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Place Attachment and the Roots of Spiritual Relating in Animals

Before the gods existed, the woods were sacred, and the gods came to dwell in these sacred woods. All they did was to add human, all too human, characteristics to the great law of forest reverie. -- Gaston Bachelard, *The Poetics of Space* (186)

Introduction. In 2013, I had just completed a draft chapter on intersubjective attachment theory (Bowlby, *Attachment and loss: Volume 1; Volume 2; Volume 3*) for my research in animal grief (Brooks Pribac, *Animal grief and spirituality*) when I was asked if I could take in an orphaned lamb. He was tiny, only a week old, and there were two other, adult male sheep already living with us. The problem that I had, and many other rescuers and parents do not, was that I knew too well how easy it would be to mark this poor baby indelibly with all sorts of bad things. I also knew that only part of it was under my executive control, the rest was implicit — things about me, the way I function and interact, things that I was myself was most likely unaware of. Naturally, we focused on what we could control, and hoped for the best.

Wanting to offer him a normative upbringing (as much as the circumstances allowed it) for the next four months or so I would spend most of the time in the paddock with him (as a mother sheep would do) and the other two sheep. My presence functioned as a secure base (Ainsworth; Ainsworth and Bowlby) as predicated by attachment theory, while the other two sheep were effectively and affectively teaching him how to be a sheep. In the openness of the paddock and the adjacent forest area, the world became alive in a way that I had not experienced before. The sheep and other nonhuman residents were perfectly attuned to the environment. Every sound, every sight, every scent bore a meaning; the world was filled with agency speaking to them, and they, in their turn, were responding to it. Their moment-to-moment alertness (a stick could be a snake, a fallen branch a predator roaming through the bushes) was expected and therefore not surprising, nor was the rather automatic appraisal that followed disturbances, that is, the evaluation of the nature and danger levels of single disturbances in accordance with internal categorization systems, discussed below. Could other animals, I pondered, encounter phenomena that resist categorization, a condition that has been proposed to give rise to the feeling of awe in humans (e.g. Shiota, Keltner and Mossman), potentially leading to either dread or bliss? When I say

“resist” I do not mean only that a phenomenon cannot be categorized because it is not known, not familiar, but also in the sense that it may be so broad that it simply does not fit, it cannot be forced into anything with limits, with boundaries, anything reductionist.

Suddenly a very clear picture of animals’ spiritual relating emerged in my head. Of course, as I began to analyze this picture it began to blur very rapidly. It became even more complicated when I tried to verbalize it, and I felt relief when I came across others who had tackled the issue before me and who offer, among other things, some very useful language (e.g. Harrod “A trans-species definition of religion”; Harrod, “The case for chimpanzee religion”; Schaefer, “Do animals have religion?”; Schaefer, *Religious Affects*).

In this paper I first briefly present my conceptualization of animal (human inclusive) spirituality (Brooks Pribac, “Spiritual animal”), along with relevant aspects of intersubjective attachment theory and self-formation. I then turn to place attachment and consider the possibility of place attachment (and aversion) as a relational framework through which animal bodies learn to communicate with intangible agencies within inhabited geographical spaces — a communication at the base of spiritual relating. An additional question that emerges when considering the potential of place as a relational variable is its capacity for healing effects (or otherwise) upon animal bodies and minds, and the impact of anthropogenic interference with spaces inhabited by other animals upon this healing capacity and perhaps *necessity*. This question is not explored in this paper, but it is acknowledged for its ethical implications and worthiness of further consideration and research.

Animal spirituality. Intersubjective attachment and the emergence of the sense of self.

In the 1950s, when John Bowlby, the father of attachment theory, began work in the area of infant-caregiver separation, he had, by his own admission, “no conception of what [he] was undertaking”; the subject appeared to him “a limited one, namely, to discuss the theoretical implication of some observations of how young children respond to temporary loss of mother” (*Attachment* xxvii). The negative impact of prolonged separation (such as in the case of hospitalization of children) was clear, the hows and whys less so. It was only upon familiarization with the ethological work of Konrad Lorenz and Niko Tinbergen, particularly the phenomenon of “imprinting” in precocial¹ avian species, that Bowlby was able to envision the possibility that mammalian (including human) attachments may work in a similar fashion. By converging fields pioneered by his two most significant intellectual influences (Darwin and Freud),

Bowlby, in the words of his colleague Mary Ainsworth (cited in Schore xi), in essence attempted to “update psychoanalytic theory in the light of recent advances in biology.”

Over the following decades, research in the field has produced an extensive corpus that testifies to the vital importance of attachment relations not only for humans but also for other animals. A substantial amount of data and knowledge of attachment relations and their roles in developmental and post-developmental contexts actually comes from more or less invasive experiments in nonhuman animals. In a nutshell, what this research reveals is that the interactions between the infant and the primary caregiver (usually the mother but not necessarily) influence the development of the infant’s brain and psychological and biological self-regulation, both of which are still maturing in infancy. There are some differences in the rate of pre- and post-natal development of the brain between altricial and precocial species (e.g., Bennett and Harvey) but essentially, as Polan and Hofer phrase it, the caregiver acts as a “superstructure” to the infant’s developing system (120). In practice this means that the developmental context along with the mothering/caregiving style will influence how the infant’s self-regulatory system develops and will inform his or her capacity to cope with stressful situations later in life. These early interactions in effect “teach” the infant that relational stress can be tolerated and regulated, or that it cannot be (Schore; see also Bradshaw and Schore). Within this relational context in the early period animals also begin to develop a sense of self. It is important to understand that the self under examination here is not the reflective, cognitive self — the self that *thinks* the self, the self that the WEIRD² (Henrich, Heine and Norenzayan) population seems particularly fond of. Instead, the discussion here revolves around the experiential, relational self — the self that *feels* the self.

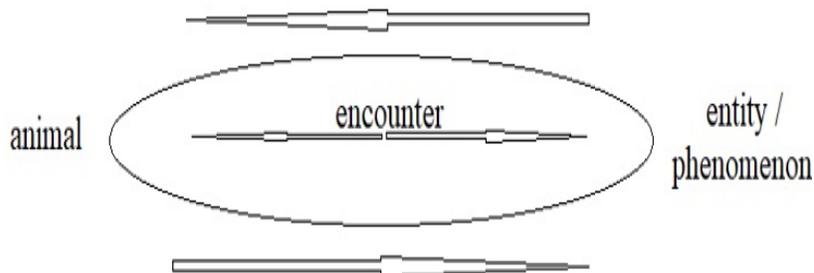
In this delicate period, through the interactions with the caregiver the infant animal develops working models of the caregiver (Bowlby, *Attachment*). Through the caregiver’s reactions to the infant (e.g. responsive or not, attuned or not, etc.), the infant also develops a working model of the self, as Siegel puts it eloquently: “we first know ourselves as reflected in the other” (Siegel 62). Caregivers’ responses thus provide the infant, be it lamb or human, with a plethora of critical information about the self (including whether the infant is “worthy” of love or not, whether help is available in case of need or not, how to behave to elicit it, etc.); the infant will organize this information in his/her internal working model, i.e., mental representations of the self, the socio-natural environment and the self in relation to the latter, which will accompany the individual throughout life. For our discussion of spirituality, the consideration of the self is relevant because the self does not only develop but also lives

within a relational framework. Research has shown that the self exists on a self-nonsel self continuum rather than a self-nonsel self dichotomy (Han and Northoff). This means that the self is fluid and remains open to relational potentials.³ This enables relations not only with other humans and other animals but also, I argue, with other perceived agencies.

Therefore I proposed to envision spiritual engagement as animal bodies' affective dancing with animacy ("Spiritual animal"). From conception to death, the organism is in constant communication with the environment. The environment acquires animacy, that is, becomes animated and endowed with agency by its capacity to speak and respond to the organism on an experiential level. This happens well before (and continues after) the organism develops the ability for any kind of reflective consciousness, leaving the organism essentially primed for affective communication with the rest of the world.

In other words, we can conceptualize the spiritual experience as the engagement of the individual animal (human and other) with agency as a quality of an entity/phenomenon, which (i.e. agency) materializes by way of producing an effect on the animal's experiential consciousness, drawing the animal into the relational dance. Such agentic potential is not confined ontologically but belongs to all life forms and perceived manifestations. This exchange between the organism and animacy from the environment resembles dancing in the sense that the interaction of parts gives rise to a whole, and this whole can only be sustained while the parts continue to interact in synergy. During the dance the lines between the self and the nonself become blurred, producing a feeling of merging and oneness.

Schematically, this relational dance could be presented as follows:



Encounter between animal and entity/phenomenon.

Entity/phenomenon speaks to animal = animal is affected.

This confers agency to entity/phenomenon. Agencies (of animal and phenomenon) interact.

This exchange / relational engagement between agencies = spirituality.

Note that the entity/phenomenon can possess agency on its own, irrespective of the encounter but from the animal's perspective it is only recognized as meaningful if it affects the animal.

An example of spiritual vs non-spiritual engagement: the taste of madeleine cakes can produce a spiritual experience if it speaks directly to the experiential consciousness, as it does in Proust (*Remembrance*); whereas a non-spiritual experience of madeleines is produced when, for instance, I take the cakes out of the oven, try them and feel thrilled that they are literally melting in my mouth (unlike last time I made them), and won't the guests love them! Of course there could be confluence of both.

Categorization and cognitive closure. The above conceptualization of animal spirituality is not too dissimilar to Donovan Schaefer's conceptualizations of religion (*Religious Affects*).⁴ However, in my view religion is a broader concept that includes implicit and explicit elements for human and nonhuman animals alike. In contrast, I am considering the implicit dimension that exists outside interpretive frameworks: spirituality, rather than religiosity, which manifests as a propensity of animals' intrinsically relational, non-reflective, experiential, embodied consciousness.

I see human faith and belief as simply forms of, and results of, cognitive closure (e.g. Webster and Kruglanski). Cognitive closure is defined as resolution of a state of uncertainty, and it is a rather important trait in the entire animal kingdom, not just in the human world. We all need to make some sense of the environment — both social and natural — of things that are happening around (and within!) us. Understanding phenomena, finding connections, interpretations, and making decisions based on them is critical in the lives of all animals. There is safety in understanding what exists and happens around us, in having an explanation for it; what we do not know/understand is more unpredictable, it makes us uncomfortable, we may even fear it. Therefore there is the tendency to try to grasp, to understand events and phenomena, to bring about

cognitive closure. Other animals' religions, thus, in my view, would, like human religions, incorporate affective *and* interpretational components, likely including faith and beliefs of some kind. The interpretive domain is of course harder to access in other animals, and their interpretive solutions are most likely less elaborate compared to those of humans and our rather incredible capacity for imagination, but to various degrees they do exist. To achieve cognitive closure, the brain helps us substantially through its automatic categorization system and concept formation.

Animals' brains process sensory data through acquired concepts. The term "concept" describes groupings of attributes, sensory details, characteristic of familiar "objects," whereas "object" does not refer only to tables, chairs and the like but is intended in the broadest sense and it includes complex interactions and events (Snyder, Bossomaier and Mitchell; Vallortigara et al.). Following the formation of a concept, the details constituting the concept elude conscious awareness in lieu of the bigger picture. While this process is necessarily reductionist in nature, it is very useful for animals; without the capacity for such concept formation and categorization we would have to start anew with every detail that hits our senses. Animals would be overwhelmed by details and the efficiency of navigation and decision-making in our socio-natural environment would be significantly compromised.

Concept formation is of interest here because researchers have proposed that awe emerges at the encounter of a phenomenon that does not fit into an established mental template and that the brain thus cannot automatically assimilate and achieve cognitive closure. Since other animals also process information using mental schemas, it is likely that they too encounter phenomena that their brains cannot automatically assign to a known category: generating a sense of awe.

Following this logic, spiritual relating would occur when an experience resists being squeezed into a pattern, a category. Instead, the experiential self engages with it, enters with it into a dance of relating, merges with it into a dynamic relational unit.

Awe is what I would refer to as an accidental source of spiritual engagement, in the sense that such engagement is not sought; instead, it is triggered by an encounter, with a waterfall, for instance, as in the case of Goodall's chimpanzees (Goodall), or a landscape, that speaks to the animal in a particular way. It could also emerge from being present in a place that offers calmness and peace: suddenly one may develop an overwhelming sense of integration within the self, a deep form of felt contentment as one becomes absorbed and absorbs the space with its tangible and intangible forces, or

conversely, finding oneself in a place/situation that causes utter dread. It is these two (“accidental”) forms of spiritual engagement that, in my view, mark the spiritual experience of nonhuman animals, and possibly many humans who, like the present author, do not engage in structured meditation or prayer. The latter, that is meditation and prayer, could be viewed as an intentional source of spiritual engagement as the individual intentionally seeks the connection, the experience.

Spiritual engagement (when the experience is positive) is not only an interesting subject for scholarly deliberations and a possible enhancer of religious belief, it also benefits animals’ physical and mental health. Body-focused approaches, including meditation, are being increasingly employed in mental health therapies for their overall benefits. Bottom-up psychobiological regulation appears to be more efficient and less costly to an organism than top-down processes (Coan), and evidence suggests that while in short-term practitioners of mindfulness meditation top-down regulation likely occurs, in long-term practitioners the reverse appears to be true, namely, regulation follows the bottom-up path (Chiesa, Serretti and Jakobsen).

This observation is potentially significant for the consideration of animal (human inclusive) spirituality. Psychobiological regulation plays a vital role in animals’ lives, in infancy and beyond. Aside from regulation provided through social interaction (e.g. primary caregiver and later partners, friends, etc.), animals need to be able to self-regulate to various extents. If meditation, as a phenomenon that facilitates reconnection with the experiential self and extension of this self and consecutive merging with the vitality of life and its intrinsic relationality, has such positive effects on human physical and mental wellbeing by influencing neuro-physiological structures and processes that humans in fact share with other animals, is it not safe to assume that other animals would benefit from it, too? Could that “glimmer of infinity” which Victor Hugo (cited in Kristeva) concedes to all “beasts” and is reached when the experiential self engages in the dance with animacy therefore be viewed not as a fad of the human “divine” nature but as a biological imperative, on a par with alimentation, hydration, and interpersonal relations? Nonhuman animals most likely do not train themselves in mindfulness meditation. However, is it not possible that they may have retained the capacity to engage in such meditative processes in a more spontaneous manner (a capacity that many humans, particularly those in industrialized societies, have lost and now have to re-learn), and perhaps to actively seek such experiences, or at least to embrace them when they occur?

This resonates with Bataille's and Rilke's views of nonhuman animals as being more in tune with the flow of life, like "water in water" (Bataille 23), less concerned about interpretive worlds compared to humans (Rilke). Clearly, as Willett points out, like humans, other animals also have to attend to more mundane things, such as searching for food, detecting danger, avoiding predators, and other cognitively and affectively demanding tasks that life brings along which involve interpretations of various kinds, as indicated above. Bataille's water in the nonhuman animal world thus is not always shiny and blissful, with anthropogenic violence mudding it further. Nevertheless, the point I want to emphasize is that when the experience of connection, of bliss, does occur in nonhuman animals, it is felt, it is experientially meaningful in itself; like hunger is, and satiety, thirst and hydration, social deprivation and union. It does not need a cognitively interpretative component — ideological or other — to give it meaning. Traditionally, as Panksepp summarizes, speaking of mammals, the neocortex was believed to be not only "the seat of conscious thought but also of emotional feeling;" experiential consciousness, feelings were viewed as a form of thought, both "affective and cognitive processes were envisioned to be completely interpenetrant in higher brain regions that generated certain higher cognitive processes" ("Cross-species affective neuroscience" 3). The confusion of thought and feeling and the belief that feeling had to be processed through higher brain regions to acquire experiential relevance has had clear implications for nonhuman animals. Nevertheless, cumulative evidence challenges this view, substantially expanding the circle of phenomenologically conscious animals (e.g. Cambridge Declaration on Consciousness 2012⁵).

I now turn to the consideration of the role of places for the development of animals' capacity to communicate with intangible agencies, a communication at the foundation of spiritual experiences.

Place attachment. *Inhabited wilderness.* "Inhabited space transcends geometrical space" writes Bachelard (47) in his exquisite exploration of dwellings and the broader spaces accommodating them. We live and breathe spaces, we create them and they create us. Space is so integral to being that it becomes elusive. Although all animals likely exhibit place preferences (and aversions) based on phylogenetic and ontogenetic factors, research on place attachment continues to struggle with conceptual and methodological problems deriving from the intangibility of a phenomenon, which is, nevertheless, and not unlike many other ungraspable phenomena, composed of tangible entities with geometrically and otherwise defined and describable features. A more general definition of place attachment, which would bring higher homogeneity to this field of enquiry and further the theoretical development of the concept, has yet to

be agreed upon (Scannell and Gifford 2). With place attachment being a continuation of community studies, there is a strong tradition of focusing largely and principally on social aspects of place attachment, i.e., the extent to which a place facilitates inter-human sociality and community identity. This has also resulted in the creation of measurement instruments which tend to address physical aspects in conjunction with social ones (summarized in Lewicka). This approach has been contested by some — most notably perhaps by Stedman — who are disinclined to view the physical space only as a container for human social interactions. Instead, as suggested in this paper, from the organism's capacity — indeed imperative — to communicate with the environment and entities within it emerges a relationality that creates experiential (albeit not necessarily always reflectively elaborated) meaning, whereby meaning, as summarized by Johnson, "is not just a matter of concepts and propositions, but also reaches down into the images, sensorimotor schemas, feelings, qualities, and emotions that constitute our meaningful encounter with our world" (cited in Lewicka xi).

Paul Morgan draws parallels between interpersonal attachment theory and person-place attachment, proposing a developmental model of place attachment that, like interpersonal attachment, is a result of the exchange between the child and the physical environment as an interacting presence. Rather than understanding the motivation to interact with the environment as sourcing entirely from within the child, Morgan, citing Striniste and Moore (25), views such motivation as "both a quality inherent to the child, which determines how the child will use the environment, and a quality of the environment, which has the potential to draw the child's involvement" (14).

Through repetition this relational dynamics of arousal-interaction-pleasure generates an affective bond between the animal and the place, consolidating into an unconscious internal working model informing future relationships with place. Place thus has the capacity to soothe and, in Korpela's view, much like intersubjective attachment dyads, place may function as an external regulator mediating psychic balance. If such consolidation does not occur in childhood, place attachment later in life may be weak. However, there is currently not enough data to support this claim. In fact, given the inevitability of interaction with places, and given that extra-ontogenetic factors may contribute to animals' affective responses to them, there is reason to believe that, like in the area of intrapersonal attachment, the organism remains open to place-attachment potentialities and affective reorganization all through life, with attachment emerging if the relational transaction secures the kind of multimodal support the organism needs and/or expects.

Fashion issues aside, the popularity of home décor media and the financial prosperity of this market with an estimated gross of US\$65.2 billion per year in the U.S. alone (summarized in Graham, Gosling and Travis), suggest a strong human inclination to concentrate substantial effort and other resources (when they can afford it) on making their residential hub not only mechanically liveable but also relationally competent, that is, capable of implicit communication with the dweller, of arousal and soothing, of promoting or supplanting moods, creativity, concentration, relaxation — features that determine the difference between a house and a home. In the choosing and shaping of residential spaces people may be driven not only by explicit tastes and preferences but also by unconscious factors reflecting emotional ties to certain features, sourcing from past experience with them, as Graham, Gosling and Travis remind us. For instance, people may unconsciously incorporate features from a beloved grandmother’s house — those madeleines of interior design. However, despite the obvious psychological significance of residential spaces, the authors lament the lack of empirical research in the area even though it has received substantial attention by theorists and practitioners, including Jung, and Bachelard as seen above. The home with its sense of familiarity, coziness, and perceived protection indeed has the capacity to function as a bioregulator, as Korpela suggests. On a cognitive-affective level, much as it can be the case in interpersonal relations, the home can become part of the extended self, and if the home is violated, for example by burglary, people report qualitatively similar albeit less intense psychological distress compared to victims of direct physical violations (Droseltis and Vignoles). However, human-made buildings and their adjacent yards are only part of the composition we may call home. The latter encompasses a much broader space, the limits of which are not always easy to identify. Research into environmental degradation in and surrounding human habitats (e.g. due to mining operations, land clearing, and similar events) also records psychological distress (e.g. Higginbotham et al.), which Glenn Albrecht named “solastalgia” and described as:

the pain experienced when there is recognition that the place where one resides and that one loves is under immediate assault (physical desolation). It is manifest in an attack on one’s sense of place, in the erosion of the sense of belonging (identity) to a particular place and a feeling of distress (psychological desolation) about its transformation. It is an intense desire for the place where one is a resident to be maintained in a state that continues to give comfort or solace. Solastalgia is not about looking back to some golden past, nor is it about seeking another place as “home.” It is the “lived experience” of the loss of the present as manifest in a feeling of dislocation; of being undermined by forces that destroy the

potential for solace to be derived from the present. In short, solastalgia is a form of homesickness one gets when one is still at “home.” (45)

Rogan, O’Connor and Horwitz, on the other hand, report compelling testimonies of farmers who had themselves (along with their ancestors) been part of such an assault. With the “golden past” in mind, one that they had never themselves experienced, at least not in the place in question, the degradation was nonetheless obvious, and upon realizing the consequences of the long-held belief in the “normality” of the utilitarian approach which led to such degradation, they changed their ways. A turning point for a farming couple interviewed, for example, was their experience with wind erosion, “one of the worst experiences we had,” they are reported to have said (151). Another farmer admits that he had always seen the environment as a means for agricultural gain: “I didn’t see the clearing really, because that was good, because we were producing something where before nothing was produced ... and this is what farmers do, they clear the land,” until one day flying back home, “it suddenly struck me that what I had in my hands was the spoils and I was one of the spoilers that was making it look like that out of the window.... It was just so graphic that it was mind boggling.”

Unguarded instrumentalization of nature following the emergence of agriculture, but particularly over the past few centuries with technological advancement and unprecedented and unsustainable human population growth, has contributed substantially to the degradation of the planet. This is now backfiring, not only in terms of geophysical changes with their adverse effects (e.g. erosion mentioned above), pollution of vital resources such as water, extreme temperatures, etc., all of which may affect human (and of course other animals’) physical health as well as community wellbeing (Berry, Bowen and Kjellstrom). This anthropocentric, self-appointed role of dominion (or “guardianship” as some would have it) over the rest of nature has uprooted humans from their evolutionary cradle to the extent that it appears to be quite directly impacting upon their psychological health. The field of ecopsychology in particular has been concerned with the troublesome relation between humans and the rest of nature. Congruent with the biophilia hypothesis (Wilson) whereby humans tend to feel an urge to affiliate with other life forms, this field explores the interdependency of humans and the rest of nature and the benefits a greater appreciation of this synergy and reciprocity by humans would bring to both.

Like other animals humans have also evolved in a naturalistic setting with large scale urban spaces being a relative novelty in our species’ history. Regardless of human ontogenetic experience and reflective conclusions, human bodies and psyches recognize

this intrinsic connection and may ache if deprived of it. City dwellers, for example, may think they are habituated to stress-inducing urban environments, but their bodies and brains may continue to react to the stress without the human being reflectively conscious of it, as Bratman, Hamilton and Daily observe. An indication that this may be the case can be found in the numerous reports of therapeutic properties attributed to exposure to “nature,” including a sense of connectedness, belonging, and an extended (eco) self, which tend to be labelled as spiritual (e.g. Snell and Simmonds). Even the smallest exposure appears substantially advantageous: Ulrich found that rooms overlooking hospital gardens positively affect patients’ recovery rates, while Moore notes that prisoners benefitting from similar views exhibit lower rates of sick-calls (both reported in Hinds and Sparks 110). Koga and Iwasaki, with a focus on the tactile consciousness and simultaneous repression of the visual dimension, examined psychological and physiological effects of touching plant foliage compared to other textures/materials. The results, based on the experimental human subjects’ reported impressions and on observations of their cerebral blood flow, show that touching plants has a reflectively unconscious (but of course experientially conscious) calming effect on people, leading the authors to conclude that “plants are an indispensable element of the human environment” (1).

While a substantial part of the literature addressing the human and more-than-human nature relationship appears to promote humans’ respect for the rest of nature, the instrumentalization of nature implicitly and most likely unconsciously propagated in these writings is disturbing. The notion of nature as a place to go to in order to de-stress, get away from the daily capitalist, consumerist life with its overwhelming contribution to the destruction of nature, and to recharge one’s internal batteries for better coping with the stress-inducing, “ordinary” life, gives little consideration to the fact that any such visit to “nature” is in effect an invasion. It is an intrusion into spaces of other animals (including us, the local human residents), into *their ordinary life*, and as such causes additional stress to *them*. Nature is not an empty cathedral awaiting humans to come and unload their burdens, even though at times it may appear so given that animals tend not to put themselves on display for the “wilderness”-hungry human visitor. Instead, nature is a fully inhabited space, home to communities and individuals who have been pushed to the limits (physically and psychologically) by the destructive powers of the ever expanding human population, urbanization, industrialization, and more recently eco-tourism and eco-therapy. Walking into other animals’ homes and backyards will cause a certain amount of anxiety to the dwellers as any novel situation inevitably does. It will disrupt the animals’ current activity (whatever that may be at the time of the intrusion: acquiring food, constructing a home, educating their children,

solving a personal dispute, resting after a hard day's work, meditating, etc.), forcing animals to attend to the intrusion because failure to do so may cost them, their families, and their friends their lives. A recent disturbing report (Gaynor et al.) shows that anthropogenic disturbances, which include anything from hunting to hiking, are forcing free-living nonhuman animals around the world to become more nocturnal. Since it has become increasingly harder to avoid humans in space, they have to adjust their lives to avoid us in time.

The “wildness” cherished in animals is far from the unstructured randomness that it is often credited with. When Cookson states: “Wildness in humans is usually seen as disruptive, while wildness in animals is essential to the health of their ecosystems” and “[i]f humans do not make the grade needed to use wildness constructively, then wildness becomes an otherness that is shunned” (188), he is disregarding the ecological and social sophistication characteristic of other animals’ communities. Like human communities, other animals’ communities are also regulated by social norms and codes of conduct (e.g. Broom) with aberrations exceeding acceptable levels likely to be penalized in one way or another. And just as intra-community social norms provide a certain grade of stability and security in animals’ lives (human inclusive) so does familiarity with the residential space and the conspecifics and others in it with strangers and the unpredictability accompanying them causing due concern. “I see, now, ‘the wilderness experience’ almost as an escape from the cultural reformation work needed, from reforms needed for survival of life on the planet,” Robert Greenway admitted in an interview (48). He continues, “[w]ilderness-as-therapy seems (in my more cynical or frightened moments) as an indulgence — an experience primarily available to a relatively wealthy tiny minority of the planet’s human population.” In the absence of such a reform, humans and other animals tend to their primordial needs for psychic homeostasis as best as their circumstances permit it, travelling through space, touching wildness and being touched by it, often without much reflective awareness of it.

When Kahn goes on his writing retreat, leaving human society behind for two months to write his academic book, it is not the wildness of his unshaved face and his unbathed body that makes his experience so special, even though he seems to have enjoyed that, too. Rather, it is wildness emerging following the blurring of time frames and schedules that many humans are slaves to in their daily lives, which provides him with the opportunity to be present and with the time “to notice,” as he puts it, and the silence, which aided both. Kahn writes:

Odd how the silence I described on my first night here was pounding my head. It was like I was coming off drugs and noise was my drug. This morning there is lovely sound in this light rain, and the blessing of the silence between the drops. (42)

When silence is allowed into a space, the organism opens up to modes of communication and understanding — of relating — that may be suppressed or obfuscated in an environment with noise as a prevalent theme. In our evolutionary past and in the rest of nature sound is used sparingly and meaningfully, attention to detail draws very fine lines between life and death: is the rustling foliage just signalling a cool change or is it aiding a predator's disguise? The world is populated with "spirits" (agencies), and other animals are as aware of them as humans are, regardless of whether they develop stories around them or not.

I was able to observe my own change of perception and increased attention to detail over the four months I spent in the paddock with Orpheus-Pumpkin, the orphaned lamb mentioned previously. This area is home to some of the world's deadliest nonhuman animal species, such as the Eastern brown snake and the funnel web spider, both of which live on and around the property; therefore, while sitting on the ground, barefoot most of the time, caution was in place. As Guthrie argued in his variation of Pascal's wager in relation to anthropomorphizing: "it is usually better to err many times by applying them [human-like models, i.e. agency, intention] when they do not obtain than to err once by failing to apply them when they do" (Guthrie 190).

While waiting for snakes and spiders, one becomes sensitized to all life around, as minuscule as it may be physically, particularly anything out of the ordinary, the unknown, and hence unpredictable. Following this period of close interaction with the ground and bushes I took a trip to the city; walking down the pavement I saw an unusual creature move in the middle of it. I stopped, convinced at that stage that it was an animal of some kind, but upon closer inspection I realized it was a leaf that had been moved by a gust of wind. I smiled, only half pleased. Just like one learns the rules of urban traffic, one learns to navigate other shared spaces. In doing so animals discover spaces that are best able to communicate with them and fulfil their psychobiological needs, which results in place attachment. The wild rabbit who "domesticated" himself and settled in our garden, would spend most of his time watching the rest of the world from under the lemon tree. The sheep would spend the day grazing around the property but at night, or even during the day when they feel like resting, they would always come to the same spot on a small plateau within the paddock — elevated areas

with a good view over the rest of the habitat and a higher chance of early predator detection are a rather common choice as a resting place in this species. Within this plateau they exhibit even more specific place preferences and it is not uncommon to see a sheep whose spot has been occupied by another sheep to nudge (or butt) the intruder to encourage them to move. When it rains the sheep take shelter in the barn, except for Jason. Rain speaks to Jason differently than it does to the others. Jason stays outside, lying under the rain with his face up and eyes closed. When the rain is heavier he moves under the tree, when the rain gets even heavier he joins the others in the barn.

Space as individual, individual as space. Place attachment in humans is believed not to develop until the age of five at the earliest, but more probably later (Morgan) and “certainly” after human-to-human attachment (Morgan citing Sobel). In my view, there are several problems with this assumption. The first and most obvious one is that relying on human self-reports can only reflect the contents of explicit memory and not that of the implicit memory storeroom which has an equal or greater impact on animals’ perceptions, feelings, choices, and decisions in life compared to the explicit contents. If we cannot recall place attachment from an earlier age it does not mean that place attachment was not present, or that it did not, at least, begin to form far earlier than our recollections suggest, probably earlier than, or perhaps alongside, intersubjective attachment.

In fact, unlike lambs and other precocial infants who pop out of the womb (or egg — giving birth to live offspring is basically a delayed form of egg-laying [Goodson, Kelly and Kingsbury]) and start following the caregiver, many animals (humans included) do not consolidate intersubjective attachments until they become capable of moving and getting lost. Nelson and Panksepp (438; see also Panksepp, *Affective neuroscience* 265) suggest that intersubjective attachment may have evolved from ancient mechanisms regulating place attachment, energy balance, thermoregulation, and pain perception, with the first three contributing primarily to evolving mechanisms for the appreciation of social presence with mechanisms for pain perception playing a greater role in the development of mechanisms for distress related to social absence (see also MacDonald and Leary). Panksepp never pursued research into place attachment as the origin of intersubjective attachment nor was he aware of anyone else that did so (pers. comm.). Nevertheless, from a neurochemical perspective, the endogenous opioid system with its capacity to modulate physical and social pain and pleasure plays a central role in mediating attachment relations, with the latter more likely to develop when a beneficial balance felt on the level of the experiential self is reached. In place preference conditioning, for instance, place preference is achieved by pairing a place with opiate

administration (Nelson and Panksepp 438; see also Prus, James and Rosecrans). This does not tell us much about non-conditioned processes of place attachment, but it suggests that a place with the capacity to trigger an animal's opioid system would be a suitable candidate for an attachment relationship, with mothers being one such place.

The line between subject and place appears far more blurred than it is generally recognized. Whether subject is place or place is subject may be difficult to establish, or rather the two "states" may be better viewed as fluid, taking the form of one or the other depending on the circumstances and viewpoint in any particular moment. Before having the opportunity and the capacity to interact with other animals, an animal lives and develops in, and interacts with, space. The womb, or the egg, is not a stimuli-free void, a sensory desert animals have to go through before "real" life starts. Real life starts at conception, and everything that happens afterward affects the organism, and it continues to do so until death. Both the womb and the egg represent a vibrant environment with sensory input the foetus is influenced by and responds to, including endogenous (within the mother's body) and externally generated sounds (Griffiths et al.). In human fetuses, for instance, these sounds influence the post-natal organisms' phonetic perception, i.e. human babies react differently to familiar (native) and non-familiar (foreign) vowels (Moon, Lagercrantz and Kuhl), while domestic chicks communicate with both siblings and parents while still in the egg to synchronize hatching (Broom and Fraser). Before having the opportunity to pair a voice with a face, the animal interacts with cognitively intangible entities, a relationality that appears to be the default mode of the experiential self.

The experiential self is in constant communication with the "spirits" in the environment, which are responding to it and elicit responses from it. There is a sensed presence before these agencies are associated with a particular face, smell and other specificities. Even when they do become associated with an embodied entity the mechanisms underlying the relation remain implicit, "spirit"-like, sensed but largely escaping capacities for reflective articulation because such interaction does not address one level only, but a multitude of levels reflecting various organismic needs and capacities. Once out of the womb (or egg) the organism continues its rich communication with space. Attachment figures (both in infancy and later in life) are primarily places (albeit very specific ones) with the capacity to offer the multimodal support the organism needs.

The individual as space is perhaps most obvious in the infant-mother dyad in altricial species. Before mutual intersubjective attachment develops, i.e., before the infant recognizes and bonds with the primary caregiver, essentially the infant is interacting

with a space. Unlike some other forms of space (such as a room or a garden), this space (the mother/caregiver) is a very active one and it intentionally seeks interactions with the infant, providing stimulation as well as regulation of the infant's internal states as indicated earlier. Despite the intentional interaction and care provided by the caregiver, communication within the dyad occurs on an implicit level. As such, factors outside the caregiver's will and intentional focus affect the interaction and determine the success of the regulation or lack thereof. These factors include the caregiver's own attachment style, stress reactivity, dispositional anxiety, and other components of the micro-cosmos embodied as a primary caregiver that communicates with the multimodality of the micro-cosmos of the infantile organism.

If an individual can in essence be viewed as a space — not only for infantile organisms; adult attachment relations reflect a similar multimodal exchange engaging a conglomerate of properties and activity, which is better understood as a more or less integrated space rather than a singular entity, if any such thing exists in the first place — can space/place be perceived as individual, a personified (though also multimodal) entity?

As part of the therapeutic process, Siegel, for instance, encourages his patients to imagine a place from the past or present where they felt safe and happy. Studies in separation distress reveal that a familiar environment may reduce separation distress vocalisations in animals (Panksepp, *Affective neuroscience* 265). Further, oxytocin, the mammalian neuropeptide with homologies in other taxa, which plays an important role in social interactions and increases the sensitivity of the opioid system, when externally administered to animals may increase social bonding, but only if animals have not had the chance to fully habituate to the test chambers. If such habituation occurs, oxytocin is ineffective, which may mean that the existence of a reasonably strong place attachment may hinder the formation of new intersubjective bonds (*ibid.*, 252). This suggests that the line between subject and space may indeed be far more blurred than generally thought. In a similar vein, while oxytocin may promote prosocial behavior towards in-group members, it appears to have the opposite effect towards out-groups (Panksepp and Biven 39). In research, nonhuman animals' place attachment tends to be conceptualized as so-called territoriality. Like in the exploration of human place attachment where place has largely been viewed as a container for intersubjective and intergroup social interactions, as mentioned above, territory (and territoriality) is also usually explored through the lens of inter- and intraspecific subjective functionality (e.g. space providing mating opportunities, etc.), rather than focusing on the direct relation between individuals and their space.⁶ Such relation may indeed be elusive, at

least compared to the much more (observably) vibrant animal-to-animal interactions, with (other) places likely appearing largely static to an external observer, but the organism is nevertheless in constant interaction with them and this interaction, this relation, informs the organism's state albeit in a largely reflectively unconscious way.

Just like a singular animal (human or other) has the capacity to speak to the sensory realm of another animal, leading to either attraction or aversion, both of which result largely from phylo- and ontogenetically informed implicit processes, other spaces are also in communication with individuals through touch, sight, smell, and other sensory modalities. Phylogenetic knowledge may broadly define needs and preferences; it may explain, for example, why wilderness has a powerful calming and so-called spiritual effect on people, why touching plants is beneficial as the Japanese study showed, and why sheep choose the highest spot in the paddock to relax and watch the stars on a clear night. Ontogeny defines such preferences further.

Concluding thoughts. It is becoming increasingly evident that to meaningfully engage in the dance with animacy one does not need highly elaborated concepts of divinities, the sacred, or other interpretive solutions that humans often associate with spirituality. The relational dance that emerges when the experiential consciousness responds to the touch of other animacy affirms its ontology and is experienced as meaningful without the need for cognitive elaboration pre- or post-factum confirming it. Animal organisms' capacity, indeed *propensity*, to engage relationally with the environment, populated with both tangible and intangible agencies, opens a window into possible modes of discussion and comprehension of phenomena that had, in the past, due to their liminal nature, been considered mentally ungraspable by the human — this not quite animal and not quite god oddity (Agamben) — and as such well beyond anything that may pertain to other animals and the rest of Earthly existence.

The possibility of the sacrificial lamb having equal or greater spiritual depth compared to her killer (Brooks Pribac, "Spiritual animal") may not sit comfortably with every human. Nevertheless, spirituality is another uniquely human characteristic that we may relinquish, and expand the circle of inclusion to other species. Furthermore, spiritual experiences may have significant psychobiological value for animals, human and others. Anthropogenic violence in the forms of both captivity with its inherent deprivation of species-specific natural sensory and other input, and the degradation of the planet most likely, and in their own ways, significantly impact upon this propensity of animals to engage with the agencies in the environment and the healing properties of such engagement. This may have substantial repercussions for their wellbeing. On top

of the grief they experience at the loss of significant others, many animals may also be grieving the loss of an ontological normative that has been tailored through a long evolutionary path and that humans have more recently come to manipulate for their own purposes.

Dedication. This essay is dedicated to the animals who lost their homes or lives in the fires ravaging Australia in late 2019/early 2020.

Notes

1. Precocial animals are relatively independent soon after birth, able to walk, feed themselves, flee, e.g. deer and ducks; altricial animals are relatively helpless and immobile at birth and completely dependent on adults for food, e.g. dogs and humans.

2. Western, educated, industrialized, rich, democratic.

3. In contrast to Western conceptualizations of the self as independent and separate from other selves (e.g. Geertz; Markus and Kitayama)

4. Schaefer proposes to move beyond the logocentric, human exclusivist view and explore religion from an evolutionary perspective, stressing the importance of affect, which humans share with other animals. Schaefer theorizes religion as “a dance of relating, a compulsory, affective web fusing bodies to worlds (...) a cycling of semistable bodily forms,” emerging differently in different bodies (192). Quoting LeMothe, Schaefer agrees that religion “is not what a person believes, nor what he has or does per se. Religion rather exists in the moment of its performances as a kind of doing that embodies a person in relation to a sense of the world” (191). Faith and belief, for example, are elements of the human religious dance, while other bodies, other animal species, with their distinct evolutionary histories informing distinct biophilic relations and related affective triggers, engage with the world differently, which manifests in different forms of religious dance.

5. <http://fcmconference.org/img/CambridgeDeclarationOnConsciousness.pdf>

6. The discourse concerning cage/pen enrichments for captive animals is a clear exception since it aims at providing a more naturalistic setting in recognition of the multimodal support such setting may offer to an organism (e.g. Balcombe).

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