

Calling the Na'vi: Evolutionary Jungian Psychology and Nature Spirits

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Avatar evokes many archetypal themes that have contemporary relevance, including the Great Mother, Dame Nature, Mother Earth, the World Tree, the Wise Old Woman, the Hunter, the Innocent Child, Resurrection and Rebirth, and the Hero's Journey.¹ These are relevant not only to our relation to nature and Earth but also to the wider role of spiritual experience in twenty-first-century Western culture. This archetypal richness is part of the reason why the movie has captivated audiences. However, *Avatar* is more than simply an evocative story or a modern myth, for if we understand the archetypal themes that it embodies, we can discover in it a way toward a deeper connection with nature and a more meaningful life.

I will argue for this thesis within the explanatory framework of evolutionary Jungian psychology, which combines study of the evolved neuropsychological adaptations of humans (pursued by evolutionary psychology) with experiential investigation of the archetypes (the unconscious psychological structures common to all humans) that are investigated by Jungian psychologists (MacLennan 2006). Evolutionary psychology has its defenders (e.g., Barkow, Cosmides, and Tooby 1992; Buss 2005, 2012) and its critics (e.g., Buller 2005; Richardson 2007), and Jungian psychology also evokes skepticism (e.g., Nagy 1991). Although a defence of these major movements in psychology is beyond the scope of this article, I contend that, on the whole, evolutionary psychology has strengthened the scientific basis of Jungian psychology. Moreover, I believe that these movements in combination provide exceptional insights into human nature, both neurophysiological and psychological, and its relation to the rest of nature; this double perspective illuminates the impact that the film *Avatar* has on viewers. To advance this argument, however, I need to explain some of the less well-known aspects of Jung's theory of the archetypes.

Archetypes

According to Jung, the archetypes are the psychological correlates of phylogenetic neurophysiological structures that regulate human motivation, affect, perception, and behaviour.² That is, our species, like all others, has characteristic ways of interacting with its environment that are rooted in our shared biological structure; these are commonly called "instincts," which are defined as evolved behavioural adaptations to an environment.³ Usually, instincts are studied from the "outside" by investigating the observable behavioural patterns and physiological responses characteristic of a species.

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When the subject is human instincts, however, we can also investigate them from the “inside”: that is, in terms of their effect on our mental state – moods, feelings, emotions, motivations, perceptions, impulses to act, and so forth. Jung used the term *archetype* to refer to the psychological aspect of an instinct. He wrote, for example, “Just as his instincts compel man to a specifically human mode of existence, so the archetypes force his ways of perception and apprehension into specifically human patterns. The instincts and the archetypes together form the ‘collective unconscious’” (Jung 1967–78, 8:270).⁴

The archetypes reside in the collective unconscious because they are characteristic of our species (hence, collective) and because they do not manifest consciously until they have been released by a triggering circumstance (hence, they are usually unconscious). Like other unconscious structures, they cannot be observed introspectively; they are known only through their effects on the conscious mental state and overt behaviour when they have been activated by some innate or learned releasing mechanism. As Jung (1967–78, 9, pt. 1:155) put it, “The existence of the instincts can no more be proved than the existence of the archetypes, so long as they do not manifest themselves concretely.” The unconscious mind also contains personal structures, such as “complexes” woven from unconscious associations and dispositions acquired during an individual’s life.

The archetypes correspond to patterns of relating to each other and to our environment that are adaptive: that is, that have contributed to the survival of *Homo sapiens* and its ancestor species. Light is being shed on these adaptations by evolutionary psychology, which seeks to understand human psychology in terms of its adaptive function and by comparison to other species, especially our nearest relations. There is evidence that, among other things, instincts condition sexual relations (Buss 2005, chaps. 9–14), child care (chaps. 16–17), dominance and status relationships (chap. 23), and emotional dispositions to other species, such as attraction to juvenile mammals (Eibl-Eibesfeldt 1970; Lorenz 1971), and fear of snakes and spiders (Buss 2005, chap. 7). Separating the effects of genetic and cultural evolution, especially in the face of gene-culture co-evolution, is a continuing complex empirical investigation, but we may draw a few general conclusions.⁵

The Na’vi as Ideal Humans

Overall, it is reasonable to assume that our instincts have facilitated human survival in our “environment of evolutionary adaptedness” (EEA): that is, in the environment in which our species evolved and to which it is coupled through natural selection. But what is this environment? Modern humans have existed for approximately two hundred thousand years, and for 95 per cent or more of that time, we have been foragers who survived primarily by means of gathering food and hunting. Indeed, we were foragers before we became *Homo sapiens*, so our foraging history is much longer, perhaps two million years (cf. Wilson 1978, 34, 84; 1993, 32). Therefore, foraging is our EEA; it is to this environment that we should look to understand the specific adaptations of *Homo sapiens*.

Paleogeneticists have been surprised at how little our genome has changed over the past three hundred thousand years: E. O. Wilson notes that a quarter of a million years ago, when *Homo sapiens* emerged, the brain stopped increasing in size, and since then,

genetic evolution has had a decreasing influence compared to cultural evolution (Wilson 1978, 87–88; see also Gibbons 2010, 680, 684). Therefore, in spite of gene-culture co-evolution, our genome has not changed very much over the two hundred thousand or so years that modern humans have existed, and even less over the approximately ten thousand years since agriculture was invented and many humans adopted a more settled way of life. For these many millennia, the instincts have provided a largely stable foundation for rapid cultural evolution. Therefore, since the instincts encoded in our genome are little changed from those of our foraging ancestors, the archetypes – which, according to Jung, are the psychological correlates of those instincts – are, for the most part, those of foragers, a conclusion defended by Jungian psychologists Anthony Stevens and Meredith Sabini, and indeed, by Jung himself (Jung 1967–78, 10:104–47; 2003, 99–118; Sabini 2000; Stevens 1993, 63–67).

Given that our behavioural adaptations are those of foragers, what can we conclude about the corresponding archetypes, understood as the psychological expressions of those adaptations? Stevens (1993, 2003) argues that we can learn much by looking at contemporary foraging cultures and by studying our close primate relatives. If we do so, we conclude that our ancestors were probably adapted to living in clans of a few dozen loosely related individuals of all ages, not unlike the Omaticaya clan, which occupies Hometree in *Avatar* (Wilhelm and Mathison 2009, 34). The information about our behavioural adaptations provided by cultural anthropology and evolutionary psychology has been supplemented by the empirical research of Jung and other depth psychologists who have investigated the archetypes through analytical psychology, which uses introspective, dialectical, and other techniques to explore unconscious psychological structures. An extensive, expanding Jungian literature contains reports of these (primarily clinical) investigations and interpretations of their results (Dyer 1991, vii–viii).

Jung (1967–78, 8:253) stressed that both archetypes and complexes behave like autonomous personalities. The archetypes in particular, since they correspond to instincts, have their own phylogenetic agendas (such as procreation, child care, and establishment of dominance), which may diverge from conscious purpose. They correspond to behavioural “programs” that are somewhat independent of each other but are nevertheless parts or aspects of the complete innate human behavioural repertoire, which we may call the “archetypal human.” Jung called this ideal human the “Self” (with a capital “S”), and I will call it the archetypal or higher self. It is the phylogenetic human psyche, which is encoded in the genes of every person.

The higher self and the archetypes it comprises can be considered an ideal human, but it is *ideal* only in the sense of being a transpersonal dynamic form; it is not ideal in any moral sense. The archetypes are psychobehavioural program implemented in human neurophysiology, which is encoded in the genome shared by all humans (hence, transpersonal). They can be called “good” only insofar as they are adaptive: that is, they have promoted our survival as a species in our environment of evolutionary adaptedness.

The archetypes correspond to the gods, nature spirits, and so on of polytheistic religions and animistic perceptions, although, of course, the archetypes are overlaid with cultural characteristics. When an archetype is activated by some external or internal releasing stimulus, it conditions motivation, affect, perception, and action to serve some evolutionary function. The conscious mind may experience the influence of this autonomous personality as a kind of possession (Von Franz 1980; Jung 1967–78, 8:204;

9, pt. 1:220–24, 621; Stevens 2003, 68–69). Even short of full-scale possession, a stimulus that partially activates an archetype may be experienced as numinous, spiritually potent, charged with existential significance (as it is). In particular, natural phenomena can evoke archetypal spiritual responses (Stevens 1999, 99–116, 332–91).

I think that the Na’vi have captured the imagination of *Avatar*’s audiences because they represent ideal humans, not in the sense of romantic “noble savages” but in the sense of archetypes: our innate psychodynamic models of phylogenetically normal human behaviour. As I have argued above, the archetypal human is a forager, not unlike the Na’vi, whose “technology is Neolithic . . . bows and spears, clay pots, animal skins, that sort of thing” (Cameron 1994, 29).⁶ Therefore, like the figures of myth, the Na’vi are literally evocative because they activate our ancestral archetypes, making them psychologically present as forces moving in our psyches, which is one reason why the movie is so compelling.

The word *avatar* comes from the Sanskrit word *avatāra*, “descent,” which refers to an incarnation of divinity. Thus, in the movie, human “drivers” incarnate into the avatars, which are otherwise non-sentient beings created by humans. The Na’vi call the humans *Tawtute*, “Sky People,” because they descended from the heavens and incarnate into the avatars. As Jung observed, in our culture, spacecraft have assumed the role of the chariots and other vehicles of the gods that were prevalent in earlier cultures (1967–78, 10:589–90, 608–11, 614, 621, 624). Reinforcing the incarnation theme is Dr. Grace Augustine’s remark in the scriptment, “Time to take flesh and walk the earth” (Cameron 1994, 61).⁷ From a different perspective, however, the Na’vi themselves are avatars, for as physical inhabitants of Pandora, they are physical incarnations of our archetypal gods. The movie invites viewers to project human archetypes onto the Na’vi, thus activating the archetypes within themselves.

Jake Sully’s first contact with the Na’vi is with Neytiri, who both saves his life and begins his orientation to an alien world. Clearly, she is what Jungians call an “Anima figure,” for the Anima in a man, which conditions his relation to women, is the archetype closest to a man’s conscious mind and is therefore the archetype most likely to serve as a guide and mentor in the archetypal realms (Jacobi 1973, 118). (Similarly, the Animus in a woman’s psyche regulates her relation to men and serves as her archetypal guide.⁸)

The Psychological and the Physical

As the unconscious psychological correlates of the instincts, the archetypes provide a nexus between, on the one hand, a spiritual realm occupied by gods and ancestral spirits and, on the other hand, neurophysiologic structures that are grounded in nature and our evolutionary history. That is, by virtue of the latter, the archetypes are physical, but by virtue of their intervention in consciousness, they are psychological. Hence, as Jung (1967–78, 14:767) stressed, the physical and the psychological must be understood as two aspects of a single underlying reality, the *unus mundus*, or “one world”:

“Undoubtedly the idea of the *unus mundus* is founded on the assumption that the multiplicity of the empirical world rests on an underlying unity, and that not two or more fundamentally different worlds exist side by side or are mingled with one another.”

Therefore, the archetypes are central to understanding the role of human consciousness in nature; they are the articulation points between the preconscious channels of our conscious experience and human neurophysiology grounded in natural history. Hence, archetypal figures, as perceived spiritual beings grounded in nature, contribute to our understanding of human perception of the sacredness of nature.

In their psychological impact, the Na'vi are spiritual beings and Pandora is a spiritual realm, but in the film, they were manifestly physical: natural, not supernatural. Although we experience them as archetypal figures arising from the collective unconscious, dwellers in an archetypal Garden (Stevens 1999, 200–209), in the context of the movie, they are physical beings inhabiting a physical place (a moon orbiting a planet in the Alpha Centauri system). Humans reach the Na'vi by physical means — an interstellar cruiser — and interact with them by means of physical avatars controlled by sophisticated technology. As a consequence, the Na'vi and their world are appealing to those viewers who are suspicious of dualistic conceptions of spiritual phenomena. Most of our contemporaries have difficulty taking seriously gods, nymphs, satyrs, and so forth, but a generation raised on space stations and shuttles and on video games and virtual reality finds it easier to believe in an expedition to a distant world and technologically controlled avatars: “Anything that looks technological goes down without difficulty with modern man” (Jung 1967–78, 10:624). The technological setting, therefore, reinforces a view that nature spirits reside in physical nature, not elsewhere.

Evolutionary Jungian psychology is similarly non-dualistic, seeing the physical and psychological realms as two aspects of a single underlying reality, the *unus mundus*. These two realms are addressed by the evolutionary and Jungian approaches, respectively. First, through comparative studies of related species, evolutionary psychology seeks to understand human neurophysiology as an adaptive mechanism in our environment of evolutionary adaptedness. Thus, this mechanism is thoroughly grounded in nature, experienced from the outside as an *object* of empirical investigation. Second, nature, and in particular human nature, is also experienced from the inside, or as *subject*, when the psyche is explored through phenomenology, which is the systematic empirical investigation of the structure of consciousness. Jung's clinical work and his personal phenomenological research, for example, led to his description of the archetypes as phylogenetic psychodynamic structures. Therefore, evolutionary Jungian psychology addresses human nature from both sides, the physical and the psychological, putting both in their natural context. In particular, from a Jungian perspective, the Na'vi – or beings very much like them – *are* real, but not in the Alpha Centauri system. Rather, they exist simultaneously in the objective structure of the human genome and in the equally objective species-specific structure of human psychospiritual experience.

Biophilia

On Pandora, we find not just archetypal people but also archetypal plants and animals. These are species and larger genera that evoke characteristic psychological responses from people. These responses correspond to innate behavioural patterns that have proved adaptive in the evolution of *Homo sapiens*, especially during our long foraging phase. (An example is a startle reaction to snakes [Buss 2012, 92–97].) As a consequence, many

plants and animals function as symbols capable of activating archetypal patterns of motivation, emotion, perception, and action.

In 1984, Edward O. Wilson coined the term *biophilia* for the “innate tendency to focus on life and lifelike processes” (1984, 1). This tendency is unlikely to be encoded directly in the genome: “Biophilia, like other patterns of complex behavior, is likely to be mediated by rules of prepared and counterprepared learning – the tendency to learn or to resist learning certain responses as opposed to others. . . . The feelings molded by the learning rules fall along several emotional spectra: from attraction to aversion, from awe to indifference, from peacefulness to fear-driven anxiety” (Wilson 1993, 31). Biophilia thus comprises the whole array of evolved adaptive responses to living things. Stephen R. Kellert (1993, table 2-1), for instance, describes nine different innate responses to nature, each with characteristic adaptive functions: utilitarian (physical survival), naturalistic (curiosity, outdoor skills), ecologicistic-scientific (observation, knowledge), aesthetic (environmental vitality, security), symbolic (enriched communication), humanistic (bonding, nurturing care, co-operation, altruism), moralistic (conservation, feelings of well-being), dominationistic (physical prowess), and negativistic (safety). These “biophilia values” are all components of a broad biophilia hypothesis, but there is evidence supporting each of them. Kellert observes that all these values have “both the capacity for functional advantage as well as exaggerated distortion and self-defeating manifestation” (56). Similarly, Jung (1967–78, 8:590n9) stressed that the archetypes are ambivalent in moral valence.

From the perspective of archetypal psychology, these biophilia values are phylogenetic patterns of human response to nature (in particular, to our environment of evolutionary adaptedness), and they have both innate and learned triggering stimuli. The designers of Pandora’s flora and fauna made expert use of these stimuli to evoke feelings of fear, awe, tenderness, wonder, and so on. Given the space constraints that preclude a comprehensive analysis of the symbolism of Pandoran life, I will discuss just two examples: dragons and trees.

Pandora hosts several species of winged reptiles, which are effectively dragons: *toruk*, the “last shadow”; *ikran*, the mountain banshee; *ikranay*, the forest banshee; *riti*, the stingbat; and *tetrapteron*, the four-winged flamingo-like bird. Symbolically, dragons combine wings, which establish a connection to the heavens (Stevens 1999, 630), with reptilian elements, which evoke the “more primitive, atavistic, and compulsive forms of human behaviour” (340). More broadly, the dragon combines the ability to soar to the heights with the ambivalent depths of nature, the unity of spirit and matter (128). Furthermore, Sully’s perilous bonding with his *ikran* and especially his climactic bonding with *toruk* – both of which have their rookeries high in the Hallelujah Mountains (Wilhelm and Mathison 2009, 61, 79) – have the character of an archetypal Dragon-Battle, a type of the hero’s “supreme ordeal” by which he obtains the “boon” (Campbell 1968, 245–46; Stevens 1999, 210). Sully’s subsequent flights on the *ikran* and *toruk* also resemble the “soul flight” typical of shamanism (Winkelman 2002; 2010, 119–20).

Pandora

The moon Pandora is the body of Eywa, who is “the Great Mother. The goddess made up of all living things” (Cameron 2007, 53). As the coordinating process of all life on Pandora, Eywa is both physical and psychological, dual aspects of the *unus mundus*. “Some believe interconnectedness, which on Earth is often considered a spiritual concept, exists in a physical and tangible way on Pandora” (Wilhelm and Mathison 2009, 186). This interconnection is manifest in bioluminescence, which is one of the most characteristic features of Pandoran life and one of the most beautiful. It captivates the characters in the movie and the audiences who view it. It seems to be common to most, if not all, Pandoran life forms, and the bioluminescent network is even visible from space, revealing the energetic web that interconnects the entire living planet (Cameron 2007, 150).

This light resembles what Jung (1967–78, 8:388–96) called “scintillae,” or soul-sparks, which appear in dreams and visions as points of light or eyes in the darkness: for example, the starry firmament, stars reflecting off the surface of the sea, myriad fish eyes in the sea’s dark depths, flecks of gold sprinkled on dark sand, iridescent eyes on a peacock’s tail, or even a nighttime regatta decorated with lanterns. Psychologically, the scintillae represent points of partial consciousness in the unconscious mind, the archetypal beings in the collective unconscious projected onto nature: that is, emerging consciousness of the spirits in nature (8:392). Jung quoted the seventeenth-century alchemist Heinrich Khunrath, who recognized scintillae as the “fiery sparks of the soul of the world” (8:388), the pure essential forms of a universally animated world. Jung explained: “These *formae* correspond to the Platonic Ideas, from which one could equate the *scintillae* with the archetypes. . . . One would have to conclude from these alchemical visions that the archetypes have about them a certain effulgence or quasi-consciousness, and that numinosity entails luminosity” (8:388). The scintillae attract conscious attention and focus the imagination (Mogenson 2006, 48); thus, they establish a resonance or symbolic link between activated archetypes and their projections in nature. According to archetypal psychologists, they reveal visually the numinous significance of the stimulus that has awakened the archetype, and they draw our attention to it, allowing its greater manifestation in consciousness. In their totality – as the myriad eyes of nature – they reveal the pervasiveness of meaning and the sacred in our environment.

The scintillae are incomplete manifestations of the *Lumen Naturae* or “Light of Nature,” which is the complete web of symbolic connections, but repeated attention to the scintillae strengthens observers’ “mental eyes” until they can experience full illumination (Jung 1967–78, 8:389), a holistic grasp of the symbolic network of meaning in nature, for “the light of nature is an intuitive apprehension of the facts, a kind of illumination” (13:148). According to Paracelsus, quoted in translation from Latin by Jung (13:148n6), the wise ones of old “derived their knowledge from the Light of Nature. This they nurtured in themselves. . . . It comes from nature which contains its manner of activity within itself. It is active during sleep and hence things must be used when dormant and not awake — sleep is waking for such arts — for things have a spirit which is active for them in sleep.” Here, we see the same ambiguity between the dreaming and waking states that Sully experienced. As a “dreamwalker” (Cameron 2007, 45), he could perceive the luminous and numinous connections among all things. Sleep is waking for

such arts. Paracelsus also said that the Light of Nature “is in the World and the whole edifice of the World is beautifully adorned and will be naturally preserved by it” (quoted in Jung 1967–78, 12:356), a perfect description of bioluminescence on Pandora.

Archetypal Trees

Besides animals, human biophilia encompasses the plant world and the landscape at large (Heerwagen and Orians 1993), both of which are exploited impressively in *Avatar*. In particular, trees are central to the symbolism of the movie and are an important archetypal image. Jung (1967–78, 13:350) summarized its symbolic range in “The Philosophical Tree”: “Taken on average, the commonest associations to its meaning are growth, life, unfolding of form in a physical and spiritual sense, development, growth from below upwards and from above downwards, the maternal aspect (protection, shade, shelter, nourishing fruits, source of life, solidity, permanence, firm-rootedness, but also being ‘rooted to the spot’), old age, personality, and finally death and rebirth.” Many of these associations apply to the significant trees of *Avatar*.

In Jungian psychology, the tree, like the dragon, symbolizes a union of opposites (Earth and heaven, human and divine, conscious and unconscious), which is necessary for psychological integration (Stevens 1999, 253). Thus, the philosophical tree is closely associated with the alchemical philosopher’s stone, which symbolizes this state of integration. It is not surprising, then, that Hometree and other sacred sites on Pandora are located over large unobtainium deposits (Wilhelm and Mathison 2009, 34).

Much of the action in *Avatar* revolves around *Kelutral* (Hometree), only one of many “great trees,” where some of the Na’vi clans dwell (Cameron 2007, 44). These clans correspond closely in size and organization to the probable social groups of our foraging ancestors (Fox 1989; Stevens 1993, 67; Wilhelm and Mathison 2009, 34; Wilson 1978, 82–88). The Hometree of a clan may symbolize the group’s organic integration, nurturing protection, integrity, stability, and permanence: the “maternal aspect.” Cameron (2007, 45) describes Hometree’s interior as “a living cathedral,” as befits the dwelling place of archetypal spirits. Each clan has its wise woman, called a *tsahik*, whom Augustine describes as “a kind of shaman,” the spiritual leader who interprets the will of Eywa, the Great Mother “made up of all living things” (46, 53). In the Omaticaya clan, which Sully joins, the *tsahik* is Mo’at, the mother of Neytiri, who is Sully’s Anima-psychopomp (soul-guide) and will be the next *tsahik* (96). Serving a different function are the *Utraya Mokri* (Trees of Voices), which stand in the sacred groves. Looking something like willows, their tendrils can interface directly with the Na’vi’s neural queues, which permits the Na’vi to upload their experiences into the Pandoran neural network and to download ancestral wisdom from it (89, 101). In the same way, shamans “plug into” the ancestral wisdom of the collective unconscious.

According to Mircea Eliade and others, the World Tree is a common feature of many shamanic cosmologies (Butterworth 1970, chap. 1; Eliade 1964, 269–74; Ryan 2002, 188–92). It is the *Axis Mundi*, or world axis, which the shaman ascends to contact celestial spirits or descends to contact chthonic spirits. Perhaps most like the shamanic World Tree is the Mother Tree, an ancient Pandoran “willow” that stands at the centre of *Vitraya Ramunong* (the Well of Souls), which is the fountainhead of Pandora’s conscious

energy vortex (Cameron 2007, 115–16). Joined with the other “willows” ringing the caldera, it forms “a braided mat resembling the surface of a brain” (116). Indeed, as Augustine explains, the trees of Pandora form a vast global neural network, each of the trillion trees acting like a neuron connected through their root tendrils to ten thousand other trees (101).

From a Jungian perspective, the Mother Tree, like the shamanic World Tree, is a powerful symbol of the *unus mundus* and of the relation of individual human psyches to the collective unconscious. Jung (1967–78, 10:53) said the archetypes are like “roots psyche has sunk into the earth . . . the most effective means conceivable of instinctive adaptation. . . . The chthonic portion of the psyche . . . in which its link with the earth and the world appears at its most tangible.” The tree trunk represents the phylogenetic psyche common to all humans and encoded in the human genome. The tree ramifies, like our individual family trees, representing patterns of genetic relationship between our individual genotypes. From a Jungian perspective, this all reflects unconscious ancestral wisdom. Sometimes the shamanic World Tree has “soul-flowers” blooming at the periphery of its branches (Jung 1967–78, 9, pt. 1:596, 604; Ryan 2002, 44–46, 53, 58, 186). These represent the conscious minds of individual people. This symbol appears in *Avatar* both as the tendrils of the “willows,” which interface with conscious Na’vi, and as the Na’vi sleeping in Hometree.

An important, related symbol is the *atokirina*’ or woodsprites, the seedpods of the Mother Tree (and the other Trees of Voices), which Neytiri describes as “very pure spirits” (Cameron 2007, 43): that is, they are soul-flowers. Swarming, as they do around Sully when he is anointed by them (Cameron 1994, 58), they also resemble Jungian scintillae, or soul-sparks. The two symbols merge if we understand them as points of incipient consciousness in the collective unconscious: “Though not coinciding with the ego, which Jung defines as the center of consciousness, these sparks of partial consciousness in the unconscious appear to us outwardly as the things of the world that attract our attention, compel our reveries, and stir the imagination” (Mogenson 2006, 47–48).

Connecting with the Archetypes

The Na’vi use their neural queues to connect to each other, to other animals, and to the Pandoran neural network in order to access “the collective wisdom of all Pandoran life” (Wilhelm and Mathison 2009, 28–29). This bond is presented as a physical connection, but in the archetypal world of Pandora, it is also spiritual, for the Na’vi are archetypal figures, evocative of the ideal human. The neural queue represents the spiritual connection with nature, which most contemporary people have lost, for “the Na’vi do not see themselves as separate from nature, but rather an integral part of it. Humans had a similar interconnectedness with nature long ago” (Wilhelm and Mathison 2009, 29).

Avatar shows this bond being used in two different ways. First, it is used to connect the individual Na’vi to the Pandoran collective intelligence, as when Sully bonds with the Tree of Voices. Second, it is used to connect one individual to another, as riders bond with their direhorses or *ikrans* (mountain banshees), or when two Na’vi join together in love (as do Sully and Neytiri). In Jungian psychological terms, the first is a

connection between an archetype or complex and the undifferentiated ground of all archetypes; the second is an interaction between two distinct archetypes, with some coordination and perhaps contamination of content. Since the archetypes are just differentiated aspects of a unified collective unconscious and the complexes are just unconscious individual elaborations of them, such connections are common. Furthermore, since the archetypes and complexes are psychological in substance, there is no barrier to their communicating or coordinating psychological content, as represented by the neural connections of the Na'vi.

If we understand individual Na'vi as archetypes, then when they connect with Eywa through a Tree of Voices, they are drawing strength and inspiration from the undifferentiated unconscious archetypal self, of which they are but parts. When Na'vi die, they return to Eywa and contribute to the ancestral voices. We may see these as metaphors, respectively, for the genome's contribution to individual behavioural adaptations and for these behaviours' contributions to the genome's future evolution. The various human instincts (of which the archetypes are the psychological expressions), through their greater or lesser adaptation to the environment, contribute to the evolution of the human genome, which defines our species both physically and psychologically.

When avatar-Sully, who represents Sully's conscious ego interacting with the archetypal realm, connects his neural queue with Neytiri's or an animal's, he is establishing intimate contact with that archetype. In an analogous way, the ego can negotiate its relations with the archetypes, learn from them, draw strength from them, and work toward integration of the psyche. According to Jung (1967–78, 9, pt. 1:620), “This is the answer to the great question of our day: How can consciousness, our most recent acquisition, which has bounded ahead, be linked up again with the oldest, the unconscious, which has lagged behind? The oldest of all is the instinctual foundation.” And how can we, who do not have the avatar technology, journey to Pandora and contact the Na'vi?

Visiting Pandora

In the movie, Pandora is a physical place, a moon of a planet in the Alpha Centauri system, but it has the characteristics of a spiritual realm. Its geography, flora, and fauna are numinous, perhaps more typical of fairy tales than science fiction. Superconductivity and intense magnetic fields create subtle forces and mysterious, awe-inspiring effects, such as the levitating Hallelujah Mountains – among which is Mons Veritatis, the “Mountain of Truth” (Cameron 2007, 70; Wilhelm and Mathison 2009, 21–23). The gravity is low, and the avatars felt freer, less embodied, less physical than they do in their Earthly bodies (Cameron 1994, 25; 2007, 24, 80). This spiritual character is reinforced by Pandora's atmosphere: a dense air lower in pressure than Earth's and breathable by its archetypal inhabitants but unable to sustain human life (Cameron 2007, 8; Wilhelm and Mathison 2009, 6, 8–9). Likewise, the Pandoran plant life is inedible by humans (Wilhelm and Mathison 2009, 5). Pandora is a magical place but not a human realm. It is significant that humans can live their avatar lives for only limited amounts of time. They have to return to the human world, leaving their “psionic link units” to eat and, presumably, to take care of the other necessities of human embodiment.⁹ Pandora is

manifestly a sort of Garden of Eden, at least for the Na'vi, a paradise to which the humans are seeking re-entry, if only to exploit its abundant resources.¹⁰ By means of the avatar technology, people can walk once again in the archetypal Garden, but human nature prevents them from residing there permanently. As Augustine pointedly reminds Sully, “Our life out there takes millions of dollars of machinery to sustain. You visit – and you *leave*” (Cameron 2007, 84).

Likewise shamans, so long as they are alive, cannot remain in the spirit world indefinitely. Their presence there is maintained by a technology – drumming, chanting, psychoactive substances, and so on – but they must return because they are human and because it is their duty to bring the fruits of their journey back to their community (Walsh 1990, 31–32; Winkelman 2010, 57–58). A recurring motif in folklore and mythology is the temptation to refuse the return, to remain in the ecstatic dream (Campbell 1968, 193–96, 218). Sully expresses the common dilemma: “Everything is backwards now. Like out there is the true world, and in here is the dream,” a feeling common among the avatar “drivers” (Cameron 2007, 66; 1994, 29).

The Innocent Child

Sully is typical of shamanic initiates who, according to some scholars, begin their path to shamanism through some trauma that brings them to the brink of death, leaving them broken in mind as well as body (Eliade 1964, 25–32; Ryan 2002, 90; Walsh 1990, 39–41; Winkelman 2010, 49, 52–53).¹¹ Sully subsequently hears an irresistible call to the realm of archetypal spirits, where he undergoes incredible trials, including the *uniltaron*, or “dream hunt,” which is a formal “vision quest” (Eliade 1964, 36–38, 53–56; Ryan 2002, 107–10; Winkelman 2010, 57–58). He is consequently accepted into the community of spirits and becomes a sort of ambassador between the spirit world and our own – metaphorically, through the Pandoran story – thus becoming able to bring its wisdom and healing power back to our world (Walsh 1990, 31–32). Like some mythological heroes, he eventually achieves apotheosis, leaving his human body behind and joining the ranks of the archetypal spirits, symbolized in the movie by the Na'vi, who resurrect him with a subtle, luminous, incorruptible, spirit-body, the traditional dwelling place for the true self, uniting mind and nature, the conscious and the unconscious (e.g., Eliade 1969, 274, 283; Jung 1967–78, 13:29–30, 68–69, 76, 392).

Sully's childlike emptiness is stressed. Neytiri tells him, for example, “You are like a baby” (Cameron 2007, 40), and when Sully asks Neytiri why she saved him, she answers, “You have a strong heart. No fear. *But stupid!* Ignorant like a child!” (40–41). Augustine has already expressed her dismay at his lack of scientific training, but this turns out to be an advantage. Mo'at observes that it is difficult to teach humans – because “it is hard to fill a cup which is already full” – and Sully replies, “My cup is empty, trust me. Just ask Doctor Augustine. I'm no scientist” (47). As Cameron (1994, 75) explains, eventually Sully “embraced the animistic forest, which is alive with invisible dynamic forces, spirits. Things which he doesn't understand, but accepts, in a way a scientist could not without taking it apart and finding out how it worked. He deeply respects these primal people who are in touch with forces we no longer see and feel.” Sully is psychologically prepared for contact with archetypal spirits. Aside from his somewhat fragile

psychological condition, he is unburdened with complex theories and unaccustomed to extensive rational analysis; therefore, he is susceptible to an intrusion of unconscious forces. The conscious, rational ego, which wants to be in control, must be passivated to contact the archetypal world. This is achieved by *adaptive regression*, or *regression in service of the ego*: that is, the ego abdicates conscious control to permit entry (and even possession) by subconscious forces (Rosegrant 1980, 1987; Stein 1974, 91–93; Wild 1965). This involves a lowered level of arousal, defocused attention, and a shift from “secondary process” rational cognition to more instinctual “primary process” non-rational thought (Martindale 1999; Mednick 1962; Mendelsohn 1976). Shamanic techniques for achieving a trance state include drumming, chanting, dancing, fasting, sleep deprivation, and the use of certain mind-altering substances (Walsh 1990, chap. 12; Winkelman 2010, chap. 4). Even in the more technological context of *Avatar*, when Sully enters the link unit for his first experience as an avatar, Augustine instructs him, “Relax and let your mind go blank. That shouldn’t be hard for you” (Cameron 2007, 18). In this way Sully, the empty vessel, the innocent child, is prepared for his eventual rebirth as one of the Na’vi.

Rediscovering Our Place in Nature

How can we apply the insights of *Avatar* to our own situation? Although the avatar technology of the movie is more acceptable to contemporary people than archaic shamanic techniques are, there is nothing supernatural about the latter, for shamans use their understanding of neurophysiology and potent cultural symbols to facilitate conscious engagement with the unconscious archetypes (Winkelman 2002; 2010, 38, 113, 214–15). Furthermore, modern psychoanalytic techniques, such as active imagination, and modern incarnations of archaic techniques, such as dream incubation and shamanic journeying, permit contemporary Westerners to engage these archetypal forces (Harner 1980; Ingerman 1991; Jung 1997; Johnson 1986, pt. 3; LaBerge and Rheingold 1990; Meier 2009; Walsh 1990).

The goal of these techniques is psychological integration (Winkelman 2010, 4–6), especially between an often detached and calculating conscious ego and a deeper, more instinctual psyche, which is rooted in, and ultimately continuous with, nature. Jung (1967–78, 7:266; 9, pt. 1:490) called this practice of integrating our conscious and unconscious lives in order to discover our true selves “individuation,” because its goal is a psyche that is undivided (Latin: *individuus*).

When Sully enters the world of the Na’vi, ultimately becoming one of them, he discovers the relation of archetypal humans to their environment. We can do the same, not through “psionic link units” and avatars but through ancient and modern psychospiritual practices, possibly enhanced by technology, including 3-D motion pictures. In this way, we can consciously integrate the archetypal human, and its relation to nature, into our contemporary lives. By these means, we may explore the archetypal landscape, as Sully and the others explore Pandora, coming to know this common, unconscious substrate of human experience, which will help us to discover how to relate to nature in a way consistent with human nature and human thriving. (I believe this would result in a more reverential attitude toward nature, mitigating environmental degradation.)

Also by these means, we may engage the higher self in dialogue, bringing it into the light of consciousness in order that we may live in better accord with human nature.

Although science has not finished unravelling the complex interdependencies of genes and culture, I think it is clear that the archetypal human is fundamentally a paleolithic forager. Moreover, the pace of evolution is slow, so our biological nature cannot change quickly, but this conclusion does not imply that we should attempt an atavistic return to a paleolithic lifestyle. On the contrary, human nature also includes the capacities for learning, language, cultural evolution, and a highly differentiated conscious ego, so a return to the past would be contrary to human nature. Rather, our task is to strive for a rapprochement between our collective consciousness (as reflected in contemporary culture) and the collective unconscious (deriving from our biological nature). By using new and updated ancient practices, we can discover the nature, needs, and potentials of the human higher self and address them consciously in a contemporary context, thus improving the quality of life.

Jung was very sensitive to the dynamic tension between nature and culture. He concluded, “Nature *must not* win the game, but she *cannot* lose” (1967–78, 13:229). I believe that this statement is both wise and accurate (MacLennan 2007). On the one hand, nature must not win; that is, we should not allow her to win, if by that we mean a decline of civilization and a regression to a less differentiated state of conscious awareness. Indeed, such regression would be a denial of human nature, which is wired for cultural development. On the other hand, it is not possible for her to lose, because human nature is part of nature, and whatever we do, we must play by nature’s rules. This could be interpreted as an irresolvable dilemma – Freud’s “discontents of civilization” – but it is better to see it as a marriage, a *coniunctio oppositorum*, between collective consciousness (culture) and the collective unconscious (nature). Rather than fighting the Na’vi (nature spirits and archetypal ancestors), we should be seeking co-operation for mutual benefit.

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Endnotes

1 There is no comprehensive list of Jungian archetypes, since they are somewhat fluid manifestations of a unitary collective unconscious, which emerge differently in differing cultural contexts. The archetypes mentioned here have been

2 “Phylogenetic” refers to the development of a species or other class of organisms, as opposed to “ontogenetic,” which refers to the development of individual organisms.

3 Oversimplified definitions of *instinct* are treacherous, but for convenience, I will use the word. Our instincts “(1) are complexly specialized for solving an adaptive problem, (2) reliably develop in all normal human beings, (3) develop without any conscious effort and in the absence of formal instruction, (4) are applied without any awareness of their underlying logic, and (5) are distinct from more general abilities to process information or behave intelligently” (Buss 2005, 18). See McFarland (1987, 309–10) for a brief overview of the history and present understanding of instincts; Stevens (2003, chap. 4) addresses the definition of *instinct* in the context of the archetypes.

4 Jung (1967–78) refers to Jung’s *Collected Works*, which will be cited by volume and paragraph number. Volume 8 is especially relevant to the present discussion. Jung devotes volume 9, part 1, paragraphs 87–110 to the collective unconscious.

5 “Gene-culture co-evolution” refers to the mutual influence of genetic evolution and cultural evolution on each other (Lumsden and Wilson 1983, 19–21, 170–71).

6 This is the 114-page “scriptment” (Cameron’s term) of *Avatar*. Its pages are unnumbered, so for purposes of citation, I have counted them from the beginning, numbering the title page “1.” The scriptment is sometimes more explicit about Cameron’s intentions than the script (Cameron 2007), but, of course, we must beware of changes in Cameron’s conception over the thirteen intervening years.

7 In the scriptment, Grace Augustine is called Grace Shipley and Jake Sully is called Josh Sully.

8 In the scriptment, Augustine has a corresponding Animus figure, N’deh, her mentor and guide in the world of the Na’vi (Cameron 1994, 29–31, 74, 87–88).

9 Sully remains on Pandora, but in his apotheosized Na’vi form. Presumably, the other avatar controllers who stay behind will survive in the same way.

10 In the scriptment, Sully tells the other controllers, “Pandora is not Hell, it is Eden” (Cameron 1994, 80). Interestingly, this garden seems to contain no serpents.

11 *Shaman* is, of course, a contested term. Here, I accept the principal characteristics of shamans identified by the empirical studies by Winkelmann (1992), which were later summarized and discussed in Winkelmann (2010, chap. 2).