## Invisible Realities: Ethics, Meaning, and 'Universal Consideration'

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Whether we are concerned simply with understanding nature, or also with acting more ethically toward it, the more we learn about the non-human world, the more we are reminded how consistently we underestimate it. This article is concerned with what I see as the central problem for ethics: the ways in which we fail to be ethical. It is concerned with how we treat others that are so meaningless to us we don't even notice they are there. Like much ecological writing, this is an argument for humility, and against hubris – but my focus is on what seems to be a somewhat insidious and often invisible form of hubris that limits our capacity both to understand the world, and to treat it with care and compassion. I will argue that if we accept that we are not in a position to know the perceptual reality of another organism; then we must also accept that we are not in a position to know with certainty what is meaningful, or valuable, to or for another organism, and we therefore cannot justify excluding what we perceive as 'meaningless' from our moral communities.

The perspective outlined here is drawn from diverse strands of thought, but all of them thoroughly *ecological*. I will begin by outlining an ontological perspective broadly influenced by biosemiotics¹ and complexity science. It is consistent with a broadly 'ecological' understanding of the world in that it is focused on understanding the interconnectedness of organisms and their environments. In the 'biosemiotic' view, organisms are best understood as communicative, and as such, meaning-making, sign-processing systems, and every organism lives in its own perceptual or 'semiotic' bubble – or world of meaning². Accounting for complexity means that these sign-processing systems are also complex, dynamic, nonlinear, entangled and uncertain. I employ these perspectives somewhat loosely, but I aim to show that through conceptualising the world in this (complex, semiotic and uncertain) way, we can make more sense of both some of our moral intuitions, and some of the 'great pitfalls' of ethics – those instances in which we fail to be ethical. I will then show that this intra-active³, semiotic ontology both entails, and helps us to make sense of, the meta-ethical implications of an approach to thinking about ethics which I will call 'axiological humility' – with the goal of 'universal consideration'.4

We begin (...) a stroll on a sunny day before a flowering meadow in which insects buzz and butterflies flutter, and we make a bubble around each of the animals living in the

<sup>&</sup>lt;sup>1</sup> see Barbieri, M. (2007). Introduction to biosemiotics: the new biological synthesis. Dordrecht: Springer, 2007

<sup>&</sup>lt;sup>2</sup> Uexküll, J. v. (2010). A foray into the worlds of animals and humans: with, A theory of meaning. Minneapolis: University of Minnesota Press

<sup>&</sup>lt;sup>3</sup> Where 'interactive' refers to external relationships, 'intra-active' refers to internal relationships. See: Barad, K. M. (2007). *Meeting the universe halfway : quantum physics and the entanglement of matter and meaning*. Durham: Duke University Press

<sup>&</sup>lt;sup>4</sup> Birch, T.H., 1993. 'Moral Considerability and Universal Consideration,' *Environmental Ethics,* 15, 313-332

meadow. The bubble represents each animal's environment and contains all the features accessible to the subject. As soon as we enter into one such bubble, the previous surroundings of the subject are completely reconfigured. Many qualities of the colourful meadow vanish completely, others lose their coherence with one another, and new connections are created. A new world arises in each bubble. (Uexküll 2010:43)

With this somewhat pastoral scene, biologist Jacob von Uexküll invites us on a *Foray into the Worlds of Animals and Humans*, worlds which are 'not only unknown; they are also invisible." We are invited, as we have been so often in the history of ecological thought, to venture into the perceptual world of the non-human. We are reminded that this paradoxical journey is one in which we are asked to take on a new way of thinking; the journey is intended to shift our own perception, a journey in which our 'previous surroundings' are 'completely reconfigured'. These invitations represent ecological ways of thinking in three important ways: different organisms perceive and interpret the world differently, everything is not only interconnected but entangled, and organisms can only be understood in context. However, today, in the midst of the sixth great extinction event, the journeys into other perceptual worlds that are perhaps most urgently needed, are far from idyllic; destruction, pollution, suffering and death abound. Today, our impetus is not only to understand the non- human world, but to protect it – to help it to survive. Instead of a pleasant stroll in a springtime meadow, we are today beckoned to dive into the dark depths of an ocean we cannot inhabit.

But wherever our journeys into non-human worlds take us, those journeys are paradoxical because although understanding the 'Other' demands understanding it from its own perspective, this task is ultimately impossible. Just as reconciliation after an injustice demands considering the issue from the victim's perspective, if we are to have any chance of understanding the non-human world, we must aim to do so from its own perspective. Yet we can't really 'think like a mountain'6 - we can never entirely escape our own 'bubbles' of subjective experience - just as we can never really understand what it is to be an albatross, zooplankton, a coral reef, or an ocean. While it is an impossibly paradoxical journey, it is one we must nonetheless undertake, for the limits of our ethical responsibility do not end at the limit of our epistemological capacities or sensory experience. Rather, I will argue, this is precisely where they begin.

The key insight of biosemiotic theory, and it's advance on other theories that highlight the importance of information (and its transference) in biological processes, is the idea that information isn't *enough* to explain these processes, but that information has to *mean* something; that exchanges of information are interpreted. Biosemiotics is a pragmatic attempt by some working at the junction of biology and philosophy to take seriously the fact that (conscious and unconscious) perception of the world occurs from different perspectives, and it seeks to understand "how (...) matter interacts in interconnected systems that include organisms in their (distinctively) perceiving worlds—worlds that are

<sup>&</sup>lt;sup>5</sup> Uexküll, J. v. (2010). A foray into the worlds of animals and humans, p43

<sup>&</sup>lt;sup>6</sup> Leopold, A., & Sewell, M. (2001). *A Sand County almanac: with essays on conservation*. New York: Oxford University Press

necessarily incomplete." For semiotics, signs are the basic units of meaning, and so 'Biosemioticians' interpret and analyse all biological processes, from single-cells to ecosystems, as sign-processes. Biosemioticians take from Uexküll the idea of the "coconstruction between species and environment of Worlds through signs".8 In its focus on relationship, we can understand it as both an ecological theory of sign relations, and as a semiotic theory of ecology – semiosis supplies an interpretive lens through which to represent both biological and ecological relationships. These signs are everything that means anything to or for an organism, (not just to a conscious self); they are the 'differences that make a difference'. 9 Most of these signs are "registered and responded to" 10 unconsciously, so a lot of this sign interpretation is going on 'in the dark'. This means that our semiotic 'bubbles' include not only what is significant to an organism, but what is significant *for* it. In the *bio*semiotic view<sup>11</sup>, sign-processes are a triadic relationship between an interpretant, a sign, and something it stands for: its meaning. In general, human terms, it can be understood as our intuitive process of hypothesis formation. I, the *interpretant*, encounter a sign, X, which I hypothesise means that something else – the object, exists. For example, I see someone wave and smile in my direction and I assume they are greeting me, so I smile back and say hello.

The idea here is that organisms don't just respond to sensations, they respond to an interpretation of those sensations as *meaning something*, or 'standing for something else', which means that the same thing can mean different things (and of course be valued differently, or not at all) to different organisms. For example, I cannot see what a bee sees, but the bee and I are responding to, and drawing meaning from, real, context-dependent, phenomena. What they mean for each of us, and what they 'look' like are very different. This reminds us that it is not the sensory stimulus that directly provokes a behavioural response, but interpretation of that stimulus. For example, we don't respond to what people actually mean when they speak to us – we respond to what we interpret them to mean, and sometimes we get it wrong. Similarly, moths, having evolved to navigate by moonlight are attracted to light bulbs, which they interpret as celestial navigational devices - but they've *mis*interpreted the meaning of the sign, and fly fruitlessly in circles.

Consider a micro-scale example with macro-scale consequences: ERV-3, "an endogenous human retrovirus, a virus-like entity that is part of human DNA (...) may code for immunosuppressive properties of the placental barrier." Without ERV-3 assisting with interpretation of the signs to a mother from her placenta, her body could fail to recognise the foetus as *signifying*, *or meaning* a future child, rather than a parasitic foreign body – something the organism should protect rather than destroy. Willows and Poplars (amongst

<sup>&</sup>lt;sup>7</sup> Sagan, D. (2010). Introduction *A foray into the worlds of animals and humans.* Minneapolis: University of Minnesota Press, p1

<sup>&</sup>lt;sup>8</sup> Wheeler, W. (2009). Creative Evolution: A Theory of Cultural Sustainability. *Communication, Politics & Culture, 42*(1), p23

<sup>&</sup>lt;sup>9</sup> Bateson, G. (2000). Steps to an ecology of mind. Chicago: University of Chicago Press, 2000.

<sup>&</sup>lt;sup>10</sup> Wheeler, W., Creative Evolution: A Theory of Cultural Sustainability, p23

<sup>11</sup> This is in contrast to the numerous binary theories of cultural semiotics of the 20th century, see: Favareau, D. (2007). The Evolutionary History of Biosemiotics. In: M. Barbieri (Ed.), *Introduction to biosemiotics: the new biological synthesis*. Dordrecht: Springer, pp. 1-67

<sup>&</sup>lt;sup>12</sup> Morton, T. (2010). Ecology as Text, Text as Ecology. Oxford Literary Review, 32(1), p7

many other species) send chemical messages when under attack by insects that prompt neighbouring trees to actively enact defenses. In all these examples, it is meaningful communication that is integral to survival.

Ecological or evolutionary 'traps' are an example of the meaning-making processes of living systems going wrong, and there are countless examples. "Newly hatched turtles mistake the lights of beachside hotels for the horizon and crawl away from the sea towards bustling resorts where they perish. Male California red-legged frogs mistake juveniles of an invasive frog species for females of their own species, clasping them for hours in a futile embrace. The list goes on; the effects are catastrophic." <sup>13</sup>

On the biosemiotic view, we only recognise (whether this is conscious or unconscious recognition) what is meaningful or significant to us. Although each organism's 'bubble' is perceptually distinct, they are not causally distinct - our bubbles are entangled. Just as the crashing waves of the surf zone of the ocean create 'noise' that interferes with the data-collection of remote ocean sensors, our semiotic 'bubbles' create 'noise' that interferes with signals we might receive from others, and the signals we send. Our plastic waste, for example might be (or might have been) meaningless to us, but it is very meaningful for the marine species who interpret small pieces of colourful plastic as food, ingest it, and die. We are slowly coming to understand that there is no 'over there' for our waste to go, but it is an incomplete understanding that retains a kind of 'metaphysical stubbornness'. This stubbornness is connected to the very concept of waste; by definition something that is unwanted, insignificant, and to be put 'away'. But while our waste may be insignificant to us, it is significant to something, somewhere, and the fact that we are amidst and embedded in complex systems means that even small actions may have significant, unpredictable consequences.

According to complexity theory, human and non-human organisms co-create their environments and relationships in complex couplings in which causality is non-linear. These 'complex couplings' can also be understood as entanglements - if two 'objects' are entangled, then one cannot be adequately described without consideration of the other. In philosopher-physicist Karen Barad's view, these entangled relationships between organisms are not only interactive, but *intra*-active: that is, we are not simply separate entities interacting, but are thoroughly enmeshed in and entangled with each-other. For Barad, both subjects and objects "are permeated through and through with their entangled kin; the other is not just in one's skin, but in one's bones, in one's belly, in one's heart, in one's nucleus, in one's past and future."14 No organism's coupling with its 'environment' – or intra-activity with its context, is identical to another's (or even to its own at any other time). Accepting complexity and entanglement then, means accepting a complexity 'intra-active' world in which "the manifold of entangled relations is reconfigured" in each and every action.15 There are no clear boundaries to draw around ourselves, or others; of what is inside, and what is outside. 'Organisms', 'species,' and the 'environments' that we inhabit, are constantly moving targets. When it comes to ethics, this means there can be no clear boundaries between what matters, and what we can ignore.

<sup>&</sup>lt;sup>13</sup> Kemp, C. (2014). Trapped! *New Scientist*, *221*.

<sup>&</sup>lt;sup>14</sup> Wheeler, W., Creative Evolution: A Theory of Cultural Sustainability. p23

 $<sup>^{\</sup>rm 15}$  Barad, K. M., Meeting the universe halfway, p393-394

A further important aspect of complexity is uncertainty, which has implications for both ecological philosophy and ethics, and for practical conservation decisions. Complexity means we cannot with certainty know the consequences (or significance) of our actions. We cannot presume that simply because an action is small, that so too will be its consequences. In complex, entangled systems, like the earth's ecosystems we are all entangled with and which some of us seek to protect, one object cannot be adequately described without reference to many others – the set of which are ever-dynamic. Accepting the ecological insight of entangled intra-active complexity, we must accept that every action counts. Just as we have no 'view from nowhere' there is no 'over there' in which to conduct 'ecological' experiments without affecting the very world we seek to both understand and *conserve*. 'Do I dare disturb the universe?' is not a meaningful question." <sup>16</sup> While we can change path, we cannot change the past; every action is binding, and nothing can be undone.

So what does all this mean for ecological ethics? Before considering what normative conclusions we might reasonably draw from the worldview I have outlined, I will first consider how the academic discourse of *environmental* ethics has historically defined itself – for the move I'm suggesting is entailed by the above conclusions runs counter to many of the historical assumptions of the field. Environmental ethics (rather than *ecological* ethics, which concerns itself with relationships from the outset) literature has been largely characterised by a search for the necessary and sufficient conditions by which a being, or other entity, might be included in the class of morally considerable (significant) entities, or as members of an ethical community. In short, it has consisted largely of attempts to demonstrate reasons why certain elements of the non-human world are worthy of our moral respect. Should we include sentient beings no matter their species? All living things? Individual organisms? Ecosystems? Abiota? Environmental ethics is perfused with arguments in support of these and other criteria for inclusion within 'our' moral community.

While the historically 'expanding circle'<sup>17</sup> of our moral community can be interpreted as an expansion of our world of meaning<sup>18</sup> (surely, a good thing in itself), even arguments for the *intrinsic* value of non-human nature have tended to be framed in terms of qualities that are meaningful to us – for example, sentience, or life. Even the most inclusive theories tend to consider only those elements of the world that are significant, or meaningful for us, and as such, still elide the unavoidable problem for ethics: the outsider that we simply have no means to identify with. The *other* we consider utterly meaningless, and thus, morally irrelevant. The *others* we do not even notice are there.

The question generally accepted as fundamental is 'what matters?'; any answer to which necessarily produces, at least implicitly, a statement of what does *not* matter. The presumption of a class of entities that are morally significant implicitly assumes a class that are not – and therefore a class of beings that those who define the boundaries can dominate, destroy, or ignore. From the perspective of life understood as intra-active sign-processes, we can see this as not only an inconsistent question but a also as quite a dangerous

<sup>17</sup> see Singer, P. (2011). *The expanding circle : ethics, evolution, and moral progress*: Princeton, N.J. : Princeton University Press, c2011.

<sup>&</sup>lt;sup>16</sup> Ibid, p396

<sup>&</sup>lt;sup>18</sup> Beever, J. (2012). Meaning Matters: The Biosemiotic Basis of Bioethics. *Biosemiotics* (5), p185.

question, because it implicitly asks, "What can we exclude from consideration in advance - what can we ignore?"

This 'traditional' perspective presupposes that there are, and should be, theoretical limits, as well as practical limits to moral consider-ability, or, in other words, our capacity for respect. However, in terms of a genuine ethical exploration it would seem to get the issue back to front, as it invites us to pre-limit our ethical considerations and "represents a way of closing ourselves off from the beings in question." This approach uses philosophy to reinforce and underwrite our 'daily intuitions' about what 'matters' and our unconscious prejudices and biases. To even begin on a genuinely ecological ethical exploration it seems clear that we must, following Weston<sup>20</sup>, instead use philosophy to *undermine* those intuitions.

While ecological ethics is most explicitly dedicated to undermining these intuitions, it is also unavoidably subject to them. Seeing something as morally relevant remains a very different thing from seeing it as meaningful to us. Recognising everything as 'mattering' means recognising everything as meaningful in some sense. However, judging various things as 'more or less meaningful' means returning to an anthropocentric perspective – precisely what ecological ethics usually aims to avoid. Things that are utterly meaningless to us can be profoundly meaningful to something or someone else. While we may be able to understand much of this, we will at times be "unable to decipher the hidden meaning"<sup>21</sup>. The lesson is that we should never forget that such meaning, or value, is there (or even simply that it may be).

What this means is that we are not in an objective position to draw conclusions about what matters and what doesn't, what is meaningful or meaningless, or what is good or bad. We can, however, draw a conclusion about how we approach this very question. Of course, it may be easier to imagine a world in which there are things that matter and things that don't, as then there would be less conflict, or ethical dilemmas, in our use of others. Unfortunately, reality does not afford us this option. As the history of anti-anthropocentrism in ecological ethics has so forcefully argued, we cannot expand our bubbles to achieve a universal, or objective, 'view from nowhere'. When we assume we are in a position to answer the question 'what matters?' or 'what is of moral value?' then we assume our own perspective to be universal – and we assume that we know the criterion for the justification of such knowledge. Birch describes this approach as a "function of imperial power mongering"22, and it is both ethically and theoretically problematic. When we assume this 'view from nowhere', our metaphysical stubbornness leads to outcomes that are inconsistent with an ecological understanding of reality. Intra-active entanglement in the complex, dynamic systems of world means that if we are to be responsible members of 'the earth community', there is nothing, in principle, that we should ignore.

What then is a theoretical approach that would be consistent with 'eco-inclusive' ethical aims? Birch advocates 'universal consideration', in which "to give moral consideration to X

<sup>21</sup> Leopold, A., A Sand County almanac.

<sup>&</sup>lt;sup>19</sup> Weston, A. (2009). *The Incompleat Eco-Philosopher: Essays from the Edges of Environmental Ethics.* Albany, New York: State University of New York Press, p77

<sup>&</sup>lt;sup>20</sup> Ibid

<sup>&</sup>lt;sup>22</sup> Birch, T. H., Moral considerability and universal consideration, p315

is to consider X (to attend to, to look at, to think about, where appropriate to sympathize or empathize with X, etc.) with the goal of discovering what, if any, direct ethical obligations one has to X."<sup>23</sup> For Birch, the very possibility of establishing 'what matters', demands 'universal consideration' not only because we simply cannot see value in something we don't notice, but because we cannot look clearly at something without at least some sense of respect – even if that respect pertains only to that entity's ambiguity. So, "What is asked of us, so far as we can manage it, is an open-ended, nonexclusive consideration of everything. People, bacteria, rocks, animals, everything, so far as we can."<sup>24</sup>

Our moral community is a metaphorical bubble. Intuitively, we include what makes sense to us, what we value because of what it means to us. In other words, what it is for something to have value (or to be significant or meaningful) still remains a different thing from what it is for something to be valuable to *us*. Rather than leaving aside the questions of 'what matters,' and 'what matters more/less', which are questions our decisions about conservation, and environment more broadly depend on, I am arguing for a truly rigorous engagement with these questions that asks: 'how can we come to care for things that we cannot even recognise – things we cannot even perceive?'

So this position of axiological humility, and its goal of 'universal consideration', has "direct implications for the great pitfalls of ethics - the ways in which we fail to be ethical. [...] Blind to the possibilities right next to us, we may never know what we are missing."<sup>25</sup> Universal consideration doesn't entail actual evaluation of everything, but it does entail an explicit refusal to set limits on considerability. It is an attitude; a disposition; a tendency towards open-minded inquisitive respect toward all things one encounters. If indeed, there were to be an objective set of obligations toward others we encounter, then the only way to discover these obligations is to keep the question open, and to give those others moral consideration and *reconsideration*.

Faced with the reality of our experience of the world through our 'semiotic bubbles' or 'niches', we are reminded that we are surrounded by the invisible and that our task is paradoxical, yet essential if the aim is a eco-inclusive ethics. Universal consideration is not about achieving an omniscient view, or an objective perspective – rather, we are compelled to the activity through the realisation that we have no access to such a perspective. The point is to never stop looking for what we haven't noticed yet – to look into the dark with a kind of compassionate curiosity. When we consciously enact this disposition, something does not have to be meaningful to us for us to respect it as meaningful to something, or someone else. That there might be more to understand about any other entity is reason enough to act ethically toward it, at least inasmuch as this means to regard it worthy of consideration, and to not dismiss it out of hand.

So, ethics is inescapably about our entanglement within a world where actions have effects. There is no place 'outside of causality' in which we can 'try things out'. We are not in an epistemological position to determine 'the necessary criteria of moral relevance'. We cannot act without interpreting and interacting with nature, but doing nothing isn't an option either – so what are we left with? Can we, as Arne Naess advocates, take bold, radical

<sup>24</sup> Weston, A., The Incompleat Eco-Philosopher, p69-70

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<sup>&</sup>lt;sup>23</sup> Ihid

<sup>&</sup>lt;sup>25</sup> Ibid, p71

conservation steps on the basis our lack of knowledge?<sup>26</sup> What is an ethical basis for action in a world that we must accept can never be fully understood?

Birch insists that the close and careful attention required by 'universal consideration' is essential for philosophers to employ if they are to be 'responsible'.<sup>27</sup> But is it a different thing to engage in 'universal consideration', in the real-world of biodiversity conservation, ecosystem 'management' or environmental activism? Is it an essential element of 'responsible conservation practice' too? Many would argue that, theory aside, limitations on moral consider-ability are a *practical* necessity - practitioners have to make decisions about what matters, and what matters more, or less when they choose how to prioritise their aims at conservation. Yet axiological humility and 'universal consideration' are as important for practice as they are for theory. Whether our goal is simply to understand non-human nature for our own purposes, or also to make our relationships with non-human nature more just; whether we are simply seeking greater meaning for ourselves, or truly concerned with what might be meaningful for non-human others, we do not have the luxury of considering only our own (human) perspective. 'Universal consideration' may be an ultimately unreachable goal, but paradoxically, it is an essential starting point. It is about not setting arbitrary limits on our questioning or understanding of the world. It depends simply on an attitude of axiological humility; a disposition; a tendency towards open-minded inquisitive respect toward all things one encounters. Though it may be impossible to embody this outlook completely, the point is simply to persevere with the endeavour, to keep the question open.

Acting on this basis also means becoming more comfortable with the implications of complexity; especially entanglement (intra-activity) and uncertainty. If we accept this, then we must not only accept that all our actions have effects, but that the consequences of even our most well-intentioned actions are ultimately unpredictable. If we never expect certainty, we have no psychological need to wait for it before acting in response to the situation we find ourselves in, and this, combined with 'universal consideration', is a good thing, because "decisions cannot wait until all the facts are gathered: they are never all available."

We cannot hear most of what an echo-locating bat hears, and we cannot even conceive of the colours possible for the mantis shrimp whose eyes have sixteen colour cones for our three. Fortunately, the uncanniness of others in their myriad manifestations can displace the centrifugal force of our perspective, if only for a moment. We notice that there is another way of seeing – and we see a new way, even if not *their* way. We notice that they are seeing, hearing, being *something* and that they are co-constructing worlds of meaning in a complex, dynamic web of intra-active relationships - worlds rich in signification; worlds being torn apart by our own semiotic pollution.

Our semiotic capacities also put us in a unique position of responsibility. While we cannot ultimately understand the world from another's perspective, we have an apparently unique capacity to consciously critique, question, expand and recreate our world of meaning – we

<sup>&</sup>lt;sup>26</sup> See Naess, A. (2005). The Glass Is on the Table. In A. Drengson (Ed.), *The Selected Works of Arne Naess*. Netherlands: Springer.

<sup>&</sup>lt;sup>27</sup> Birch, T. H., Moral considerability and universal consideration, p321

<sup>&</sup>lt;sup>28</sup> Naess, A. (2005). The Glass Is on the Table. In A. Drengson (Ed.), *The Selected Works of Arne Naess*. Netherlands: Springer.

can consciously and deliberately create opportunities for new meaning. While we may not be able to predict consequences with absolute certainty, we can consider our actions in abstract before we act, and we can consider other perspectives when we do so. This habit of checking blind-spots before action applies equally to theorising. In the case of ecological ethics, we cannot remove our blind spots, but if we pay close attention to the 'noise' of our own 'bubbles' then we are in a better position to both understand the world, and to act ethically in our interactions with it. We can only give moral consideration to what we consider, and we can only consider what we can conceptualise, or what we can 'see'. Art is one way in which we are invited to look into the dark. It can provoke us to notice that the other is there, and that our actions are significant for others whether they are significant to us or not. It can never bring the invisible entirely into visibility- but it can remind us that what we can see is not the whole world but our world.

I have argued that as we are not in a position to know the perceptual reality of another organism, we are not in a position to know with certainty what is meaningful, or valuable to or for another organism, so we shouldn't exclude what we perceive as 'meaningless' from our moral communities. I have explored these issues through the lens of biosemiotic theory because it gives us a way of making sense of the incompleteness of our own worlds, and thus the reality of difference. The biosemiotic focus on meaning gets to the heart of some of our gut intuitions about ethics - but also sheds light on some of the ways these intuitions can go wrong. I have argued that our experience of the world puts limits on our epistemological capacities that should result in epistemological, and therefore, axiological, humility, and a recognition that we have no access to an objective 'view from nowhere' on which to judge ultimate criteria of moral relevance or value. If we accept that we are not in a privileged position to determine what in the world is of value, then there is an ethical imperative to consider what we don't ascribe meaning to, just as there is an imperative to consider what is meaningful to us. It is important that our methods, both in theory and practice, pay explicit attention to our blind spots – that they specifically account for the ways in which we fail to consider others.

So, "intra-acting responsibly as part of the world means taking account of the entangled phenomena that are intrinsic to the world's vitality and being responsive to the possibilities that might help us and it flourish."<sup>29</sup> To be responsive requires attention. Paying attention means consistently undermining our preconceptions about what we can ignore – and aiming not to ignore anything. Because we instinctively ignore things that appear meaningless to us, this means paying explicit, conscious attention to this fact, and continually returning to the paradoxically impossible and essential task: striving toward the goal of universal consideration.

Meaningfulness is a matter of perspective, and when we cast something, or someone, outside our moral community because we don't see it or them as meaningful, or because we cannot imagine what the meaning might be (for something or someone), we are evading ethical responsibility. What is meaningless, or insignificant, to us, is meaningful and significant for something else, or is meaningful to us in a way we are not yet aware. Our perceptual worlds are necessarily incomplete, and this means that the fact that something makes no sense to us, or is meaningless to us, is not a reasonable basis on which to determine moral value.

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<sup>&</sup>lt;sup>29</sup> Barad, K. M., Meeting the universe halfway, p396.

'Others' invite us to shift our perspective, to enter another world, to realise that the world means different things to different organisms, and that there is no view from nowhere. Just as when we travel, we can never hope to completely understand the culture that we visit, but on returning home our 'previous surroundings' are 'completely reconfigured'; we can see the bias of our own perspective in a new light, and the reality of difference destabilises our centrism because we are reminded that we are different too. We don't need to (indeed we can't, and perhaps shouldn't!) think like each other, like trees, mountains, rivers or bees. But any encounter with the non-human world should remind us that we don't have a monopoly on what it is to 'know' or to 'value' any more than we have a monopoly on what it is to 'see'. We are enmeshed in processes that are invisible to us, but that both we and other organisms depend on for survival. Our actions are binding because they cannot be undone and we are intra-actively co-creating the world – a world where matter 'matters', and no thing is nothing.<sup>30</sup>

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<sup>30</sup> Rose, D. B. (1996). Nourishing terrains: Australian Aboriginal views of landscape and wilderness. Canberra: Australian Heritage Commission.

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