

# There is no magic wall

Kristian Brevik, Lindsay Barbieri

## Bats

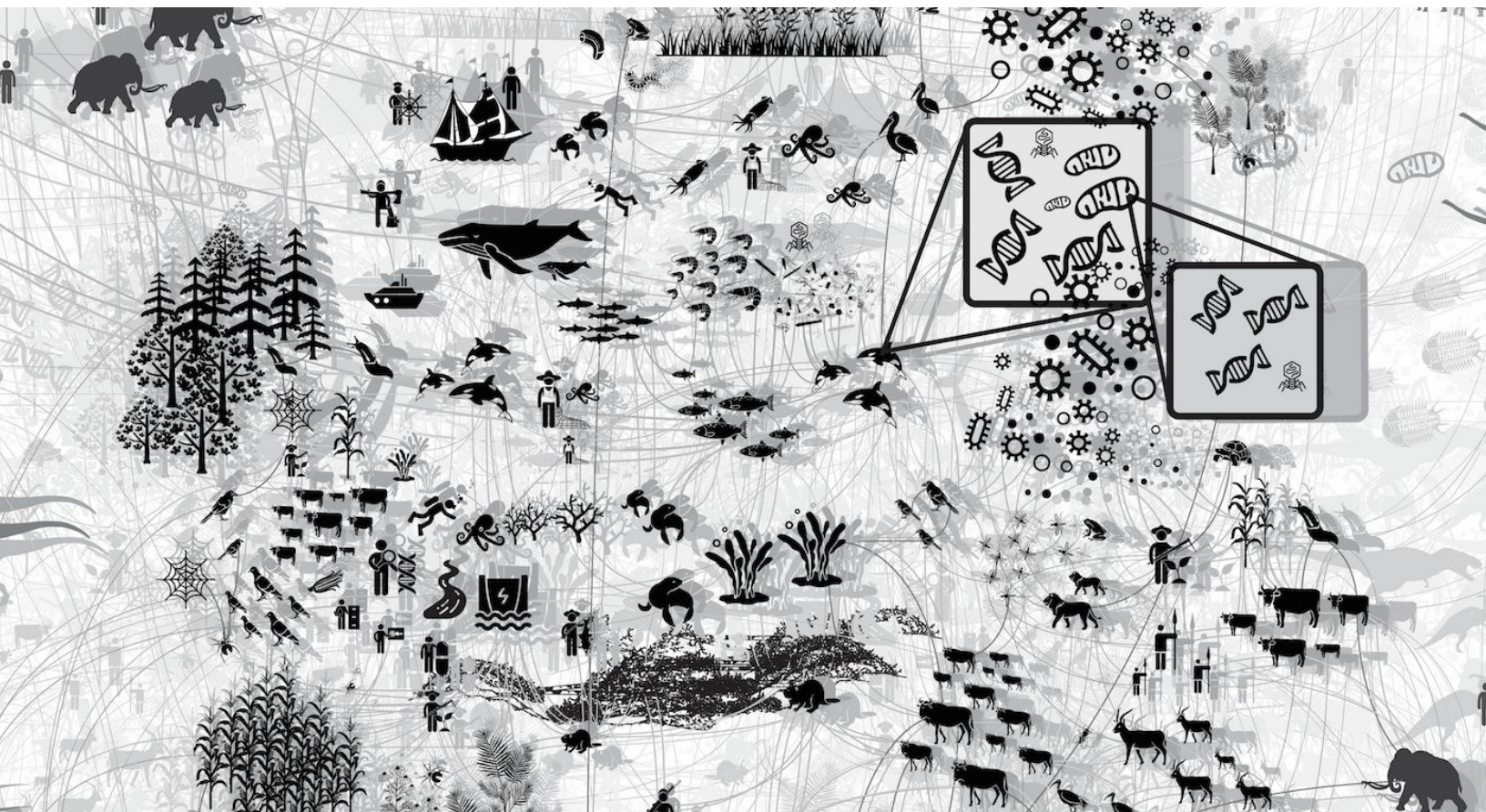
When I used to see bats flying  
in the California twilight  
their intricate zigzag voices  
went flickering with them  
but they fell silent with the years  
and without that tiny sonar static  
to see them flicker  
in and out of being  
is a kind of blindness

-Ursula K. LeGuin, from *So Far So Good*

Reflection on what it is like to be a bat seems to lead us, therefore,  
to the conclusion that there are facts that do not consist in the truth  
of propositions expressible in a human language.  
We can be compelled to recognize the existence of such facts  
without being able to state or comprehend them.

- Thomas Nagel, from *What is it like to be a bat?*

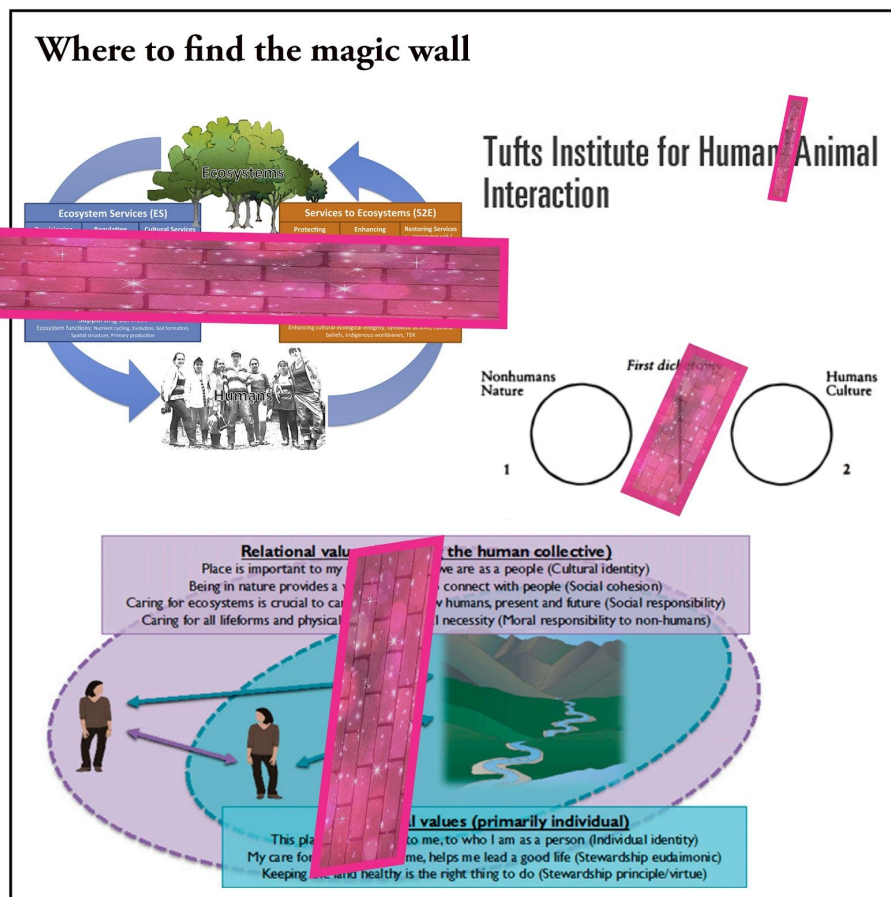
This paper is called, “there is no magic wall”. You may be wondering, “What is a magic wall?” A magic wall is a wall between humans and everything else - a wall which frees us from accountability, dependency, and responsibility towards those beings on the ‘other side’. A magic wall allows us to disregard, manipulate, and exploit other beings, to appoint ourselves dictators or stewards, to say, “humans first, humans always”. But... there is no magic wall. So what does that mean for how we are in the world? We often hear and say the words, “humans are a part of nature”, or “humans are embedded in ecosystems” or “humans and nonhumans are interwoven in deep relationships of kinship and reciprocal obligations”<sup>13</sup>. But have we thought about what that really means? Here is an image of how we might imagine humans, once we know that there is no magic wall:



We’ve got humans, and nonhumans, and DNA, and boats and beaver dams and human dams and dinosaurs and mitochondria and mountains and rivers and cyanobacteria and oxygen and hydrogen, all together, entangled in webs of ecological, evolutionary and perceptual connections and interactions and dependence and kinship, all existing as mosaic beings, with no circles around groups, no dots representing species, and nothing labeled ‘nature’ or ‘humans’. This is the mesh, as described by Tim Morton in *The Ecological Thought*: “All life forms are the mesh, and so are all the dead ones, as are their habitats, which are also made up of living and nonliving

beings. We know even more now about how life forms have shaped Earth (think of oil, of oxygen—the first climate change cataclysm). We drive around using crushed dinosaur parts. Iron is mostly a by-product of bacterial metabolism. So is oxygen. Mountains can be made of shells and fossilized bacteria. Death and the mesh go together in another sense, too, because natural selection implies extinction.” It is also congruent with Darwin’s ‘tangled bank’<sup>10</sup>, Watson’s ‘continuum’<sup>12</sup>, and Abram’s “more-than-human world.”<sup>7</sup>.

But how do we imagine humans instead? Most of us, it seems, are bumping up against a magic wall we think is there, like mimes against an invisible screen. Even those of us who are panicking about climate change, depressed about the mass extinction we’re in, and desperate to start working towards “a richer world, (where we) can begin to negotiate life membership in an ecological community of kindred beings”<sup>3</sup>, still talk and act as though there is a magic wall. Here are a few examples from ecosystem services, human-animal interaction, and philosophy, followed by some examples of the wall in common phrases, illuminated by replacing the word “human” with words we use for other beings.



## How to see the magic wall

The Human Condition : The Papaya Tree Condition

“What does it mean to be human?” : “What does it mean to be mammal?”

Nature’s benefits to people : Nature’s benefits to rivers

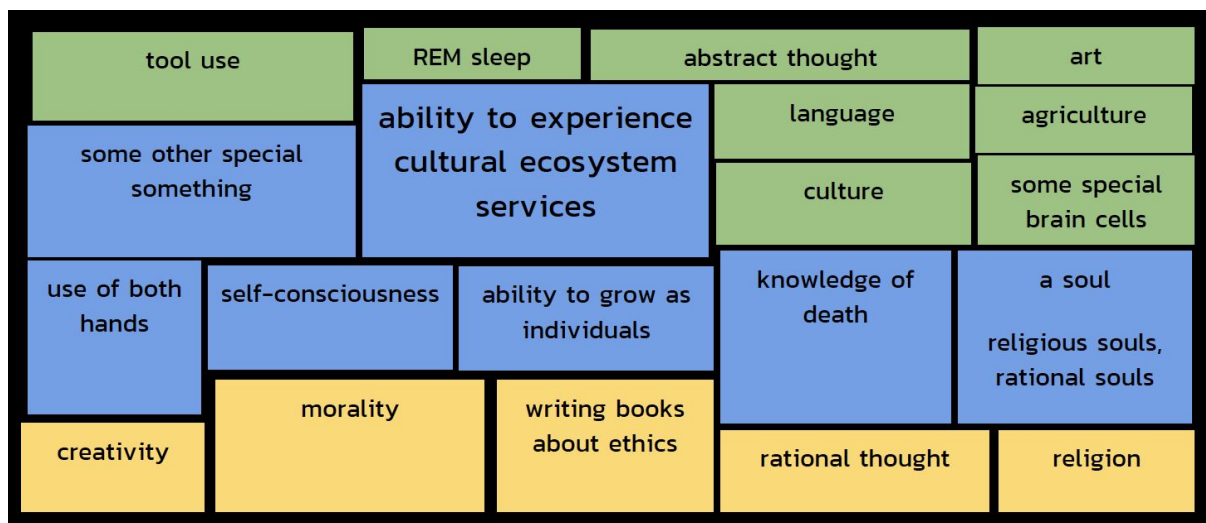
Human-Animal interactions : Moose-Animal interactions

Humans and the rest of nature : Frogs and the rest of nature

Social-Ecological system : Coral Colony-Ecological system

Nature’s Contributions to People: Nature’s Contributions to Algae

Why do we call this a magic wall? Others have written about “a divide” between humans and everything else - but that suggests that humans are innocent, and just “found” it, when really, humans fortify the idea of a wall every day. Generally, we either (1) pick something we like about humans and say, “this is the thing that separates us!”, or (2) we choose or invent something that humans only are allowed to have or do, or (3) we say that we do such and such a thing “more” or “better”. This following image shows examples of stones with which we try to build a wall.

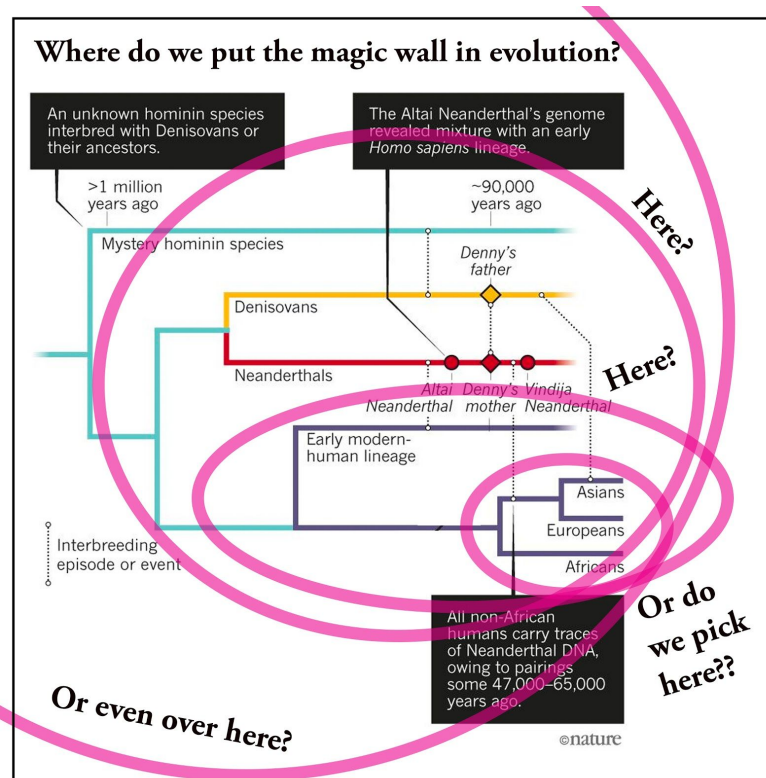


You might see in that image of a wall something that you think might be a justification for there being a magic wall between humans and everything else. I certainly used to think some of these concepts provided us a magic wall. However, gathering what we have learned from fields



such as ecology, evolutionary biology, genetics, ethology, critical theory, phenomenology, education, philosophy, environmental studies, ecological feminism, botany, entomology, ecological restoration, ecological economics, speculative fiction, art, and multispecies ethnography, has made clear that light gets through the magic wall in cracks of many dimensions. Exploring three of these dimensions will show that there is no magic wall. The first dimension is evolution, the second dimension is our mosaic being, and the third dimension is traits and characteristics.

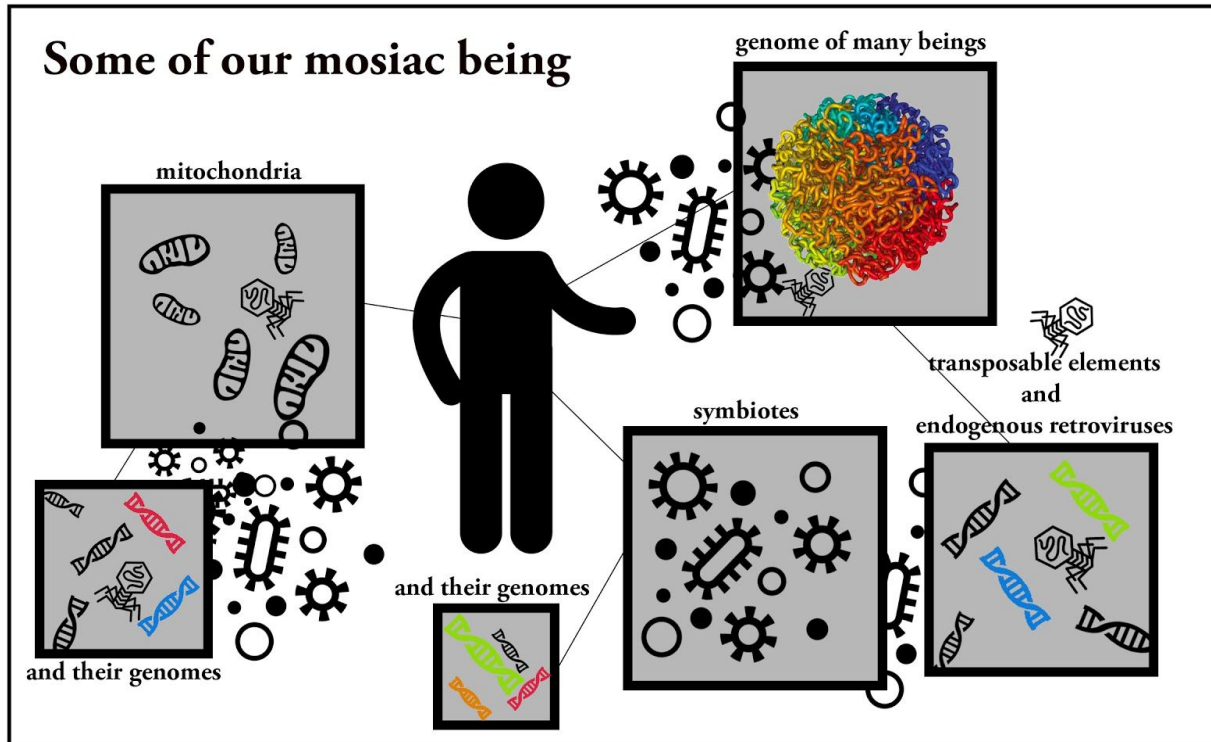
First, evolution. Many humans may consider this the first and most obvious place to look for a magic wall - around *us*, “*Homo sapiens*”. But there are dozens of different definitions of what constitutes a species, and so species exist, sort of, but not in some magic way - just as a useful way to talk about organisms. The evolutionary tree is rather tangled<sup>11</sup>. In this figure from a recent paper (pink circles drawn by me), we can see that even those who we consider humans have a complicated situation happening:



Oh boy, that seems messy. Some humans had kids with Neanderthals, some humans had kids with Denisovans, and some Denisovans had kids with a “mystery species”, who then had kids with Neanderthals, who then had kids with ‘humans’ in Europe and Asia. You might notice in this figure the authors say, “non-African humans carry traces of Neanderthal DNA”, which seems to imply that there is some sort of “pure human” which somehow just has a little sack of Neanderthal

DNA that they carry around with them. But European and Asian “humans” are the grandkids of “humans” and Neanderthals and Denisovans, all hybridized and mixed up, fully constituted by the DNA that is them. So that means that if you want to put a magic wall around “human”, you need to decide if you are going to include Neanderthals and the others. (The way we do this, as shown in the image, is by circling branches of the evolutionary tree that go back to a single branching, which is known as the *most recent common ancestor*.) If you decide *not* to include Neanderthals, on what side of the wall are non-African human/Neanderthal hybrids? If you decide to allow Neanderthals to be inside the wall, then what about that Mystery species? Are chimpanzees inside the wall (though they are outside the scope of the figure), since it appears we have them as ancestors well after what we consider the species divergence<sup>11</sup>? You might have noticed something happening in these last few sentences... we are discussing “picking”. And that is the major problem with trying to use evolution as a way to place a magic wall, we end up “just picking” who gets to be included inside. If you might say “I pick all humans including Neanderthals and Denisovans”, then I might say, “I pick all Finnish humans.” Both are just “picked” out of the tangled tree - one can see how this is a dangerous zone, with “unsettling analogies with familiar forms of prejudice”<sup>14</sup>. We feel that dismantling the magic wall is a critical component of the journey of liberation<sup>4</sup> from all injustices.

We think of ourselves as individuals, but the second dimension - our mosaic being of symbiotes and our fuzzy boundaries - shows that there is nowhere to find a magic wall within or amongst the beings which are us. Where would we find a magic wall between us and the myriad beings which make “us” up? On the surface, we are full of and covered by symbiotic microbes which mediate our interactions with other beings. Our guts are full of microbes who are involved when we interact with all the other species we eat - and these microbes affect not only our metabolism, but our cognition. As an example, you might say, “there is a magic wall around humans because we have morality”. If a microbe affected some idea you had about morality, how much of your morality is attributable to those microbes and your relationship to them? Deeper into ourselves are mitochondria, who were once free-living bacteria and now exist with/as us as symbiotes - neither of us exist without the other. Are they inside or outside the magic wall? And even in our DNA, we have transposable elements, endogenous retroviruses and other genetic elements, which make up “our” DNA. Much of “our” DNA is made up of these elements, who are the descendents of viruses who have been incorporated into our genome over the course of evolution. These viruses and genetic elements have interacted with the genes we consider “ours” to make possible pregnancy, aspects of the way we learn, and our immune systems - along with our whole way of being constituted. You may believe that only humans can feel or think something, but how much of that feeling or thinking is attributable to your mitochondria, and how much to elements within your genome? There is nowhere to put a wall between us and the mosaic of beings of which we are.



The third dimension is evolved species traits, also known as characteristics or attributes. We have learned, more and more in recent years, about the ways in which all the traits we often assign to 'humans only' are spread throughout many species. As Robin Wall Kimmerer reminds us, there have been no studies that show that other beings are dumber than we thought<sup>2</sup>. If we attempt to say that a certain trait or ability forms the basis for a magic wall between humans and everything else, we find that there is no trait that allows all who we consider human to be inside the wall, and all who we do not consider to be human to be outside the wall<sup>14</sup>. Examples include culture, which humpbacks and mountain goats express, and which human infants and humans in permanent vegetative states may not. Not all humans are able to use tools or language, while many crows are. Many rats make better moral judgements than many humans. Many species seem self-aware, as do many humans. Whatever we pick, we find that the magic wall ends up including or excluding beings who we did not intend to include or exclude.

## Evolved species traits are everywhere



culture language  
self-recognition



tool use

'intelligence' 'consciousness'



emotions

altruism



death rituals



Every trait that we might pick in this third dimension has been evolved and is a part of our embodied being, not some true “pure and eternal” idea (like Plato’s *eidos*) in a magic cloud that we gain access to after having evolved enough. Any concept we choose, be it love, suffering, morality, intelligence - we experience the human (and more so, just our own individual) version. We seem to assume that humans experience the “true” version of the concept, and other beings are ‘automatons’ who only act with ‘instinct’ or ‘neurochemicals’. We wonder, “do dogs feel love?” or “do orcas feel grief?”. Humans experience feelings which we describe as love or grief, and we all feel and experience those in unique ways as individuals - and so do individuals of other species. Onyx (our friends’ dog), and Tahlequah (the orca) both feel “a thing like what we call love” and “a thing like what we call grief”. These feelings and perceptions are all rooted in evolution and the mesh.

The concept we call ‘consciousness’ or ‘sentience’ is also subject to our being - often we assume that humans experience “The One True Consciousness”, and that all those beings who we deem ‘sentient’ experience the same ‘outside of themselves’ perspective - but what about clam consciousness and tree sentience and river awareness? Our idea of consciousness is based how we are embodied as social mammals, and the way we ‘access’ the world is with hands and talking and thinking, but other access modes are equally full for other beings<sup>6</sup> - a slugs way of sliding and eating and tasting and who knows what else is as equally full an experience as ours is. Thomas Nagel’s *What is it like to be a bat* discusses how it is almost certainly impossible for us to imagine what it would be like to experience and feel the world as another being. However, we can imagine what certain things feel like, like hunger, temperature, or touching, and can acknowledge that our



individual world of experience is a certain range of abilities limited by our embodied form, which has some overlap with the world of experience of a bat, and a different overlap with the world of experience of a slug, and so on for all beings. Slugs have slug consciousness and slug experience and slug self-awareness - just as humans have human consciousness and human experience and human self-awareness.

There may be some of you humans for whom no amount of finding things out about other beings will convince you that humans don't have a special something. There may also be those of you who may think, "well, okay... but since we can't really know what a bat or a slug or a papaya tree or a zooplankter wants, experiences, or feels, there is no point in considering them when making decisions". Well, to borrow again from Tim Morton and our shared experience of movie preference, we have a shortcut - the *Blade Runner* shortcut. Simply put, you and I might think that we have self-awareness/morality/ethics/love/language, but can you show that you are not an android programmed to behave in exactly the way that you behave? And what would be the difference if you could? We are always guessing and assuming about what other beings, humans included, want and experience and value.

So those are three dimensions (though I imagine there are more) in which a magic wall cannot be. Humans can put up other walls, of course. In *Earthsea*, male human wizards put up a low stone wall between the living and the dead, by stealing land from and severing their connection to nonhuman kin. They then pretended like the wall was just something that they found and had no power to tear down. It was torn down, but it took more than male wizards to do it<sup>1</sup>. Humans often put up walls of chain-link and barbed-wire - but these too are full of holes and divide things up in terrible, awkward ways. Any wall we put up is going to have problems, which is why there is no *magic* wall that frees us from accountability for the choices and actions that we take. That there is no magic wall means that we cannot make decision after decision, forever, for the sake of those we consider human, and absolve ourselves of the outcomes of our actions. We make decisions every day, and for most, if not all, we cannot know the outcomes of those decisions on all past, present, and future beings of the mesh. Even for those decisions which most humans would consider okay, like exterminating mosquitos, we can't know how that changes the mesh now and seven million years from now. If, by exterminating the mosquito *Aedes aegypti* (who spread Dengue fever) to save our children, we cause a swamp to be drained, a forest to be cut, and a leopard's children to starve, we don't get to walk away - we stay with the trouble<sup>15</sup>. This isn't to advocate for not exterminating mosquitoes - it is to advocate for wallowing in the uncertainty. To light a candle is to cast a shadow<sup>1</sup>.

That there is no magic wall means that there is no center. This means that a "centric thinking" model, after Val Plumwood's conceptualization<sup>4,8</sup>, cannot hold. In a centered framework, 'the center' (in this case humans) is placed in contrast to 'the other'. The other is excluded and considered inferior to the center, stereotyped and homogenized into an undifferentiated group (for example, 'trees', 'mosquitos', 'nature'). The other (in this case,

'nonhuman' beings) is often deemed inessential, and dependencies between the center and the other are denied. A centric framework also includes pathways for incorporation into the center without dispelling the notion of a center, such as including certain beings (whales and apes, or species whose suffering we can empathize with) into the center. But a center relies on a magic wall to maintain itself, and so because there is no magic wall, then decentering is necessary<sup>14</sup>.

That there is no magic wall also means that we cannot use definitions to shirk our responsibility to take into account all kin when making decisions and taking action - and humans don't get to have special stuff, like sentience or morality, just by saying so. For example, the definition of ecosystem services is, "the benefits humans receive from ecosystems". So, it seems like we can just think about humans and walk away. However, we could define eating as, "what humans do when they ingest food". But that doesn't mean that it is different in any meaningful way from the way other beings ingest food<sup>9</sup>. A human can enjoy a sandwich as a benefit from the ecosystem, but if a raccoon steals and eats that same sandwich - it is still a benefit from the ecosystem. We could instead expand our framework to say that ecosystem services are "the benefits received from ecosystems" which allows all beings to be recipients or valuers of those services and benefits. We could still study, "ecosystem services as experienced by those I consider human".

What types of questions must we think about now? What happens when all beings are allowed to experience value and benefits - when all beings are valuers, all valuing in their own way? How can we say the value of a tree? Is it the value of the tree to all beings, from the squirrels and birds and the cells of the tree itself<sup>5</sup>, through all of the universe we think of as space and time? Even if beings eat or parasitize each other, how is their wellbeing dependent upon one another? How can individuals of other species and other beings be stakeholders when we are making decisions? How are we supposed to make decisions if everyone gets to be included?

That there is no magic wall means that humans and all other beings, in our mosaic of interrelated forms, are a mesh of entangled and interwoven kinship. This makes life easier. When you know that there is no magic wall and you need to make a decision about removing a dam, then you get to look around at the fisherman and the orcas and the salmon, and the teachers, and the river, and all the crows, and the many stones, and the forest, and the beetles and the fungi and the incarcerated youth and the children of the humans who have lived with the river for generations and all the other beings who will each be impacted by your choice. If this sounds challenging, look around you: is the way we make decisions now working out for our whole family of kin?

When, if we allow a songbird and the whole of the mesh to also value a tree, do we choose to change that tree into a canoe or a house, the forest into a warship or a farm, or the world into a place for some of us, or a place for all of us?







You may have noticed what seems like an omission. We have taken after John Lupinacci's amazing talk, '(Un)Learning Anthropocentrism'<sup>5</sup>, in attempting to navigate our relationships with indigenous knowledge. This is a hard question for us, and we have been thinking about how voices can best be heard - but heard for their own sake, and not simply to bolster our perspectives. However, the ways of knowing and ideas of many indigenous humans are hugely influential in how we are thinking about these ideas. To us, we feel that many of the ways we've come to think about the magic wall and the idea of humans is congruent and reconcilable with much indigenous thought, though we are wary of assuming too much. Don't take our word for it - seek out these voices, authors, and scholars:

Jeremiah "Jay" Julius - [Sacred America](#)

[When Whales and Humans Talk](#)

[Never Alone - Cultural Insights](#)

Robin Wall Kimmerer - [Two Ways of Knowing](#)

[Kim TallBear - An Indigenous Reflection on Working Beyond the Human/Not Human](#)

#### Who else is out here, knocking out stones?

- Ursula K. LeGuin - *"I'm going to go unbuild walls."*

(Earthsea (all six books!)<sup>1</sup>, The Dispossessed, Always Coming Home, The Lathe of Heaven)

- Robin Wall Kimmerer - *"I can't think of a single scientific study in the last few decades that has demonstrated that plants or animals are dumber than we think. It's always the opposite, right? What we're revealing is the fact that they have a capacity to learn, to have memory, and we're at the edge of a wonderful revolution in really understanding the sentience of other beings."*

(Braiding Sweetgrass, [The Intelligence in All Kinds of Life \(interview\)](#)<sup>2</sup>)

- Val Plumwood - *"(we) can open another door to a richer world, and can begin to negotiate life membership in an ecological community of kindred beings."*

([Nature in the Active Voice](#)<sup>3</sup>, Androcentrism and Anthropocentrism: Parallels and Politics<sup>4</sup>)

- Timothy Morton - *"Solidarity requires nonhumans."*

(Humankind, The Ecological Thought<sup>5</sup>, Dark Ecology<sup>6</sup>)

- David Abram -

*"an oak tree...remains an experience for others - not just for other persons, but for other sentient organisms, for the birds that nest in its branches and for the insects that move along its bark, and even, finally, for the sensitive cells and tissues of the oak itself, quietly drinking sunlight through its leaves."*

(Spell of the Sensuous<sup>7</sup>, Becoming Animal)



- John Lupinacci - *“Because without addressing anthropocentrism, or conversely, your willingness to uphold human superiority, you are in fact making way for the rape, slavery, and murder of the human and more-than-human family: the animals, the land, each other, the oceans, and everything to which we all belong.”*

([\(Un\)Learning Anthropocentrism](#)<sup>8</sup>)

- Samantha Hurn - *“There is nothing to be gained from the hierarchical ordering of cultural practices (in relation to differences between humans or differences between humans and other animals) other than a rationale for exploitation.”*

(Humans and Other Animals<sup>9</sup>)

- Charles Darwin - *“It is interesting to contemplate a tangled bank, clothed with many plants of many kinds, with birds singing on the bushes, with various insects flitting about, and with worms crawling through the damp earth, and to reflect that these elaborately constructed forms, so different from each other, and dependent upon each other in so complex a manner,”*

([On The Origin of Species](#)<sup>10</sup>)

- Thomas Nagel - *“What is it like to be a bat?”*

([What is it like to be a Bat?](#))

### Other works mentioned:

David Quammen’s *The Tangled Tree*<sup>11</sup> covers a great deal of the history of how we learned about our mosaic being. Paul Watson’s description of “The Continuum” is found in *Dark Green Religion*<sup>12</sup> by Bron Taylor.

[Assessing nature’s contributions to people](#)<sup>13</sup>

*Anthropocentrism*, edited by Rob Boddice<sup>14</sup> contains a number of papers exploring these ideas (Tony Milligan discusses what I have called dimension 3 on pages 226-227), and Nik Taylor discussing the role of Actor-Network Theory in decentering.

Donna Haraway’s *Staying with the Trouble*<sup>15</sup>

### Links for the images:

Larger versions of the mesh image are available here: <http://www.kristianbrevik.com/mesh/>

On page 2, from the image with all the magic walls:

1: [Ecosystem services or services to ecosystems?](#)

2: [Why protect nature? Rethinking values and the environment](#)

3: [Tufts University](#)

4: [We Have Never Been Modern, Bruno Latour](#)

On page 4, the image of our messy family tree is from this article:

[The genome of the offspring of a Neanderthal mother and a Denisovan father](#)

Image of 3D genome in the image of our mosaic being is here:

[Comprehensive Mapping of Long-Range Interactions Reveals Folding Principles of the Human Genome](#)

The images of other beings from the image exploring species traits are stock or:

Orca: [Amos Nachoum](#)

Fish: [Is This Fish Self-Aware?](#) Photo by Georgette Douwma/Minden Pictures

Elephants: [Elephant Mourning Rituals](#) Photo credit to scalar.usc.edu

And thanks to NounProject for the icons used in the mesh.

**Acknowledgments:** Many thanks to the many humans who have asked us the questions about the magic wall which needed asking, including Alison Adams, Charlie Nicholson, Josh Morse, Michael Wironen, Eduardo Rodriguez, and more. And many thanks to a few kin who hung around and waited for me to open this door, including the spiders who live in our bathroom, the chipmunk who ate our tomatoes, and the tick who crawled on my leg.

### Malheur Maar

A hole in black ground.  
Steep cliff walls round.  
A ring of tall green reeds  
under the walls around the water.  
Some small people sit here and there silently  
on the cliffs among rabbitbrush and sagebrush.  
Some small people silently  
climb up my pants leg.  
In the round water  
are the reeds and the walls  
and some of the people  
and the wind moving  
and the silence.

- Ursula K. LeGuin, from *Out Here: Poems and Images from Steens Mountain Country*