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Undisciplining the study of religion: critical posthumanities and more-than-human ways of knowing

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ABSTRACT

Recent discussions about other-than-human agency and relationality across species and lifeforms are closely tied to theoretical reconsiderations within, and beyond, the humanities. Scholars in the study of religion have only reluctantly picked up these considerations. Theoretical work that includes nonhuman animals in conceptualisations of religion often still operates in binary structures of nature/culture and body/mind. The author reviews recent naturalistic approaches to concepts of religion and combines them with discussions in critical animal studies and biosemiotics, as well as with Karen Barad's theory of agential realism, which forms the basis of a robust analytical frame of nonhuman agency. The author proposes a critical posthumanities study of religion, transforming and 'undisciplining' the humanities into a form of scholarly engagement that creates a transversal field of knowledge, consisting of human and other-than-human intra-actions—a study of religion that intentionally leaves behind the regimes of mastery and exploitation that are still operative today.

Poststructuralism is not just some high-tech toy that humanities scholars use to entertain themselves.

Karen Barad, *Meeting the Universe Halfway*, 59

For this is what we should task ourselves with: thinking future coexistence, namely coexistence unconstrained by present concepts.

Timothy Morton, *Dark Ecology*, 27

Since the turn of the twenty-first century, an important development has been going on in the humanities and the natural sciences, a development that has challenged binary constructions of human/nonhuman, nature/culture, mind/body, and related tools of conceptualising the world. This interdisciplinary and transdisciplinary conversation has resulted in fundamental changes in scholarly frames of analysing the relationship between humans and other-than-humans. Those changes not only challenge discourses and analytical tools that arguably have been co-responsible for the planetary crises we are

finding ourselves in (such as patriarchal, colonial, capitalist, and anthropocentric regimes), but they also explore new ways of orchestrating academic research and organising institutional settings beyond the common divides between the humanities and the sciences. The academic study of religion has only reluctantly responded to these new developments, which is the reason for the current article (and the entire special issue this article is part of). Such a reluctance is astonishing insofar as we may expect that the study of religion would be interested in new ways of thinking with *other*bodies—and with the more-than-human in general—as this is a core aspect of its very concern. On closer examination, though, it turns out that the study of religion has itself been part of patriarchal, colonial, capitalist, and anthropocentric regimes of mastery and exploitation. While there certainly has been critical self-reflection in parts of the field, dominant intellectual and organisational structures still operate within a frame that prioritises the human over against the 'rest' of the natural world.

In what follows, I want to explore a study of religion that takes the more-than-human world seriously, not as an object of study but as an active member of a larger-than-human knowing community. After reviewing a number of recent approaches that attempt to include nonhuman animals and the natural world in their understanding of religion, I look at conversations that are currently going on in environmental humanities, biosemiotics, and critical posthumanities. I pay special attention to questions of nonhuman agency, making use of Karen Barad's theory of agential realism. These (and related) conversations are, as I argue, highly productive when it comes to repositioning the study of religion in the twenty-first century. Building on such discussions, I develop a few rudimentary ideas about the theoretical and organisational frames of a study of religion that intentionally and even strategically leaves behind the regimes of mastery and exploitation that have been so influential in European thinking about 'religion.'

Including nonhuman animals in the study of religion

The study of religion as a field

Many scholars today agree that the academic study of religion is best described as a *field* rather than a distinct *discipline* with a methodological and theoretical frame of its own. With Richard King we may also argue that

> what unites the field of the study of religion is neither a singular, essentialized, and stable object of study ('religion') nor even the shared emergence of a distinctive disciplinary practice or enterprise ('the history of religions' or 'religious studies'), but rather an ongoing commitment to the reproduction of the language game of 'religion' itself. It is conversations about this category—about how it is to be defined and conceived (as belief, sacred text, practice, community, experience, and so on), about how it is to be evaluated, understood, embraced, or rejected, that bring scholars of 'religion' together into a distinctive field. Sustained scholarly conversation about 'religion' is itself what constitutes the field of the study of religion. (King 2017, 7)

While it is important for every scholarly endeavour to clarify the object of its interest and the appropriate tools to study that object, this does not entail that 'religion' is itself the only qualifier for such a study. Over against 'the historical instability of our object of study' (Taves 2011, 291), it is fair to say that critically engaging the very contexts in which 'religion' has gained meaning and influence is one of the most important exercises of the study

of religion today, as far as its conceptual work is concerned. This should be done without a stipulated definition of religion, a definition that could be applied beyond the very contexts of its emergence and cultural location. Bruno Latour's note that '[t]he task of defining and ordering the social should be left to the actors themselves, not taken up by the analyst' (2007, 23) has been embraced by many scholars in the field of the study of religion. Being a concept that is deeply embedded in European cultural history—particularly linked to what is called 'Enlightenment' and 'modernity'—'religion' will always be dependent on (and limited by) European conventions, perceptions, and fantasies about the world. This makes a comparative perspective even more important, as King notes:

> I would argue that anyone seeking to engage in cultural critique or civilizational analysis (or what, in a slightly different vein, Ninian Smart used to call 'worldview analysis') lacks a sufficiently broadened perspective from which to comment on modernity and its various forms if they make no recourse to *historical* and *non-Western* contexts since these serve as the primary sites of *difference* from which one may view dominant Western models of modernity in their historical and cultural specificity. In that sense there is a vitally important role for the comparative study of religion in the modern academy as the primary scholarly location for the exercise of a truly comparative humanities—that is, an informed, multivocal, and critical reflection on what it is to be human and what it might be to be modern. (King 2017, 18, emphasis original)

Naturalistic approaches to religion and worldview

King's reference to Ninian Smart indicates that some scholars of religion have made a move to introduce alternatives to 'religion' in order to avoid the concept's colonial and hegemonic limitations. Indeed, the concept of 'worldview' has gained traction recently, building on Ninian Smart's important work in the field of religious studies (Smart 1999). An interdisciplinary dialogue has emerged that addresses human interest in 'ultimate questions' as the emergence of worldviews, often with particular political implications (see DeWitt 2010; Droogers 2014; Weir 2014). Ann Taves and Egil Asprem suggest an even broader use of the concept of worldview, seeking

> to naturalize worldviews by connecting them to a cognitive and ultimately biological explanatory scheme. Thus, in contrast to religion/s, which we view as a human cultural product, we ground the meaning making processes that give rise to diverse cultures and worldviews in sub-personal appraisal processes that are operative not only in humans, but in other animals as well. (Taves 2020, 139)

This, according to Taves, 'offers a theoretical rationale for viewing "lived" or "enacted" worldviews as prior to rationalized or systematized worldviews' (2020, 140). In doing so, her approach may be combined with Donovan O. Schaefer's understanding of affect, which I will address later. Taves herself does not seem to go into that direction, and it remains unclear why Taves, in the same article, limits 'worldviews to humans (and any possible others) in so far as they have *the ability to articulate and reflect on these questions*, that is, to approach them *as* questions' (2020, 143; emphasis original). As I will point out in this article, from the perspective of biosemiotics and critical posthumanities, this seems to be an unnecessary emphasis on human exceptionalism.

To avoid such an emphasis, either in 'religion' or 'worldview' studies, it makes sense to look at approaches that merge biological research with humanities theories in the study

of religion. Again, Ann Taves has provided important input to this discussion. What she calls the building-block approach to the study of religion differentiates between religions more broadly and the elementary phenomena that comprise these religions. Concretely, she suggests

> that the elementary phenomena might best be understood broadly and generically as things that people consider special (special things, for short) and that religions (and spiritualities and philosophies) are often organized around path schemas that involve special practices and/or special goals. In their more elaborated forms, we can view religions, philosophies, paths, etc., as systems or frameworks for assessing, ranking, manipulating, and sometimes transcending things that matter (and, thus, are viewed as special). (Taves 2010, 175)

The Durkheimian definition of 'a religion' (which, thus, is not a generic definition of 'religion') as 'a unified system of beliefs and practices relative to sacred things, that is, things set apart and forbidden' (Durkheim 1995 [1912], 44), is clearly visible in Taves' understanding of religion, but she develops Durkheim's interpretation further without necessary recourse to the religiously connotated concept of the 'sacred' (see Taves 2010, 175–176, with reference to similar attempts in psychology and sociology). Consequently, 'special(ness)' is not a substitute for 'sacred(ness)'; rather, Taves is 'situating "sacrality" as an emically defined subset of the larger class of things people consider special' (Taves 2010, 176).

Taves is not interested in offering stipulated definitions of religion, as these 'artificially stabilize our object of study and obscure what I believe we ought to be studying: the processes whereby people decide on the meaning of events and determine what matters most' (Taves 2011, 291). Defining the object of the study of religion as what people identify as most important has a long tradition in the field (Taves 2011, 291), and it has the advantage that this understanding can be extended to nonhuman animals. At the same time, we need to critically address what the terms 'we' and 'people' refer to exactly; this conversation takes place *within* a European colonial setting, which marginalises indigenous forms of reasoning that for a long time have operated without an exclusive focus on human perception.

Humans are only one species of 'culture-creating animals,' as Taves argues. In highlighting the biological aspects of what she calls the enacting processes of valuation, Taves notes, 'I do not mean to imply that the biological factors are determinative—adoptions clearly demonstrate otherwise—but they do suggest that mammals are able to set some things apart as special without recourse to language, in contrast to what many of us in the humanities would tend to assume' (Taves 2011, 306). This is an important step forward, but the description still thrives on the distinction between nature and culture, even if the domain of culture is extended to all animals.

We see a similar reluctance with regard to the institutional organisation of the field of the study of religion. While Taves clearly identifies the need to work collaboratively and in interdisciplinary structures (2011, 308), she is not interested in breaking down the walls between the humanities and the sciences. Rather, she wants to 'build bridges' between these domains, and she suggests that 'we prepare at least some of our students to collaborate with others outside the humanities.' Taves also still advocates the idea that there is a need for departments of religious studies, even if they no longer 'have a monopoly on special things.' She sees departments of religious studies 'as loci for studying things people consider special and the ways people incorporate them into and perpetuate

them within larger socio-cultural formations, whether or not people view these formations as religious' (2010, 186, both quotes).

Like Taves, William E. Paden also attempts to integrate the study of religion in an evolutionary framework. He also derives his understanding from Durkheim's concept of the sacred (see also Lynch 2012). But in contrast to Taves, he comes up with a general definition of religion. 'I view religion,' he writes, 'as that area of culture where we see interaction behaviors with invisible, supposed superhuman beings, for shorthand here, gods.' For him, the gods 'represent a parallel, second social reference group, albeit invisible' (Paden 2017, 705, both quotes). For our concerns here, it is problematic that Paden's argument still maintains the binary between cognition/thinking and culture/materialisation.

> My ecological framing entails that every behavior and feeling is a response to a piece of environment, whether the environment is a mental image of a god or a stone that one trips on. With religious traditions, by definition, the landscape is populated with superhuman beings and these become real objects of consciousness, regardless of later rational explanations that they are projected illusions and therefore unreal. […] The gods and demons, witches and ancestors, as present mental objects, are experienced as being 'there' or 'out there.' (Paden 2017, 214)

While Paden's thinking about world-making from an evolutionary perspective has the potential to integrate human and other-than-human engagements with specialness (see also Taves 2020, 142–143), it will be important to leave behind the binary construction of mind versus matter, which is discursively entangled with the binaries of nature versus culture.

Critical animal studies and the question of 'animal religion'

For the study of religion, these binaries have reified a focus on cognitive human processes ('making something sacred' as a mental act), as well as on human language as the major tool for communicating religion. Both assumptions have been seriously challenged recently. Vasudha Narayanan, among others, has criticised the text- and language-oriented focus of the study of religion, arguing for a richer inclusion of bodily experiences in everyday life (Narayanan 2003). Manuel Vásquez argues similarly, and he suggests a 'materialist phenomenology' that sees religion as a merger of biological and cultural processes (Vásquez 2011). These reorientations of the field of the study of religion have strong connections to developments in animal studies, with Critical Animal Studies (CAS) and Human-Animal Studies (HAS) being the most important influences on this highly interdisciplinary field of inquiry (see the overview of concepts in Calarco 2021). As Kari Weil points out, the turn to animals 'responds to a desire to know that there are beings or objects with ways of knowing and being that resist our flawed systems of language and who may know us and themselves in ways we can never discern' (Weil 2012, 12).

Following these directions, and combining them with cognitive ethology and his own work on religious affects, Donovan O. Schaefer has developed parameters of an 'animal religion' that 'calls us to look not only at the limits of language, belief, and text in circumscribing the totality of religious experience, but to the irreducible plurality of religion, the heterogeneous multiplicity of religious bodies' (Schaefer 2012, 186). Summarising the remarkable observations and analyses of biologists such as Jane Goodall, Marc Bekoff, and Kimberley C. Patton, he asks:

> The chimps at the base of the waterfall, the fox burying her mate, the snow monkey in the hot spring: what do they feel? How do their distinctive bodies make possible different configurations of affective engagements? And how do these affective ingredients feed into broader arrangements that come to look for all the world, like what we would call in humans 'religion'? (Schaefer 2012, 186; Brooks Pribac 2021 provides an excellent discussion of animal spirituality; see also their respective contributions to this special issue)

Affects, Schaefer maintains, 'are religious precisely because they bind us, like nerves, to our worlds' (2017, 23). And with reference to Jacques Derrida's objection to the idea that there is something like 'the animal' that can be described in a universalistic sense, and indeed his objection to the binary of human–animal (Derrida 2008), Schaefer points out: 'The heterogeneous multiplicity of animal bodies equals the multiplicity of lifeworlds' (2017, 23).

Religion as 'beacon management'?

It is by no means accidental that Schaefer here uses the term 'lifeworlds.' The concept refers to Jakob Johann von Uexküll's (1864–1944) work in biology, including his widely used German term *Umwelt*. Von Uexküll, of German-Baltic (today Estonian) origin who worked mainly in Germany, argued against what he saw as the Cartesian bias in the study of animals, which regarded animals as mere automata. In an ecological framework, each individual organism is part of a unique environment—the 'self-world,' 'lifeworld,' or 'environment,' in German *Umwelt*—that gives equal completeness to all life forms (von Uexküll 1957). As Schaefer points out:

> This complete fit between each organism and its world is governed by powerful relationships with specific features of the world, what von Uexküll calls 'beacons'. Imagine a beacon as a ray of light emitted by something in the world that demands attention, fascinates, guides a body home. Beacons tether bodies to worlds. They funnel beauty, excitement, joy, meaning and hope to us. The *Umwelt* of an organism is a constellation of beacons, a set of richly meaningful fascinations. (Schaefer 2017, 22)

Von Uexküll, who did not regard himself an ecologist, is often described as a pioneer of a worldview that sees all lifeforms collaborating in an equal way, a worldview that overcomes the Cartesian and Kantian distinction between subject and object. In a new study, however, Gottfried Schnödel and Florian Sprenger show that this is a one-sided image that overlooks von Uexküll's deep involvement with National Socialism.

> Uexküll's provocation to attribute to ticks, snails, or sea urchins a subjectivity hitherto reserved for humans still has an effect today. But all this comes at the price of a structural conservatism and an identitarian logic in which everything should remain in its place and nothing should mix—biologically as well as politically. To put it bluntly: Uexküll's environmental theory is holistic in the bad sense, anti-democratic and totalitarian. And above all, Uexküll is much more deeply involved in National Socialism than previously assumed. (Schnödel and Sprenger 2021, 12; my translation)

Von Uexküll was not just a pragmatic follower of National Socialist fascism but legitimised it with his theories and activities. His *Staatsbiologie* ('State Biology,' 1920, 2nd edition 1933) fitted this political agenda, and therefore it is not surprising that von Uexküll in 1933 signed the public 'Confession of German Professors to Adolf Hitler' (*Bekenntnis der deutschen Professoren zu Adolf Hitler*).

Our correction to a selective reception history is important not only for historical reasons, but also because of the links between those discourses and the environmentalist conversation today. Indeed, as Schnödel and Sprenger argue:

> Despite the peculiarities of environmental theory […] it makes sense to read Uexküll as a holist, because this allows us to understand his anti-Darwinism, his rejection of democracy, and finally his ingratiation with National Socialism in the context of discursive formations that are once again effective today. […] [T]hese aspects are deeply embedded in the foundations of environmental theory and play an important role in its current popularity—in all parts of the spectrum of Uexküll's readership. (2021, 13; my translation)

Hence, von Uexküll's deep antidemocratic position and his anti-Semitism are by no means a 'curious episode' in the biography of an otherwise 'very sober scientist,' as Giorgio Agamben wants us to believe (Agamben 2004, 43). If we make use of von Uexküll's ideas today, we cannot simply disconnect his 'good' ideas from his 'bad' ones; rather, we need to keep in mind the structural and discursive links between biological theories, philosophical discussions, and political implications (Schnödel and Sprenger 2021, 16–17). The heated discussion about 'invasive species' comes to mind, another example of problematic taxonomies that combine biological ideas to *völkisch* language (see also Coates 2006). Hence, with Timothy Morton we may conclude: 'So there is little point in denigrating ecological politics as fascist. But there is every point in naming some Nature-based politics as fascist. Here is a strong sense in which ecology is without Nature' (2016, 138).

A closer look at the doctrine of *Umwelt* reveals other limitations as well. The term still implies that there is a 'world' (*Welt*) that is 'around' (*um*) us, which reifies the distinctions between human and nonhuman, subject and object, etc. In a forthcoming book (von Stuckrad 2024), I elaborate a different German concept that seems more appropriate: *Mitwelt*, literarily 'With-World,' or 'the world we're with.' A '*Mitwelt* ethics' can be the starting point of new forms of science and politics in the twenty-first century.

In an ecological setting that leaves behind von Uexküll's theory of *Umwelt* we may still explore the notion of 'beacons,' which can easily be linked to Ann Taves' theory of religion as dealing with 'specialness.' The biological terminology does not need to refer to Durkheim's notion of the sacred. What is more, beacons are not limited to humans or other animals; they can function as orientation for all lifeforms on the planet. In that sense, speaking of religion as, for instance, 'beacon management' provides the opportunity to disconnect affects from emotions and to open up this concept to the worlds of plants and other non-animal lifeforms—a claim that Hollis Phelps has made in response to Donovan O. Schaefer's theory. What Phelps calls a Deleuzian/Spinozistic approach to affect 'allows us to understand affect as constitutive of the world itself, and not merely confined to animal bodies' (Phelps 2017, 9).

Today, many of these considerations are discussed in the interdisciplinary field of biosemiotics. Let me explain.

Theorising planetary communication: biosemiotics

Since the middle of the twentieth century, semiotics has played a significant role in intellectual debates across philosophy, psychology, and cultural studies. Rather than looking at

spoken language in particular, it sees language as just one variant of communication of signs. If we leave Jakob von Uexküll behind, influential thinkers in this field include Gregory Bateson and Charles Sanders Peirce, as well as Gilles Deleuze and Félix Guattari (see Cobley 2010). Over the last couple of years, something interesting has happened: Scholars such as Jesper Hoffmeyer, Gilbert Simondon, Paul Cobley, and Wendy Wheeler have made an effort to combine semiotics with ecological discussions and the emerging field of the environmental humanities (see Emmeche and Kull 2011; Iovino and Oppermann 2014).

Let me discuss the importance of this development with reference to Wendy Wheeler's work. In what Wheeler and others now call biosemiotics, nature and culture are seen as sign systems that are intricately intertwined and evolve in constant and dynamic exchange. By starting a conversation among philosophy, cybernetics, molecular biology, genomics, and other disciplines, biosemioticians aim at overcoming the strict separation of nature and culture, as well as the Cartesian body–mind dualism and the idea that the human mind is a passive receiver of information, which subsequently is processed internally. Instead, as Wheeler explains, nature is self-creative (autopoietic); mind is (with reference to Gregory Bateson) a relation, or more specifically, a sign relation. Furthermore, all beings are born with species-specific cognitive structures that make a difference in how they relate to their environment and their own development.

Wheeler is interested in the 'ecological intertwining of flesh, sign and world' (2016, 4), and her 'primary purpose is to discuss biosemiotic insights in order to argue the case for a needful shift from the ontology of substance and essence that informs the metaphysics of modernity and towards a biosemiotics ontology of relations' (2016, 13). By exploring the cultural implications of biosemiotics, she wants to point out its relevance for the environmental humanities.

Wheeler positions herself clearly in an animistic discourse that sees the natural world as alive and agentic. She argues that nature 'speaks,' even though obviously not in a human language but in the sense that the universe is made of signs that are legible to us. By supporting the idea that nature is not just an object of our observation but an active participant in the communication process, she consciously inscribes her position in the natural philosophy tradition of *natura naturans*, hence the idea, as Wheeler says, of 'nature doing what it does self-creatively' (2016, x). In this 'naturing,' or 'doing,' lies meaning as it allows things to be and also to change. That explains why, in biosemiotics, relations and relationality are key concepts that combine ecology, philosophy, and environmental humanities. It means, for instance, that a living being is not defined by genes (and indeed, the decoding of the genome did not help us to explain human life, or *natura naturans*); rather, the genes of living entities have the capacity to evolve in one way or another, depending on history, context, and relational decision. Life, then, as Wheeler says, is understood as 'relational becoming' (2016, 17).

What Wheeler regards as relational becoming can easily be linked to what Donna Haraway calls 'becoming-with,' but also to David George Haskell's thinking about the intelligence of plants. In *The Songs of Trees*, Haskell writes:

> Part of a plant's intelligence exists not inside the body but in relationship with other species. Root tips, in particular, converse with species from across the community of life, especially with bacteria and fungi. These chemical exchanges locate decision making in the ecological community. (2017, 37)

It is the ecological community that provides the background against which relational intelligence and meaning-making take place. Just like Hollis Phelps' suggestion that affect should not be limited to the animal world, Wheeler and Haskell help us understand processes of meaning-making—in Taves' words, the 'organisation of specialness,' which I called 'beacon management' before—as something that integrates human perceptions in larger ecological settings. Such an understanding does not prioritise human perceptions or disconnect them from other-than-human bodies and worlds. Instead, it emphasises entanglement and communication across species and lifeforms. Tying in with discussions across disciplines (with Bruno Latour and Donna Haraway as strong voices in this conversation), humans are part of a complex agential network of planetary life.

This brings me to another crucial category, which needs a bit of unpacking if we want to make productive use of it in theories of religion: agency.

Nonhuman agency and agential realism

Agency is a loaded term that has received a lot of attention recently. The discussion originated in theories of action that were formulated in philosophy and sociology many years ago. In the standard theory of action, agency denotes the exercise or manifestation of the capacity to act. Intentionality—or, what Max Weber called *Handlungskompetenz*, literally the 'competence to act'—is an integral component of the traditional understanding of agency. But in sociological theory, the focus on intentionality and thus 'inner states' has been less strong than in philosophy. Weber's understanding was very influential, arguing that the 'meaning' of action is situational and not to be confused with any kind of 'essence.' Sociological interpretation reconstructs the 'subjectively intended meaning' of action; it is not interested in establishing the 'objectively "correct" or a metaphysically established "true" meaning' (Weber 1975, 1; my translation). The subjectively intended meaning can be seen as 'positioning and response to "objects" in the world' (*Sichverhalten zu 'Objekten'*), which Weber regards as 'religiosity.' Meaning lies in this response and hence in situational contexts, an approach that has been further developed by Talcott Parsons, Niklas Luhmann, and more recently by Hartmut Esser's theory of 'situational logic' (see von Stuckrad 2015).

Philosophical notions of agency are also more varied than the standard model seems to suggest:

> There are alternative conceptions of agency, and it has been argued that the standard theory fails to capture agency (or distinctively human agency). Further, it seems that genuine agency can be exhibited by beings that are not capable of intentional action, and it has been argued that agency can and should be explained without reference to causally efficacious mental states and events. (Schlosser 2019)

These alternative conceptions play a significant role in recent discussions of other-than-human agency.

Entangled agency

In the field of animal studies and critical posthumanities, it has been pointed out that attributing agency to human animals only is a problematic act of anthropocentrism and speciesism (see McFarland and Hediger 2009; Räsänen and Syrjämaa 2017;

Calarco 2021, 7–9, as well as the discussion above). Similar to the discussion of nonhuman personhood, the question is whether humans simply *attribute* agency to nonhuman entities—which can be seen as an ultimately colonialising projection—or whether they *acknowledge* the fact that nonhuman entities have had agency all along.

This problem also has ethical dimensions, and the way we refer to human connections and relationships with the more-than-human world matters. If we ignore the hegemonic imbalances that drive human entanglements with animals and other nonhuman persons, we will too easily detach notions of 'becoming-with' or 'relating' from questions of power. By way of example, when Donna Haraway describes Vinciane Despret's and Jocelyne Porcher's work on animal farming and 'their efforts to think through what it means to claim that these domestic food-producing animals are *working*, and *working with* their people' (Haraway 2016: 129; emphasis original), this can be read as a cynical neglect of human responsibility for animal suffering and as a (certainly unintended) continuation of what Dinesh Joseph Wadiwel (2015) calls 'the war against animals.' I therefore find Haraway's following statement problematic: '"Working together" in this kind of daily interaction of labor, conversation, and attention seems to me to be the right idiom' (2016, 129). Presenting the connection between human and nonhuman animals in this way overlooks the fact that the nonhuman animals may not have chosen to be in this specific kind of 'relationship.' Expressions like 'co-working' or 'collaborating'—quite popular in anthropological and also in recent biological research—are therefore misleading. For Helen Macdonald, they are an expression of '[o]ur unconscious desire to see ourselves in the lives of animals' (Macdonald 2020, 187). Describing projects that enable humans to follow migrating birds across the globe, Macdonald notes that even the scientists in these projects

> often think of the tagged animals as colleagues and collaborators. Tom Maechtle, a biologist and environmental consultant who has worked on raptor migration at the University of Maryland, has spoken of how satellite tracking 'turns the animal into a partner with the researcher' and suggested that you can think of tagged falcons as biologists who have been 'sent out to find and sample other birds'. (Ibid.)

Rather than interpreting these 'relationships' as collaboration and 'working together,' Macdonald argues that the 'notion of autonomous biological-sampling devices confuses the distinctions between technology and living organisms, quietly erasing the animal's agency' (ibid.). That is why I often use the term 'entanglement' instead of 'relationality.' Being entangled does not necessarily mean that both sides enter a relationship on an equal ethical footing (see Neely and Nguse 2015 for a good example of how to address these entangled positionalities and situated knowledges in practical research).

To avoid one-sided perspectives and the problem of humans 'speaking for' nonhumans, understandings of agency have been put forward that locate agency in concrete encounters. Indeed, what I call *situational* or *entangled* agency is part of a discussion across various disciplines in the humanities today that has become known as the 'relational turn'—a turn that is informed by Emanuel Levinas' ethics, Judith Butler's critical feminism, and other intellectual contributions (see Drichel 2019). These discussions build on relational approaches in the feminist 'ethics of care' tradition of the 1970s, as well as on relational theories in psychoanalysis of the 1980s, which linked philosophical 'relational ontologies' (Benjamin 2015) to humanities and critical theory.

Despite my hesitation to call this entanglement 'relational,' I agree that it is only in a situational context that we can achieve what Jay Johnston formulates as a precondition to a theory of agency:

> An environment that acknowledges other-than-human agencies—even if they cannot be entirely perceived, conceptualised, or known—is an ecology of other-than-human agency. Any such environment must be understood to be radically intersubjective: constituted by agencies invisible, simultaneously localised and dispersed, yet capable of maintaining individuated integrity. (Johnston 2021, 236)

If we look for a robust theoretical frame for such an endeavour, Karen Barad's understanding of entangled agencies is an excellent point of departure.

Agential realism

Combining the physical–philosophical insights of quantum theory (particularly Niels Bohr's thinking) with critical theories in the humanities, Barad develops an 'agential realism' that replaces the concept of 'interaction' with that of 'intra-action':

> The notion of intra-action is a key element of my agential realist framework. The neologism 'intra-action' *signifies the mutual constitution of entangled agencies.* That is, in contrast to the usual 'interaction,' which assumes that there are separate individual agencies that precede their interaction, the notion of intra-action recognizes that distinct agencies do not precede, but rather emerge through, their intra-action. It is important to note that the 'distinct' agencies are only distinct in a relational, not an absolute, sense, that is, *agencies are only distinct in relation to their mutual entanglement; they don't exist as individual elements.* (Barad 2007, 33; emphasis original)

Agency, in this understanding, is a quality of individuals (human or nonhuman) that *emerges* out of their being entangled; it is not a quality that is inherent to or 'owned' by an agent. This opens the way for including all kinds of subject–objects ('natural' or 'cultural,' material or abstract) as integral elements of agential networks. In fact, agential realism dismantles the distinction between subject and object. Making use of Donna Haraway's earlier work on 'diffraction,' Barad argues that our knowledges are not a 'reflection' of reality. Rather, the way we look at the world is itself part of the apparatus or phenomenon that constitutes our knowledge about the world. Reality 'diffracts' into several layers that are accessible to us, and that we produce intra-actively with the other actors in our situational setting. 'In an agential realist account, discursive practices are not human-based activities but specific material (re)configurings of the world through which boundaries, properties, and meanings are differentially enacted' (Barad 2007, 183). This has important implications:

> Practices of knowing and being are not isolable; they are mutually implicated. We don't obtain knowledge by standing outside the world; we know because we are *of* the world. We are part of the world in its differential becoming. The separation of epistemology from ontology is a reverberation of a metaphysics that assumes an inherent difference between human and nonhuman, subject and object, mind and body, matter and discourse. *Onto-epistem-ology*—the study of practices of knowing in being—is probably a better way to think about the kind of understandings that we need to come to terms with how specific intra-actions matter. (Barad 2007, 185; emphasis original)

Barad's interpretation of quantum physics, intra-actively read together with critical theory in the humanities, makes it clear that our tools of interpretation are themselves

part of the diffraction that co-creates knowledges (the phenomenon or apparatus also includes our 'data,' a category that has been problematised recently for the study of religion; see Smith 2019). What is more, the agential networks that constitute the situational intra-action do not only include humans; they also include nonhuman actors on equal basis, subject–objects who contribute to what we know about the world. The agency of these subject–objects is not a characteristic intrinsic to their ontology (something they 'own' or 'have') but the result of the entanglement with other actors, including ourselves. Situational or entangled agency, then, is located in humans, other animals, material subject–objects, and even in non-material members of the agential network. For scholars of religion, the category of non-material agents is particularly interesting, and actually quite familiar. I will come back to this. Suffice it to say at this point that, for instance, gods and ancestors, or powerful words in rituals and poems do not necessarily have agency in themselves; their agency emerges from our entanglement with them.

Abigail H. Neely and Thokozile Nguse provide a concrete example of the method of intra-active research: Diffraction, they argue,

> is a relational method where process and change are constitutional. For example, reading a sick person's description of an illness through a doctor's diagnosis through an *isangoma's* (a healer who works in consultation with the ancestors) and through her father's explanation offers a rich, complex understanding of health and illness where difference comes to the fore. Attending to the ways in which those multiple strands are then read through the researcher(s)—attending to the diffraction pattern that stems from the researcher(s)—offers a way to think through how researchers' and research subjects' relational positionalities shape knowledge. (Neely and Nguse 2015, 142)

Intra-active production of knowledge has another important implication: It removes the concept of 'objectivity' from the equation, and instead identifies 'accountability' as a major feature of scholarly work, both methodologically and ethically (see von Stuckrad 2021). This insight resonates with Rosi Braidotti's observation: 'We know by now that there is no Greenwich Mean Time in knowledge production in the posthuman era. […] What we do have is complexity, embodied and embedded diversity and multiple becomings' (2019a, 37).

If we agree that objectivity is not the lodestar that guides our scholarship, the question is: What should replace objectivity? Against a common opinion, calling objectivity a myth does not mean to proclaim subjectivity as an alternative. The counter-concept to objectivity, rather, is intersubjectivity. Friedrich Nietzsche already knew this 130 years ago, when he wrote in *On the Genealogy of Morality*:

> There is *only* a perspectival seeing, *only* a perspectival 'knowing'; the *more* affects we are able to put into words about a thing, the *more* eyes, various eyes we are able to use for the same thing, the more complete will be our 'concept' of the thing, our 'objectivity.' (Nietzsche 2017, 87, emphasis original)

Objectivity, in this language, is the central perspective, which Nietzsche does not regard as a feasible route to knowledge. Instead, by pursuing intersubjectivity we acknowledge that science is a social and communicative endeavour. As scholars, we need to explain and justify our arguments to others; we are accountable to others in many ways. These others can be scholars themselves, our peers, but they can also be members of other groups outside of the academy, and maybe these others can also be nonhuman. Our justifications and arguments do not make reference to higher—objective—levels of knowledge or truth,

but to agreements that at this point represent consensus in the knowledge community. They are diffractions of reality, interference patterns that emerge from an agential entanglement. Diffraction 'is a quantum phenomenon that makes the downfall of classical metaphysics explicit' (Barad 2007, 72). Read intra-actively through critical theory, we are back at Jay Johnston's argument, quoted above, that any ecology of other-than-human agency needs to be understood as radically intersubjective. We can also add Timothy Morton's insight that '[i]f you want ecological things to exist—ecological things like humans, meadows, frogs, and the biosphere—you have to allow them to violate the logical "Law" of Noncontradiction' (2016, 73; see also his link to quantum theory as explanation on p. 89–99).

These understandings of human knowledge do not intend to 'build bridges' between the sciences and the humanities, or argue for a 'third culture' in human quests for knowledge. They point out, instead, that speaking of these distinct cultures is itself a manifestation and reification of inherited European dichotomies—of nature and culture, of transcendence and immanence, of mind and body, of epistemology and ontology, and of human and other-than-human—that we need to leave behind. Agential realism offers an analytical frame for doing so. And it ties in with discussions that have recently emerged in the field of critical posthumanities.

Critical posthumanities and transversal fields of knowledge production

Discussions about the 'posthuman' can sometimes be confusing. Some branches of thinking 'past the human' envision a world where humanity becomes meaningless and will be replaced by technology—this is what is usually called 'transhumanism.' What I am referring to here, however, is quite the opposite of transhumanism. 'Post,' in this context, does not mean the end of humanity, but a transformative understanding of what humanity means. Consequently, 'posthumanism' is understood as a process of critical self-reflection and as an attempt to overcome the binaries of human–nonhuman, mind–body, and nature–culture (Herbrechter 2013; Braidotti 2019b). What is more, critical posthumanism aims at transforming and 'undisciplining' the humanities into a form of scholarly engagement that creates a transversal field of knowledge, consisting of human and other-than-human intra-actions. This programme is both scholarly and political, geared toward establishing what is today called 'posthumanities.'

Over the past fifteen years, scholars such as Stefan Herbrechter, Megen de Bruin-Molé, and many others have provided highly important contributions to the development of this field of inquiry. Another voice is Rosi Braidotti, whom I already briefly introduced. Since her work can also illuminate the study of religion, let me discuss some of her ideas here.

Braidotti starts her argument with the observation that there has been an 'exuberant growth […] in a number of creative trans-disciplinary hubs, which have generated their own extra-disciplinary offspring. They seldom coincide with the traditional humanities disciplines, and are also fuelled by marginal and hybrid fields of knowledge' (2019a, 38; see also Braidotti 2019b, 76–79). These new organisational hubs often go by the name of 'studies.' Braidotti lists

> [w]omen's, gay and lesbian, gender, feminist and queer studies; race, postcolonial and subaltern studies, alongside cultural studies, film, television and media studies; [these] are the prototypes of the radical epistemologies that have voiced the situated knowledges of the dialectical and structural "others" of humanistic "Man". (2019a, 38)

It is clear from this outline that feminist and queer studies have always been posthumanist (see also Braidotti 2015).

What Braidotti calls the 'nomadic exodus from disciplinary "homes"' goes along with new forms of accountability and authority. It is a process that 'Foucault and Deleuze called "the philosophy of the outside": thinking of, in, and for the world—a becoming-world of knowledge production practices' (2019a, 38–39). What is more, after their nomadic meandering outside their disciplinary origins, these scholarly practices are 'cross-breeding.' As Braidotti notes, they are 'generating new discursive practices which I call the nomadic or critical posthumanities' (2019a, 40).

Hence, the critical posthumanities today are not interdisciplinary but post-disciplinary. As offshoots of the established 'studies' they can also be called 'supra-disciplinary' (Braidotti 2019a, 44). Supra-disciplinary discourses not only reflect different patterns than the hegemonic discourses that traditionally 'disciplined' their subjects; they also imply qualitative shifts in how scholars 'do' their work—both in terms of strong ethical commitments and integrative research tools that strategically include marginalised and minority voices. The result is a new, transversal field of knowledge production that is shaped by transversal alliances. In Braidotti's words:

> This transversal alliance today involves non-human agents, technologically-mediated elements, earth-others (land, waters, plants, animals) and non-human inorganic agents (plastic, wires, information highways, algorithms, etc.). A posthuman ethical praxis involves the formation of a new alliance, a new people. (2019a, 51)

These are quite radical implications for scholarly identities and practices, and they have certainly met with a lot of resistance from the established disciplinary guardians of knowledge. But these radical shifts may be exactly what we need today. If we compare critical posthumanities with biosemiotics, we see a shared interest in forming new alliances within agential networks of planetary communication. To think ethically, theoretically, and methodologically beyond the human, and to link these considerations to scholarly practices in the production of knowledge, is the call of the day.

Undisciplining the study of religion

What does all this mean for the study of religion? How can we build a robust theoretical framework that allows us to leave anthropocentric understandings of religion behind in favour of knowing with *other*bodies? What would a scholarly engagement with 'religion' look like if we would nomadically leave its disciplinary frame? Maybe the study of religion is well prepared to inscribe itself into a transversal arrangement of knowing. What is more, as scholars of religion we are quite used to engaging with agential networks and nonhuman agents such as gods, bodhisattvas, sacred animals, healing waters, amulets, speaking stones, etc.—agents that Jay Johnston (2021) calls 'troublesome objects.'

Radical entanglement and strategic inadequacy

It is illuminating to read Jay Johnston and Rosi Braidotti diffractively against a background of agential realism. In *Stag and Stone*, Johnston demonstrates that in a world that is agentic beyond the confines of the human, we are never the masters of the world, or the masters of knowing. In fact, as Johnston claims, being a scholar today

implies 'giving up discourses of mastery and cultivating an attitude of not-knowing' (2021, 32). These regimes of mastery are at the bottom of the perilous situation we find ourselves in on this planet today. They materialise in current dealings with nature, with gender, with race, with politics, with economic power. They also influence our way of thinking and understanding, i.e., the epistemologies and ontologies our scientific and cultural systems run on. If we are serious in our attempt to break out of these regimes of mastery, we will need to explore our place in an entangled network of subject–objects that renders our knowledge vulnerable and dependent on the epistemologies and agencies of others.

Coming from a different place, Braidotti argues similarly:

> Posthuman thinking is a relational activity that occurs by composing points of contact with a myriad of elements within the complex multiplicity of each subject and across multiple other subjects situated in the world. Thinking takes the form of cartographic renderings of embedded and embodied relational encounters. These encounters can be with texts, institutions or other concrete social realities, or people. (2019b, 92)

Critical posthumanities, in their attempt to work for a rigorous change in the production of knowledge, necessarily imply a qualitative shift in academic practice as well, rather than just adding quantitative data through the inclusion of other-than-human agents (Braidotti 2019b, 94). This resonates with Johnston's call 'for be*wild*erment to be treated within the academy not as a shameful state of ineptitude, a failure of mastery, but as a strategically invited state of creative confusion that opens the subject to the "other."' Academy, for Johnston, should be a 'place and state where insightful conversations ensue, and the self and multiple "others" transform within the relation' (2021, 240, both quotes).

Johnston's suggestion to adopt a position of 'strategic inadequacy' is the consequence of acknowledging radical entanglement. What we are doing is embrace our situated knowledges (as Donna Haraway already recommended in 1988) as well as our entanglement, turning this acknowledgement into a positive assessment rather than seeing it as a problem. Subsequently, we start a strategic remapping of scholarly fields that take knowing with *other*bodies seriously in our work as scholars of religion. We then ask: In this transversal field of research, what are the qualitative criteria and analytical indexes that inscribe discourses on 'religion' in the remapping of scholarly production of knowledge?

In my view, the transversal alliance that can be built around what today is called the academic study of religion would (tentatively) include the following: human agents across the most diverse groups of people, with special attention to underrepresented voices; nonhuman agents, including living subject–objects such as animals and plants, but also subject–objects such as gods, ancestors, or spirits; earth-others (landscapes, waters, ecosystems, stars); nonhuman organic and inorganic agents (plastic, wires, algorithms, paintings and art works, but also material products of religious practice); technologically-mediated elements (such as archaeological sources, books, TVs, computers, smartphones); diverse soundscapes (without hegemonic differentiation between 'music' and other sounds); all forms of aesthetic, sensual experience that mediate between the human and the more-than-human, including the non-linguistic languages of signs that biosemiotics addresses in the natural world.

It is clear that such a remapping is a queering and an undisciplining of the academy. It is what Johnston calls a be*wild*erment of the study of religion, which nonetheless creates a 'place and state where insightful conversations ensue, and the self and multiple "others" transform within the relation.' It also puts into practice Braidotti's argument that building

> transversal interconnections across the disciplines and society is the way to implement an ethical praxis that aims to cultivate and compose this new collective subject. This subject is an assemblage—'we'—that is a mix of humans to non-humans, *zoe*/geo/techno-bound computational networks and earthlings, linked in a vital interconnection that is smart and self-organizing, but not chaotic. (2019b, 107)

The knowledge that this transversal field produces will no longer claim hegemony beyond its place in the web of entangled agencies. It will define its perspectival arrangement of knowing with reference to at least three *levels of entanglement*: (1) Humans who engage directly with our research; these are peers from various academic fields and habitats, but also stakeholders and subject–objects across society. (2) Nonhuman subject–objects whom we invite to the conversation; we are open to listen and willing to learn their languages and semiotic communications. (3) Entanglements with subject–objects whose agency (presumably) does not come from their inner motivation and livelihood but is based on entanglement; examples of situational agency include material things, material and immaterial texts and images, but also subject–objects such as gods and ancestors.

Some participants in this ecology of knowing may be filed in one or the other category —or actually in more than one. It is the constant negotiation of and work on these entanglements that characterise human quests for knowledge.

Active engagement with the more-than-human world

If we look at the 'religion' factor in these settings and arrangements, it seems as if the basic feature of religious discourses is the active organisation of human entanglements with the more-than-human world. These entanglements involve various locations (from community ritual to law, to politics, to the arts), various agential networks, and various strategies of legitimisation. In our transversal field of knowledge production, we do not have to limit our attention to 'religion' or related concepts; in fact, we can analyse these concepts as diffractions and interference patterns that change in different contexts, for instance from religion to spirituality, metaphysics, or worldview. Undisciplining the study of religion means opening it up to the nomadic use of other terms and to engagement with cultural locations other than traditional 'religious' communities and discourses. For instance, environmental policies and laws can be seen as an example of how humans organise their entanglement with the more-than-human world; the same is true for ethical questions concerning animal testing and industrial farming; for artistic engagement with invisible realms of reality; for the links between the material and immaterial dimensions of an agentic virus such as Covid-19; and for many other topics that cover the entire field of human and more-than-human experience.

Given the vastness of this field of inquiry, we may want to look particularly at those ideas and practices that evince an *active* and *intentional* engagement with these

entanglements. It is important to note that this does not mean a rational, reflected engagement in Taves' sense, which would allegedly be limited to human agents. Nonhuman agents engage with the more-than-nonhuman-world (e.g., owls with the more-than-owl-world, etc.), and their behaviour can show diffractions that may be similar to what we call religion or spirituality in human behaviour. As for humans, some of the questions discussed in our field of research are: What are the strategies and explanations that legitimise arrangements with the more-than-human world? What are the values and identities that steer the course of action? How do the agential networks that human beings are part of influence these values and arguments?

William E. Paden's ideas about world-making from an evolutionary perspective, as well as Ann Taves' suggestion that 'religion' is an emic subcategory in enacting processes of valuation, can be integrated into such a theoretical framework. Human beings' active and intentional engagement with the more-than-human world can take the form of identifying (and managing) 'specialness' or 'beacons.' But within a theoretical framework of agential realism and critical posthumanities, our analysis no longer depends on the distinction between nature and culture, or between the cognitive and the physical. An undisciplined study of religion—in its weaving together affect theory, biosemiotics, critical posthumanities, and agential realism—offers new perspectives on planetary ways of knowing. 'For this is what we should task ourselves with: thinking future coexistence, namely coexistence unconstrained by present concepts' (Morton 2016, 27).

When it comes to leaving behind and 'unlearning' concepts that prioritise human perspectives, the academic study of religion has a lot to offer. We, as scholars of religion, have always taken seriously the active human engagement with the more-than-human world. We are used to analysing ideas such as speaking stones, shape-shifting ancestors, and gods of all kinds. Therefore, in an undisciplined field of transversal knowledge, scholars of religion can add important insights about the limits of human knowledge, about human vulnerability and exposure to other-than-human influences. We can accept our accountability at various levels of our work, include strategic inadequacy and bewilderment in our methodological toolbox, and open up to the many voices of the planet.

Disclosure statement

Notes on contributor

Kocku von Stuckrad is professor of religious studies at the University of Groningen, the Netherlands. He has published extensively on topics related to the history of religion, science, and philosophy in Europe and North America, most recently *A Cultural History of the Soul: Europe and North America from 1870 to the Present* (Columbia University Press).

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