in part due to the individuals involved from the Ecuadorian Constitutional Assembly and their discomfort with the law treating “nature as a slave” (Burdon, 2010, p. 74), and in part due to a historical, political, and social context that included recent experiences of environmental disasters.

The real-world example of a constitution-based Rights of Nature in Ecuador has sparked new discussions about human-nature relationships and possibilities for innovation in how environmental resources are protected (e.g. Chapron et al., 2019; Mansaray & Aamodt, 2017). This case is also referenced in discussions on the risk of such measures remaining purely symbolic or being used for political interests other than the advancement of environmental conservation without clear implementation strategies; such constitutional reforms cannot be assumed to automatically generate improved environmental performances (Boyd, 2011; Schoukens, 2019). For example, ground-breaking legal changes to the level of environmental protection have been achieved by Indigenous environmental defenders in Ecuador over the past 10 years (Buschschlüter, 2020), but it is not clear how political, legal, and social conditions nurtured by the constitution affected these (Espinosa, 2019), and environmental degradation has continued in the country (Chapron et al., 2019).

A more focused, specific property rights regime based on the Rights of Nature has been to establish rivers as legal entities, whereby some river catchments have been accorded a legal personage and rights in Colombia, India, New Zealand, and Pakistan (Bieluk, 2020; De Vries-Stotijn et al., 2019; Kauffman & Martin, 2018), with some momentum established for a Universal Declaration of the Rights of Rivers (Wilson, 2017). These rights are shaped and defended by legislation and represented by “natural persons”—a living human being, with certain rights and responsibilities under the law—speaking on the behalf of the river, positing a level of legal protection greater than can be achieved with environmental standards and regulations (Bieluk, 2020).

As of November 2020, these are the best-known cases (Bieluk, 2020; De Vries-Stotijn et al., 2019; Kauffman & Martin, 2018; Khaskheli, 2020):

- **2016, Atrato river basin, Colombia.** *Status:* Legally recognized. Ecological degradation and resulting impacts on local communities and Indigenous peoples were the main drivers of this legislation.
- **2017, Whanganui river (Te Awa Tupua), New Zealand.** *Status:* Legally recognized. Indigenous community-driven initiative citing spiritual values and restitution of a historical wrong done to the river.
- **2017, Ganges and Yamuna rivers, India.** *Status:* First legally recognized in Uttarkhand State, then challenged by the Indian Supreme court. Ecological degradation is the primary factor for this attempt to establish better normative protections.
- **2018, Amazon ecosystem, Colombia.** *Status:* Legally recognized. These provisions include both the river and forest territory and were driven primarily by deforestation concerns.

- **2020, Indus river, Pakistan.** *Status:* Not recognized. However, the term “rights of river Indus” is being used by national and international civil society in seeking greater protection of the river.

One important consequence of considering a river as a legal person is that, while defended by humans as legal representatives, it cannot be owned by anyone. This is a clear political message that rivers have value and rights, independent from humans and the benefits derived from these systems by us (De Vries-Stotijn et al., 2019). Even though there is still confusion about what these rights should be and how they can be enforced in reality (Dsouza, 2020; O'Donnell, 2020), this is critically different from the long focus in water governance that the greatest value of river basins is how to value water and its allocation, and it is a radical departure from established processes of river-basin governance within or between countries. This obviously has major implications for efforts to exploit or contaminate or destroy river resources upon which so many contemporary societies depend.

Finally, the Rights of Nature can raise ethical considerations without being a question of legal compliance, challenging established worldviews and values that hinge on an exploitative rather than the pluralist, cooperative visions of human-nature relationships that are essential to transformation and sustainability (Gavin et al., 2018; Jacobs et al., 2020; Pascual et al., 2021). One illustration is the experience around legal defences of nonhuman copyrights, in particular, the “Monkey selfie” case. A suit was filed by People for the Ethical Treatment of Animals (PETA) against a British wildlife photographer, David Slater, in 2013 in the United States. PETA fought for legal recognition of the copyrights and ownership of nonhuman image makers following media attention for self-portraits taken by a *Celebes crested macaque* called Naruto in Indonesia using the photographer's equipment and training. They requested to administer all financial proceeds from the photos on Naruto's behalf and for his benefit. The US District Court in Northern California rejected the argument that a monkey could have legal standing (Associated Press, 2016). However, in her review of the case, Rosati (2017, p. 977) notes “the question of non-human authorship is not really (or just) about whether a monkey can be the owner of copyright in the photographs that it takes”, rather it is about “broadening of the understanding of what (rather than who) an author is” in the context of emerging artificial intelligence capabilities, and the public as well as commercial possibilities that these imply.

The examples given above illustrate the winding path for Rights of Nature as an institutional innovation while also creating a benchmark for how this concept is applied today. We are currently grappling with the results of economic, political, and social systems that are predicated on a belief that infinite growth on a finite planet is possible. That belief has been baked into our laws, markets, education programs, and so on, which go on to set up long-term, stable rules and behaviours. Instituting and respecting the Rights of Nature would make for a fundamental change in the underlying “rules of the game” for resource rights and allocation that have driven significant global environmental change and historical and present-day inequity.

THE RIGHTS OF NATURE IN EVALUATION OF ENVIRONMENTAL SUSTAINABILITY

What people value shifts conceptually and in practice over time and geography, from traditional and contemporary Indigenous, to postmodern dominion over rather than kinship with nature, and the latest realizations in light of the Anthropocene and dire climate and biodiversity warnings. We cannot, and should not, avoid debate about what and how we value. This creates a role, and perhaps even an ethical imperative, for the evaluation profession to help society engage constructively and quickly with these ideas (Schwandt, 2019). The Rights of Nature is potentially a useful concept to evaluators in environmental sustainability, even where legal Rights for Nature are not yet in place.

Environmental governance scholarship calls for moving institutions and decision making away from “predict and control” to “sense and respond” forms of governance and management that prioritize flexibility, precaution, and resilience in the face of many uncertainties and complexity (Stirling, 2014). New templates and practices for flexible and relational environmental governance are needed to move the dial of overconsumption and exceeding the planet’s boundaries, turn around climate change, and reverse biodiversity destruction, waste, poverty, and extraordinary inequalities (Young, 2017).

Evaluation has a role to play (Schwandt, 2019) as we navigate the new and uncertain terrain of just transitions, reset economic and social systems, meet the needs of eight billion people, and address eroding ecological resilience. New ideas and revised values are needed if historical, political, and social factors governing inertia in sustainability transitions are to be overcome. Evaluation is a process commissioned and financed by power brokers in fields like international development that can hinder or help the process of sustainability transformations. It can engage strongly with distributional issues and with social and environmental justice. To remain relevant in the increasingly complex and interconnected world, it is essential for evaluation as a profession and as a practice to engage in the discourse at the nexus of human and natural systems (Uitto, 2021, Chapter 1, p. 3).

Environmental monitoring and evaluation overlap with both research endeavours for scientific knowledge advancement and strategic analysis for practical decision making, for example in biodiversity conservation, natural resources/ecosystem-based management, and urban and rural planning (Uitto, 2021). Environmental impact assessment and intervention evaluation produce and rely on a wide variety of data, but in most cases a key aim is to provide credible, useful evidence for causal relationships using frameworks like the Dose-Response and Drivers-Pressures-State-Impacts-Response (DPSIR). Increasingly, however, complexity-informed frameworks are emerging (Patton, 2011, 2019; Reichert et al., 2015; Rowe, 2019, 2021) to engage with trade-offs and identify robust environmental strategies at multiple levels, from site-specific to global. Typical evaluative approaches include environmental impact assessment, strategic environmental assessment, and environmental and social standards compliance; biodiversity conservation program design; and impact evaluation, which can

often focus on environmental processes, ecosystem integrity and degradation, and measurable environmental state outcomes rather than considering human-nature dynamic interactions (Rowe, 2019, 2021; Sarkki & Acosta García, 2019; Uitto et al., 2017).

Despite these initiatives, monitoring and evaluation in the environmental sustainability field have struggled to establish accountability and to connect this to new strategic environmental management actions (Feger et al., 2019). Many who are eager for positive change in ecological conditions lament that evaluators have been trying to prove and measure environmental decline without contributing to preventing it (Lindenmayer et al., 2013). Monitoring and evaluation are a key practice area at the nexus of environmental science, policy, and implementation that show some movement toward adaptive governance in real and tangible ways (Uitto, 2021).

The field of evaluation has started to evolve in response. Evaluators' engagement with values and norms over the past two decades has put the spotlight on social justice—gender, equality, equity, human rights, common but differentiated rights and responsibilities, and transformational change (Deane & Harré, 2016; Mertens, 2009). Helped by the recognition of the importance of value conflicts in environmental sustainability (Reichert et al., 2015), a similar trend is happening in the environmental field. New types of evaluators and evaluative practices are emerging, with stronger emphases on intersectional social and environmental justice and a greater readiness to engage with a systems view of complex environmental and social values and change processes (Uitto, 2021; van den Berg et al., 2019).

Examples can now be found of how evaluative practices in environmental sustainability are providing opportunities for critical reflection, social learning, adaptive planning and decisions, and operationalizing sense making under uncertainty in multi-level governance structures (e.g., Patton, 2019):

- The expected growth in demand for impact evaluation fit-for-purpose under conditions of twenty-first-century complexity in public, private, and civil society sectors is receiving responses that explore the nexus of environment, poverty, resource production and consumption, biodiversity, and climate (e.g., Sword-Daniels & Henderson, 2020; Uitto, 2021; Uitto et al., 2017; van den Berg et al., 2019)
- There is surging interest in democratic, reflexive, and deliberative environmental governance. This is setting new directions for how monitoring and evaluation can frame and reframe values and problem definitions in ways that are inclusive and catalytic for improved behaviour, policy, norms, and other institutions (e.g., Latulippe & Klenk, 2020; Pickering & Persson, 2020).
- Collaborative and futures-oriented environmental governance using stakeholder-led indicators and monitoring as part of the problem identification-intervention analysis are being tried in many places in the world, including low-income and emerging economies (e.g., Redford et al., 2020).

This is a critical function that has real status and influence in environmental governance, but it is at present still a fairly narrow field. Evaluators may be subject to the agendas of more powerful actors without the opportunity to help set organizational agendas (House, 1997; Picciotto, 2020); others are part of agenda setting within their organizations and fields. Given that many evaluators are embedded in environmental policy and organizational networks, communities, and other coordinated systems of power in environmental governance, they can, in principle, support critical reflection in decision processes about how nature is being considered and engaged with (Eyben et al., 2015). Some evaluators are in a position to help ensure that nonhuman elements of nature are included in the weighing up of directions, achieving diversity and considering equity in distribution of gains and losses. Many support forms of ongoing learning, for example through developmental evaluation (Patton, 2011); this is critical for adaptive governance and management in implementation programs.

Evaluator agenda setting and support for adaptive action are actions with potential to nudge the design and implementation of interventions in a desired direction as part of collective or synergistic action toward transformation. Evaluative practices can thus play an important role in shaping the normative, cultural, and social climates in which institutions, policies, and procedures that affect ecosystem integrity, biodiversity, environmental quality—and our very view of nature—are formed. Such actions could be catalytic.

In short, the evaluation profession, like all actors in sustainable development, can be a change agent in efforts to transform systems helping instrumental actors set directions of change, ensure diversity in framing issues and problem solving, deal better with risk, and facilitate evidence-informed decisions. Evaluators help identify successful experimentation, essential trade-offs, and success factors; help determine how interventions can best be sequenced; warn against unintended negative consequences; and assess the distribution of gains and losses ex-post across populations. All of these can guide efforts toward more sustainable trajectories of development. Thus, for those evaluators wanting to support transformation, and in a position to play such a role, the Rights of Nature is an institutional innovation that can help shift deliberations to a focus on the systems that govern and influence the relationship between people and nature, give nature a “seat at the table,” and generate new insights for environmental governance.

HOW TO WORK WITH THE RIGHTS OF NATURE IN EVALUATIVE PRACTICES

Evaluators wanting to support transformation have to engage at the human-nature nexus (Rowe, 2021), and the concept of Rights of Nature could assist in many evaluations beyond the field of environmental governance. Given the framing in the previous sections of the Rights of Nature as a values change as much as a legal reform and compliance issue, and the evaluator’s role in environmental governance innovation, this emerging issue is one worthy of attention. In line

with the notion that post-normal evaluation will and has to open new spaces for exploration in practice and knowledge creation (Schwandt, 2019), we focus here on how an evaluator can engage with the Rights of Nature. We start from current professional frameworks, methods, and resources and highlight questions for consideration by the global community of evaluators.

The Rights of Nature in evaluation guidelines and ethical frameworks

Although evaluation frameworks for practice like the OECD-DAC evaluation criteria (OECD-DAC Network, 2019) include environmental impacts in the scope of impact assessment and evaluation, most evaluations outside of those explicitly focussed on environmental outcomes tend not to consider this dimension (Rowe, 2019). The global evaluation profession has guidances and competency frameworks that do not yet consider Rights of Nature directly. Yet, given that evaluation is intended to help strengthen accountability about what is happening, to whom and why—including engaging with distributional issues associated with transformation (Leach et al., 2012)—there is perhaps space within existing frameworks to work with this concept.

At a basic level, evaluators working within good practice professional guidelines can be asked to consider legal compliance questions. This is relevant in those countries such as Ecuador, Chile, New Zealand, and Australia that have already recognized some elements of nature as legal entities. Exploring trade-offs between the rights of different populations in these places could include identifying “effective, efficient and equitable means” of ensuring that the Rights of Nature are weighed in the balance and protected (Boyd, 2011). It is in cases such as these that evaluators can play a pivotal role in engaging with the Rights of Nature as a complementary set of legally established human rights to a healthy environment, as well as human responsibilities toward nature.

Though it is a new role for many evaluators, those interested in working with Rights of Nature where legal rights are not established can look to the negotiation of values that Rights of Nature imply from the perspective of the ethical principles underpinning evaluation as a professional activity. Evaluation ethics asks evaluation professionals to do “the right thing,” with an emphasis on being appropriate, fair, just, effective, and risk-aware as we apply moral rules and professional codes of conduct to ensure the well-being of all stakeholders to the best of our judgement in the cultures and contexts in which we work (House & Howe, 1999; Stame, 2018). Some evaluation professionals already explore questions about which goals and objectives are right, fair, and effective, as seen from multiple viewpoints and rights (Schwandt, 2019). Incorporating specific values is a slowly evolving aspect of evaluation standards for voluntary organisations for professional evaluation (VOPEs), networks of multi- and bilateral agencies, noting that the New Zealand/Aotearoa evaluation guidelines are the only ones to our knowledge that explicitly reference an ethics toward the environment (though not in terms of Rights of Nature) (ANZEA & SUPERU, 2015).

Non-mainstream evaluative practices and the “Rights of Nature”

Complementary methods to those in standard evaluative practices can offer an opportunity to consider nature and environmental sustainability, as long as these support the stated goal of the intervention (Rowe, 2019). We discuss five distinct practices with some interrelated characteristics and existing frameworks and methods that are suitable for working with the Rights of Nature in evaluative practice.

1. Establishing the frame with nature's rights in the picture

Framing in evaluation involves setting boundaries, essentially determining the focus for questions or analyses that may lead to oppression, exclusion, or marginalization (Schwandt, 2018; Ulrich & Reynolds, 2020). A good starting point is Blue Marble Evaluation principles (Patton, 2019)—in particular, although not exclusively, the “Anthropocene as Context” principle, which calls on evaluators to engage with the realities of the Anthropocene and find ways to use evaluative thinking and evaluation processes to identify and encourage movement toward futures that are more sustainable and equitable for humans and nature.

Culturally responsive evaluation and culturally responsive Indigenous evaluation (CRIE) are not known or used by the majority of mainstream evaluators (Waapalaneexkweew, 2018) but are well suited to working with Rights of Nature because they are an integral part of Indigenous philosophies, traditions, and customary law, which is more inclined toward a complex systems-informed and less extractive view of the world (Lent, 2017; Robinson & Raven, 2020; Wehipeihana & McKegg, 2018; Yunkaporta, 2020). Indigenous insights about the relationship between people and nature do not only reflect millennia-old practices but also offer potential solutions for current global sustainability issues (Yunkaporta, 2020). This is also in line with the ongoing live debate about evaluators doing their part in decolonizing development and evaluative practices and being mindful of the value of Global South, Indigenous, and culturally responsive frameworks and approaches (Chouinard, 2016; Gaotlhobogwe et al., 2018).

2. Seeing the system of human-nature interactions in evaluations

An evaluative practice based on systems thinking seeks to see the system through an understanding of interdependencies, patterns, tipping points, and behaviour over time. Conceptual frameworks underpinned with complexity theory and social-ecological systems frameworks are already part of some evaluative practices (DEFRA, 2020; Patton, 2011, 2019; Wehipeihana & McKegg, 2018; Zazueta & Garcia, 2021). Futures-oriented and participatory multi-scale assessment methods involve including and reflecting on the balancing of rights pluralist values as we evaluate processes and outcomes already feature in environmental evaluation (e.g., Gallagher et al., 2020; Kimmich et al., 2019; Pereira et al., 2020). Critical systems heuristics that explicitly explore different human-nature relationships and recognize inherent and intrinsic values of nature beyond anthropocentric valuations are already in experimentation and use (Ulrich & Reynolds, 2020;

Zafra-Calvo et al., 2020). Evolving these practices further to include a Rights of Nature perspective is an interesting opportunity waiting to be tested.

3. *Holding space for different narratives about impacts and change within the system*

Evaluation can be a deeply political practice when it engages with questions of how to organize and allocate resources (House & Howe, 1999). Evaluators can therefore play the role of information brokers and network bridges, helping all voices to be heard. Different actors produce narratives that frame problems, solutions, systems, and their dynamics in ways that suit their interests, promote particular goals and values, and justify particular pathways (Leach et al., 2012). This matters: Who tells the stories sets the frame (Waddock, 2018). Their values, beliefs, and narratives emerge as dominant, and professional evaluators bear some responsibilities for setting boundaries and conducting evaluations in an inclusive way (Ulrich & Reynolds, 2020). Many dilemmas arise when interests, values, and priorities compete or conflict, and evaluation professionals have a responsibility to engage with these (House, 1997; Patton, 2011). But what happens when some interests are not even accorded a place in the deliberation? It requires post-normal evaluation professionals to consider making space for nonhuman voices while including and nurturing values, cultures, and voices that are excluded, erased, or marginalized (Wehipeihana & McKegg, 2018).

4. *Evidence-building with a plurality of values and knowledge that includes the Rights of Nature*

In the context of biodiversity decline, ecosystem loss, and climate change, designing evaluation systems and processes that enable true inclusion and participation to understand and reflect upon plural values held for nature, as well as the intrinsic value for nature represented in the concept of Rights of Nature in choice making, is essential for a greater likelihood of both sustainability and sustainable outcomes (Pascual et al., 2021; Zafra-Calvo et al., 2020). Evaluators can play a brokering role when it comes to balancing different rights through a diversity of intellectual approaches, mixed methods, and participatory evaluation practices (Cram et al., 2018; Rowe, 2019, 2021). Inclusive spaces are crucial as we navigate intertwined social and environmental justice challenges (Pickering & Persson, 2019). Participatory evaluation procedures create space for deliberation for different mental models of nature and human-nature relationships that influence observations about problems, expectations for the future, and how to proceed in development contexts (e.g., Mustonen et al., 2018). The emerging institutionalization of the Rights of Nature offers an opportunity to contemplate how evaluators might ensure that nonhuman voices are included and appropriately represented.

5. *Supporting planning with complexity through deliberative processes*

Under certain conditions, evaluation practice presents an opportunity to go beyond weak notions of participation to deep inclusion in setting questions

and reference points, learning together, moving toward real deliberation, and co-decision-making that benefits planning under complexity and uncertainty (Innes & Booher, 2010). In many ways, such future-oriented processes allow us to explore together what we desire and expect to happen in future for ourselves, our communities, our sectors, and our stakeholders—and we know from behavioural sciences that what we believe about the future informs our behaviour today (see Gallagher et al., 2019 for a discussion of this literature in the context of an inclusive systems-based evaluation procedure). This introduces the idea that nature, or elements of nature, can have rights—can influence choice making by changing ideas about what defines progress, changing available knowledge, problem definitions, and solution sets through critical analysis, learning, deliberation, and negotiation.

Preparing to evaluate the “Rights of Nature” transformation proposition

When it comes to the Rights of Nature, there is a need, on the one hand, to anticipate the implications of a natural evolution of current pathways, and on the other, to evaluate the effects of deliberate positive changes intended to be promoted by recognizing natural elements as legal entities. The idea feels transformative, but we have to get ready to test if this is truly the case, and to muddle through the challenges to implementation that have already been raised. Evaluation of whether recognizing the Rights of Nature works for positive transformative change will therefore be a technical challenge, but the learning would support efforts to innovate a new contemporary form of environmental governance (Gerlak et al., 2020).

Tackling today’s global environmental change challenges means a significant departure from a status quo toward a better outcome—yet defining what “better” is precisely and equitably enough to be able to evaluate is rare (Nalau & Handmer, 2015). System transformation occurs at multiple different scales, multiple different levels, and in many different places, both purposefully and as an unintended consequence of social change interventions. The scale of ambition to change systems distinguishes transformational change from smaller adaptation, but the process of transformational change is one that itself is multi-faceted, multi-causal, and non-linear (Sword-Daniels & Henderson, 2020).

What effects could be observed, and how will this be done robustly? Moreover, any evaluation of the effects of Rights of Nature will have to engage with complexity in the context of the narratives around transformation that characterize the political explorations of this concept. Currently, theories of change that put the state or the market, rather than citizens, at the heart of transformations dominate (Scoones et al., 2015). How does the Rights of Nature fit into this picture, especially given its connection to Indigenous advocates? And what of post-democratic trends of shrinking civic space in some critical geographies (Hossain et al., 2018)—will this undermine the validity of the concept out of hand if the politics do not favour it (Carter & Harris, 2020)? Many questions remain open for interested evaluators to take up in this regard.

CONCLUSION

In this era, transformational change at a global level is essential, and evaluative practices are needed to provide evidence in support of the transformations the world needs urgently. As the world plans for a post-pandemic recovery, it is essential to go beyond “business as usual,” and it is at the nexus of theory and practice on urgent global environmental changes that creative solutions, approaches, and concepts have to be accompanied by appropriate evaluation insights, approaches, and methods.

The Rights of Nature is one such concept that has the potential to contribute to a paradigm shift toward sustainability as one mechanism for moving humans toward a healthier relationship with nature. We have posited that thoughtful consideration of a slowly but surely emerging institutional innovation around the Rights of Nature is an opportunity to accelerate progress and help anchor the new economies that will emerge in the aftermath of the COVID-19 pandemic, driven by the ecological realities of the Anthropocene. Furthermore, evaluations aimed at supporting transformative action can engage with the Rights of Nature as an idea with the potential to contribute to the evolution of evaluation practice that is inclusive of nonhuman voices, able to weigh varied rights in the balance, and support decision making at the nexus of human-nature interactions. Reviewing the transformation potential of the Rights of Nature has brought us to the conclusion that it is both a values-oriented philosophy and an issue of legal reform and compliance. This is a key reason for believing that the evaluation profession can and should consider this burgeoning issue explicitly as a rights issue on a par with human rights, and include it in that way in practice. We have also showed that evaluators who are interested in working with the concept of Rights of Nature already have some clear frameworks and methods within evaluative practice to follow and an opportunity to contribute to evaluating theory and practice of Rights of Nature. Indeed, evaluators have the power to adopt this concept and explore it from a rights perspective as an ethical imperative within evaluation research and practice, and to take it well beyond evaluative activities into our different fields of action. This will require the global evaluation community to take a firm stance and make an explicit commitment to placing the interests and rights of nature on par with that of humanity, thus guaranteeing the survival of both.

ACKNOWLEDGEMENT

This research was supported by a grant from the Packard Foundation.

REFERENCES

- Abson, D. J., Fischer, J., Leventon, J., Newig, J., Schomerus, T., Vilsmaier, U., . . . Lang, D. J. (2017). Leverage points for sustainability transformation. *Ambio*, 46(1), 30–39. <https://doi.org/10.1007/s13280-016-0800-y>. Medline:27344324

- Ansell, C., & Geyer, R. (2017). “Pragmatic complexity”: A new foundation for moving beyond “evidence-based policy making”? *Policy Studies*, 38(2), 149–167. <https://doi.org/10.1080/01442872.2016.1219033>
- ANZEA, & SUPERU. (2015, June). *Evaluation standards for Aotearoa New Zealand: For people commissioning, using, participating in, or conducting evaluations*. <https://www.anzea.org.nz/app/uploads/2019/04/ANZEA-Superu-Evaluation-standards-final-020415.pdf>
- Associated Press. (2016, January 7). Monkey selfie case: Judge rules animal cannot own his own photo copyright. *The Guardian*. <https://www.theguardian.com/world/2016/jan/06/monkey-selfie-case-animal-photo-copyright>
- Avelino, F. (2017). Power in sustainability transitions: Analysing power and (dis)empowerment in transformative change towards sustainability. *Environmental Policy and Governance*, 27(6), 505–520. <https://doi.org/10.1002/eet.1777>
- Bieluk, J. (2020). River as a legal person. *Studia Iuridica Lublinensia*, 29(2), 11–23. <https://doi.org/10.17951/sil.2020.29.2.11-23>
- Boyd, D. R. (2011). *The environmental rights revolution: A global study of constitutions, human rights, and the environment*. University of British Columbia Press.
- Burdon, P. (2010). The rights of nature: Reconsidered. *Australian Humanities Review*, 49. <https://doi.org/10.22459/ahr.49.2010.04>
- Buschschlüter, V. (2020, November 30). Nemonte nenquimo: The Indigenous leader named environmental hero. *BBC Latin America*. <https://www.bbc.com/news/world-latin-america-55122550>
- Capra, F., & Mattei, U. (2015). *The ecology of law: Toward a legal system in tune with nature and community* (1st ed.). Berrett-Koehler.
- Carter, B., & Harris, O. J. T. (2020). The end of normal politics: Assemblages, non-humans and international relations. In J. Pereira & A. Saramago (Eds.), *Non-human nature in world politics: Frontiers in international relations* (pp. 13–31). Springer. https://doi.org/10.1007/978-3-030-49496-4_2
- CELDF. (n.d.). *Community environmental legal defense fund*. <https://celdf.org/advancing-community-rights/rights-of-nature/>
- Chapron, G., Epstein, Y., & López-Bao, J. V. (2019). A rights revolution for nature. *Science*, 363(6434), 1392–1393. <https://doi.org/10.1126/science.aav5601>. Medline:30872530
- Chouinard, J. A. (2016). Introduction: Decolonizing international development evaluation. *Canadian Journal of Program Evaluation*, 30(3), 237–247. <https://doi.org/10.3138/cjpe.30.3.01>
- Cram, F., Tibbetts, K. A., & LaFrance, J. (2018). Editors’ notes: A stepping stone in Indigenous evaluation. *New Directions for Evaluation*, 2018(159), 7–16. <https://doi.org/10.1002/ev.20327>
- Deane, K. L., & Harré, N. (2016). Developing a thoughtful approach to evaluation: Values-driven guidelines for novice evaluators. *Evaluation Matters—He Take Tō Te Aromatawai*, 2, 53–78. <https://doi.org/10.18296/em.0011>
- DEFRA. (2020). *Complexity evaluation framework: Recognising complexity & key considerations for complexity-appropriate evaluation in the department for environment, food and rural affairs*. Author. <http://randd.defra.gov.uk/>

- De Vries-Stottijn, A., Van Ham, I., & Bastmeijer, K. (2019). Protection through property: From private to river-held rights. *Water International*, 44(6–7), 736–751. <https://doi.org/10.1080/02508060.2019.1641882>
- Dsouza, A. (2020, October 21). How to win legal rights for South Asia's Rivers. *International Rivers*. <https://www.internationalrivers.org/news/how-to-win-legal-rights-for-south-asias-rivers/>
- Earth law Center. (n.d.). <https://www.earthlawcenter.org/what-is-earth-law>
- Espinosa, C. (2019). Interpretive affinities: The constitutionalization of rights of nature, *Pacha Mama*, in Ecuador. *Journal of Environmental Policy & Planning*, 21(5), 608–622. <https://doi.org/10.1080/1523908x.2015.1116379>
- Eyben, R., Guijt, I., Roche, C., & Shutt, C. (Eds.). (2015). *The politics of evidence and results in international development: Playing the game to change the rules?* Practical Action.
- Feger, C., Mermet, L., Vira, B., Addison, P. F. E., Barker, R., Birkin, F., ... Sutherland, W. J. (2019). Four priorities for new links between conservation science and accounting research. *Conservation Biology*, 33(4), 972–975. <https://doi.org/10.1111/cobi.13254>. Medline:30456769
- Gallagher, L., Kopainsky, B., Bassi, A. M., Betancourt, A., Butth, C., Chan, P., ... Bréthaut, C. (2020). Supporting stakeholders to anticipate and respond to risks in a Mekong River water-energy-food nexus. *Ecology and Society*, 25(4), art29. <https://doi.org/10.5751/es-11919-250429>
- Gaotlhobogwe, M., Major, T. E., Koloi-Keaikitse, S., & Chilisa, B. (2018). Conceptualizing evaluation in African contexts. *New Directions for Evaluation*, 2018(159), 47–62. <https://doi.org/10.1002/ev.20332>
- Gavin, M. C., McCarter, J., Berkes, F., Mead, A. T. P., Sterling, E. J., Tang, R., & Turner, N. J. (2018). Effective biodiversity conservation requires dynamic, pluralistic, partnership-based approaches. *Sustainability*, 10(6), 1846. <https://doi.org/10.3390/su10061846>
- Gerlak, A. K., Heikkila, T., & Newig, J. (2020). Learning in environmental governance: Opportunities for translating theory to practice. *Journal of Environmental Policy & Planning*, 22(5), 1–14. <https://doi.org/10.1080/1523908x.2020.1776100>
- GIZ. (2020). *Transforming our work: Getting ready for transformational projects*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. https://www.giz.de/fachexpertise/downloads/Transformation%20Guidance_GIZ_02%202020.pdf
- Global Alliance for the Rights of Nature (GARN). (n.d.). <https://www.therightsofnature.org/frequently-asked-questions/>
- Hamilton, C., Gemenne, F., & Bonneuil, C. (2015). *The Anthropocene and the global environmental crisis: Rethinking modernity in a new epoch*. Taylor and Francis.
- Hargrave, T. J., & Van de Ven, A. H. (2006). A collective action model of institutional innovation. *Academy of Management Review*, 31(4), 864–888. <https://doi.org/10.5465/amr.2006.22527458>
- Hickel, J., & Kallis, G. (2020). Is green growth possible? *New Political Economy*, 25(4), 469–486. <https://doi.org/10.1080/13563467.2019.1598964>
- Hindriks, F., & Guala, F. (2015). Institutions, rules, and equilibria: A unified theory. *Journal of Institutional Economics*, 11(3), 459–480. <https://doi.org/10.1017/s1744137414000496>

- Hodgson, G. M. (2015). On defining institutions: Rules *versus* equilibria. *Journal of Institutional Economics*, 11(3), 497–505. <https://doi.org/10.1017/s1744137415000028>
- Hossain, N., Khurana, N., Mohmand, S. K., Nazneen, S., Oosterom, M., Roberts, T., . . . Schröder, P. (2018). *What does closing civic space mean for development? A literature review and proposed conceptual framework*. IDS Working Paper No. 515. https://opendocs.ids.ac.uk/opendocs/bitstream/handle/20.500.12413/13962/Wp515_Online.pdf?sequence=1&isAllowed=y
- House, E. R. (1997). Evaluation in the government marketplace. *Evaluation Practice*, 18(1), 37–48. <https://doi.org/10.1177/109821409701800104>
- House, E. R., & Howe, K. R. (1999). *Values in evaluation and social research*. SAGE.
- Innes, J. E., & Booher, D. E. (2010). *Planning with complexity: An introduction to collaborative rationality for public policy*. Routledge.
- IPBES. (2019). *Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services*. IPBES Secretariat. https://ipbes.net/sites/default/files/2020-02/ipbes_global_assessment_report_summary_for_policymakers_en.pdf
- Jacobs, S., Zafra-Calvo, N., Gonzalez-Jimenez, D., Guibrunet, L., Benessaiah, K., Berghöfer, A., . . . Balvanera, P. (2020). Use your power for good: Plural valuation of nature: The Oaxaca statement. *Global Sustainability*, 3, e8. <https://doi.org/10.1017/sus.2020.2>
- Kauffman, C. M., & Martin, P. L. (2018, April 4). *When rivers have rights: Case comparisons of New Zealand, Colombia, and India*. International Studies Association Annual Conference Proceedings, San Francisco. <http://files.harmonywithnatureun.org/uploads/upload585.pdf>
- Khaskheli, J. (2020, September 30). Violations of river rights not letting Indus reach its delta: Experts. *The International News*. <https://www.thenews.com.pk/print/722182-violations-of-river-rights-not-letting-indus-reach-its-delta-experts>
- Kimmich, C., Gallagher, L., Kopainsky, B., Dubois, M., Sovann, C., Buth, C., & Bréthaut, C. (2019). Participatory modeling updates expectations for individuals and groups, catalyzing behavior change and collective action in water-energy-food nexus governance. *Earth's Future*, 7(12), 1337–1352. <https://doi.org/10.1029/2019ef001311>
- Kingston, C., & Caballero, G. (2009). Comparing theories of institutional change. *Journal of Institutional Economics*, 5(2), 151–180. <https://doi.org/10.1017/s1744137409001283>
- Latulippe, N., & Klenk, N. (2020). Making room and moving over: Knowledge co-production, Indigenous knowledge sovereignty and the politics of global environmental change decision-making. *Current Opinion in Environmental Sustainability*, 42, 7–14. <https://doi.org/10.1016/j.cosust.2019.10.010>
- Leach, M., Rockström, J., Raskin, P., Scoones, I., Stirling, A. C., Smith, A., . . . Olsson, P. (2012). Transforming innovation for sustainability. *Ecology and Society*, 17(2). <https://doi.org/10.5751/es-04933-170211>
- Lent, J. R. (2017). *The patterning instinct: A cultural history of humanity's search for meaning*. Prometheus Books.
- Lindenmayer, D. B., Piggott, M. P., & Wintle, B. A. (2013). Counting the books while the library burns: Why conservation monitoring programs need a plan for action. *Frontiers in Ecology and the Environment*, 11(10), 549–555. <https://doi.org/10.1890/120220>

- Mansaray, A.-B. S., & Aamodt, J. (2017). The Rights of Nature may improve water and sanitation in Sierra Leone. *Sierra Leone Journal of Biomedical Research*, 9(2), 8–12. <https://www.ajol.info/index.php/sljbr/article/view/171628>
- Mertens, D. M. (2009). *Transformative research and evaluation*. Guilford Press.
- Moore, S. J., & Nesterova, Y. (2020). *Indigenous knowledges and ways of knowing for a sustainable living*. Paper commissioned for the UNESCO Futures of Education Report. https://www.researchgate.net/publication/344821411_Indigenous_knowledges_and_ways_of_knowing_for_a_sustainable_living
- Mustonen, T., Feodoroff, P., with the Skolt Sámi Fishermen of Sevetijärvi. (2018). Skolt Sámi and atlantic salmon collaborative management of Näätämö Watershed, Finland as a case of Indigenous evaluation and knowledge in the Eurasian Arctic. *New Directions for Evaluation*, 2018(159), 107–119. <https://doi.org/10.1002/ev.20334>
- Nalau, J., & Handmer, J. (2015). When is transformation a viable policy alternative? *Environmental Science & Policy*, 54, 349–356. <https://doi.org/10.1016/j.envsci.2015.07.022>
- North, D. C. (1990). *Institutions, institutional change, and economic performance*. Cambridge University Press.
- O'Brien, K. (2018). Is the 1.5°C target possible? Exploring the three spheres of transformation. *Current Opinion in Environmental Sustainability*, 31, 153–160. <https://doi.org/10.1016/j.cosust.2018.04.010>
- O'Donnell, E. (2020). *Legal rights for rivers: Competition, collaboration and water governance*. Routledge.
- OECD-DAC Network. (2019). *Better criteria for better evaluation: Revised evaluation criteria, definitions and principles for use*. OECD. <https://search.oecd.org/dac/evaluation/revised-evaluation-criteria-dec-2019.pdf>
- Ostrom, E. (1990). *Governing the commons: The evolution of institutions for collective action*. Cambridge University Press.
- Pascual, U., Adams, W. M., Díaz, S., Lele, S., Mace, G. M., & Turnhout, E. (2021). Biodiversity and the challenge of pluralism. *Nature Sustainability*, 4, 567–572. <https://doi.org/10.1038/s41893-021-00694-7>
- Patton, M. Q. (2011). *Developmental evaluation: Applying complexity concepts to enhance innovation and use*. Guilford Press.
- Patton, M. Q. (2019). *Blue marble evaluation: Premises and principles*. Guilford Press.
- Pereira, L. M., Davies, K. K., den Belder, E., Ferrier, S., Karlsson-Vinkhuyzen, S., Kim, H., . . . Lundquist, C. J. (2020). Developing multiscale and integrative nature-people scenarios using the Nature Futures Framework. *People and Nature*, 2(4), 1172–1195. <https://doi.org/10.1002/pan3.10146>
- Picciotto, R. (2020). From disenchantment to renewal. *Evaluation*, 26(1), 49–60. <https://doi.org/10.1177/1356389019897696>
- Pickering, J., & Persson, Å. (2020). Democratising planetary boundaries: Experts, social values and deliberative risk evaluation in Earth system governance. *Journal of Environmental Policy & Planning*, 22(1), 59–71. <https://doi.org/10.1080/1523908x.2019.1661233>

- Pope Francis. (2015). *Evangelium vitae [Encyclical letter]: On care for our common home*. The Vatican. http://www.vatican.va/content/francesco/en/encyclicals/documents/papa-francesco_20150524_enciclica-laudato-si.html
- Raffaelli, R., & Glynn, M. A. (2015). Institutional Innovation: Novel, useful and legitimate. In C. E. Shalley, M. A. Hitt, & J. Zhou (Eds.), *The Oxford handbook of creativity, innovation, and entrepreneurship* (pp. 407-420). Oxford University Press.
- Redford, K. H., Cook, C., Biggs, D., & Eoyang, G. (2020). Nature: Connecting well-being and conservation praxis. In B. A. Parsons, L. Dhillon, & M. Keene (Eds.), *Visionary evaluation for a sustainable, equitable future* (pp. 95–109). Information Age.
- Reichert, P., Langhans, S. D., Lienert, J., & Schuwirth, N. (2015). The conceptual foundation of environmental decision support. *Journal of Environmental Management*, 154, 316–332. <https://doi.org/10.1016/j.jenvman.2015.01.053>. Medline:25748599
- Republic of Ecuador. (2008). Title II: Rights: Chapter seven: Rights of nature. *Constitution of the Republic of Ecuador*. <https://therightsofnature.org/wp-content/uploads/pdfs/Rights-for-Nature-Articles-in-Ecuadors-Constitution.pdf>
- Richardson, B. J. (2008). The ties that bind: Indigenous peoples and environmental governance. In B. J. Richardson, S. Imai, & K. McNeil (Eds.), *Indigenous peoples and the law: Comparative and critical perspectives* (pp. 337-370). Hart Publishing.
- Robinson, D. F., & Raven, M. (2020). Recognising Indigenous customary law of totemic plant species: Challenges and pathways. *The Geographical Journal*, 186(1), 31–44. <https://doi.org/10.1111/geoj.12320>
- Rosati, E. (2017). The *Monkey selfie* case and the concept of authorship: An EU perspective. *Journal of Intellectual Property Law & Practice*, 12(12), 973–977. <https://doi.org/10.1093/jiplp/jpx199>
- Rowe, A. (2019). Sustainability-ready evaluation: A call to action. *New Directions for Evaluation*, 2019(162), 29–48. <https://doi.org/10.1002/ev.20365>
- Rowe, A. (2021). Evaluation at the nexus: Evaluating sustainable development in the 2020s. In J. I. Uitto (Ed.), *Evaluating environment in international development* (2nd ed., pp. 46–60). Routledge. <https://doi.org/10.4324/9781003094821-4>
- Sandbrook, C. (2015). What is conservation? *Oryx*, 49(4), 565–566. <https://doi.org/10.1017/s0030605315000952>
- Sarkki, S., & Acosta García, N. (2019). Merging social equity and conservation goals in IPBES. *Conservation Biology*, 33(5), 1214–1218. <https://doi.org/10.1111/cobi.13297>. Medline:30729586
- Schoukens, H. (2019). Granting legal personhood to nature in the European Union: Contemplating a legal (r)evolution to avoid an ecological collapse? (Part II). *Journal for European Environmental & Planning Law*, 16(1), 65–90. <https://doi.org/10.1163/18760104-01601005>
- Schwandt, T. A. (2018). Evaluative thinking as a collaborative social practice: The case of boundary judgment making. *New Directions for Evaluation*, 2018(158), 125–137. <https://doi.org/10.1002/ev.20318>
- Schwandt, T. A. (2019). Post-normal evaluation? *Evaluation*, 25(3), 317–329. <https://doi.org/10.1177/1356389019855501>

- Scoones, I., Leach, M., & Newell, P. (2015). The politics of green transformations. In I. Scoones, M. Leach, & P. Newell (Eds.), *The politics of green transformations* (pp. 1–24). Routledge.
- Stame, N. (2018). Strengthening the ethical expertise of evaluators. *Evaluation*, 24(4), 438–451. <https://doi.org/10.1177/1356389018804942>
- Stirling, A. (2014). Emancipating transformations: From controlling “the transition” to culturing plural radical progress. In I. Scoones, M. Leach, & P. Newell (Eds.), *The politics of green transformations* (pp. 54–67). Routledge.
- Stone, C. D. (1996). *Should trees have standing? And other essays on law, morals and the environment*. Oceana Publications.
- Sword-Daniels, V., & Henderson, E. (2020). Learning to evaluate transformational change. https://www.itad.com/wp-content/uploads/2020/11/Itad_TP_1_Transformational_Change.pdf
- Toboso, F. (1995). Explaining the process of change taking place in legal rules and social norms: The cases of institutional economics and new institutional economics. *European Journal of Law and Economics*, 2(1), 63–84. <https://doi.org/10.1007/bf01540824>
- Uitto, J. I. (2021). Evaluating environment in international development. In J. I. Uitto (Ed.), *Evaluating environment in international development* (2nd ed.; pp. 3–24). Routledge. <https://doi.org/10.4324/9781003094821>
- Uitto, J. I., Puri, J., & van den Berg, R. D. (Eds.). (2017). *Evaluating climate change action for sustainable development*. Springer International.
- Ulrich, W., & Reynolds, M. (2020). Critical systems heuristics: The idea and practice of boundary critique. In M. Reynolds & S. Holwell (Eds.), *Systems approaches to making change: A practical guide* (pp. 255–306). Springer. https://doi.org/10.1007/978-1-4471-7472-1_6
- United Nations (UN). (2015a). *The Paris agreement: United Nations Framework Convention on Climate Change*. https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf
- United Nations (UN). (2015b). *Transforming our world: The 2030 agenda for sustainable development*. Resolution adopted by the UN General Assembly on 25 September 2015 (A/RES/70/1). https://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- United Nations Environment Programme (UNEP). (2019). *Environmental rule of law: First global report*. <https://www.unep.org/resources/assessment/environmental-rule-law-first-global-report>
- van den Berg, R. D., Magro, C., & Salinas Mulder, S. (Eds.). (2019). *Evaluation for transformational change: Opportunities and challenges for the Sustainable Development Goals*. International Development Evaluation Association (IDEAS). https://ideas-global.org/wp-content/uploads/2019/11/2019-11-05-Final_IDEAS_EvaluationForTransformationalChange.pdf
- Vatn, A. (2005). *Institutions and the environment*. Edward Elgar.
- Wapalaneexkweew (Nicole R. Bowman). (2018). Looking backward but moving forward: Honoring the sacred and asserting the sovereign in Indigenous evaluation. *American Journal of Evaluation*, 39(4), 543–568. <https://doi.org/10.1177/1098214018790412>

- Waddock, S. (2018). Narrative, memes, and the prospect of large systems change. *Humanistic Management Journal*, 3(1), 17–45. <https://doi.org/10.1007/s41463-018-0039-9>
- Wehipeihana, N., & McKegg, K. (2018). Values and culture in evaluative thinking: Insights from Aotearoa New Zealand. *New Directions for Evaluation*, 2018(158), 93–107. <https://doi.org/10.1002/ev.20320>
- Wilson, G. (2017). Draft universal declaration of river rights. Earth Law Center. https://static1.squarespace.com/static/55914fd1e4b01fb0b851a814/t/59c5a79ba8b2b0dc3295a8af/1506125725815/Universal+Declaration+of+River+Rights+%28Draft%29_Sept+2017.pdf
- Young, O. R. (2017). Beyond regulation: Innovative strategies for governing large complex systems. *Sustainability*, 9(6), 938. <https://doi.org/10.3390/su9060938>
- Yunkaporta, T. (2020). *Sand talk: How Indigenous thinking can save the world*. Text.
- Zafra-Calvo, N., Balvanera, P., Pascual, U., Merçon, J., Martín-López, B., van Noordwijk, M., . . . Díaz, S. (2020). Plural valuation of nature for equity and sustainability: Insights from the Global South. *Global Environmental Change*, 63, 102115. <https://doi.org/10.1016/j.gloenvcha.2020.102115>
- Zazueta, A. E., & Garcia, J. R. (2021). Multiple actors and confounding factors. In J. I. Uitto (Ed.), *Evaluating environment in international development* (2nd ed., pp. 46–60). Routledge. <https://www.taylorfrancis.com/chapters/oa-edit/10.4324/9781003094821>

AUTHOR INFORMATION

Louise Gallagher is a science-policy innovator currently exploring how environmental science supports action on just sustainability transitions at the University of Geneva. Louise is specialized in environmental economics and participatory environmental policy analysis, and her recent research focuses on transdisciplinary process design and execution for positive transformations in environmental institutions.

Zenda Ofir is an evaluation specialist from South Africa focused on the interests of the Global South, on the relationship between humanity and nature, and on how evaluation can best support efforts to accelerate progress toward urgently needed transformations (zendaofir.com). A former president of the African Evaluation Association (AfrEA), she has worked on assignment in over 40 countries as an evaluator and advisor on policy, strategy, and practice.