8 Species-Typical Phronesis for a Living Planet

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Phronesis or practical wisdom is an idea often presumed to have emerged from the ancient Greeks and thus discussions tend to focus on their views. Yet practical wisdom was not just the purview of ancient Greek thought but was discussed among Axial age philosophies (e.g., Confucius), and it is apparent, though not transcribed, in ancestral-style societies (non-civilized) (Lee and Daly 2005) and among First Nation peoples of the Americas (e.g., Deloria 2006). The perspective presented here suggests that, perhaps because of inadequate attention to these other traditions, there are gaps in most scholarly discussions of phronesis. The latter traditions include two critical ingredients of phronesis not typically attended to in discussions of ancient Greek traditions: the grounding or biosocial ecology of development and the expansive imagination or worldview of transpersonal transrationality. Both are arguably fundamental species-typical aspects for becoming and being human on a living planet, and for living a life that is good for one to live. These two gaps characterize humanity's noncivilized but sustainable history. I will argue that both these aspects – the biosocial ecology of development and transpersonal transrationality – are required for a species-typical phronesis, critical for living a durable life.

Phronesis is characteristic of human living, answering the question, how does one live a good life? Phronesis or practical wisdom integrates all the intelligences, applying what is needed in the situation: interpersonal and intrapersonal (socioemotional intelligence), spatial and kinesthetic (body in space), logico-mathematical, musical, linguistic, naturalistic (understanding of the natural landscape), and spiritual (Gardner 1999). Phronesis or practical wisdom guides us in what we are doing tomorrow, today, right now. To stay alive, every creature must have prudence, sagaciously discerning what is safe or unsafe (Aquinas 1991) with rapid implicit "neuroception" (Porges 2011). But for social creatures like human beings, practical wisdom is broader and deeper, because, for example, humans make choices that can greatly affect many others, both human and other than human, at multiple levels – from quality of life that others experience, including future generations, to disturbances

of ecosystems and ~~avoiding~~ lasting eco-devastation (e.g., in water, soil, air, diversity, balance) that causes, for example, pandemics. The critical aspects discussed here may help explain how the dominant culture of the world – globalized capitalism (another form of colonialism) – became "reasonable" while habitat and life destructive.

1 Judging Human Beings

In discussing phronesis or practical wisdom, it is important to address appropriate features. To determine wise action, one must understand the animal in mind – its nature, including its capacities, upon which action and wisdom rely. Foot (2001), based on Thompson (1995), suggested that to judge goodness generally, one must take into account the kind of organism being judged. For example, wise action for a fully functioning sea turtle would be different from that for a fully functioning human being. Each organism has characteristic features, which are good for the creature to have and that, when missing, make the individual a defective member of the species. When discussing human beings, we must understand the nature of the human organism and its development, what qualities help the human organism lead a full life, and what kinds of action and capacities make it a proper member of its species. Only then can practical wisdom be discussed.

However, preliminarily, we must apply two correctives to Foot's framework for assessing wise action. First, humans do not emerge like eggs from a mother and live independently after exiting the eggshell, as turtles do. Instead, humans are highly biosocial beings: Their biology is actually shaped by postnatal social experience "all the way down" to neurobiological structures and function (e.g., Montagu 1968; Narvaez, Panksepp, Schore and Gleason 2013). Assessment of an individual human's typicality, then, involves assessing the quality of their social milieu, especially during childhood. Second, contemporary human beings hardly at all match up with the human beings ~~that~~ represent humanity's natural history; they and their social milieus are far from what will be described as species-typical. Some argue that what modern humans exhibit represents evolutionary progress (i.e., by natural selection). But evolutionary change does not occur to such a vast degree on such a short time frame – we are still social mammals, a line that emerged around 30 million years ago, with specific basic needs – so it is not parsimonious to argue from an evolutionary change perspective. Rather, it is more parsimonious to suggest that the developmental system for raising human beings has eroded, contributing to the distressed and dysregulated adults that populate and ~~construct~~ the ongoing destructiveness of the civilized world (more later; Narvaez 2014). With Foot's framework and these amendments to be integrated, we can then apply her categories before approaching human phronesis.

1.1 The Nature of the Human Organism and Its Development

What is the natural description or natural history of a human being? One cannot find this in the slice of WEIRD societies (Western, Educated, Industrialized, Rich, Democratic; Henrich, Heine and Norenzayan 2010) that are typically studied; nor can we find this description in civilization generally, which represents only a segment of human individuals living in the last 1% of human genus existence (about the last 10,000 years). Instead, it makes sense to examine those that represent the majority of human existence, nomadic foragers or small-band hunter-gatherers (SBHG), who live in the kind of society in which the human genus spent 99% of its life on the planet and who still exist today (Lee and Daly 2005).

We note then that a species-typical human life, commonly noted among extant SBHG, has the following characteristics. Individuals live in bands of 5–50 people of multiple ages, have few possessions, consume foods as they collect them, are fiercely egalitarian and peaceable, and spend most time in enjoyable social leisure (Boehm 1999; Fry 2006; Lee and Daly 2005; Sahlins 1968). Adult members of these communities tend to be generous, calm, highly communal, and highly autonomous (e.g., Gowdy 1998; Ingold 2005; Narvaez 2013). They are not "tribal," meaning outgroup suspicious (Fry 2013). Contributing factors to these outcomes likely include the lifestyle of egalitarianism, the constancy of a multiage, supportive social life, which most importantly includes humanity's evolved nest for the young (more later).

1.2 Qualities Needed to Lead a Species-Typical Human Life

Species-typical development for any animal is associated with well-functioning self-regulatory systems, from immune system to stress response, to intelligence and a cooperative nature, all of which are needed to survive and thrive, let alone reproduce with conspecifics and find one's way in the world. Such regulatory functions undergird human moral capacities generally.

Triune ethics metatheory (TEM, Narvaez 2008, 2014, 2016) identifies layers of evolved brain–body capacities related to human flourishing, including moral development and wisdom, that are initially shaped by early life experience. The most anciently evolved parts of the brain include innate survival systems used to promote survival, such as the emotion systems of fear, rage, panic, and the major stress response (MacLean 1973, 1990; Panksepp 1998; Sapolsky 2004). These systems are powerful factors in what leads individuals and groups to act in self-protective, other-destructive ways (ibid). According to TEM, when these systems guide behavior, trumping other values, they represent a self-protectionist ethic. In humans, neocortical pathways, scheduled to grow postnatally with supportive care, become able to regulate these primitive

systems (Schore 2019). Second, also scheduled to grow postnatally are the multilayered skills and motivations for love and play, emotion systems attributed primarily to mammalian species (Panksepp 1998; Stern 2010). Empathic flexible relational attunement, fundamental to living a moral life, is rooted in these systems and represents an engagement ethic (Narvaez 2014). These capacities are highly linked to the initial development of the right hemisphere that is scheduled to grow more rapidly in the first years of life (Narvaez 2014; Schore 2019). Darwin (1871) identified human capacities accrued from across the tree of life – for example, social pleasure, empathy, and concern for the opinion of others – that form humanity's "moral sense." Moral sense capacities largely fit in this second strata of development that requires supportive postnatal care (Narvaez 2017, 2018b). Third, the more sophisticated imaginative and abstracting capacities of the neocortex, a third brain strata, are shaped by supportive experiences, taking three decades to ripen, barring trauma or damage (Narvaez 2014). The prefrontal cortex has a great deal to do with another aspect of Darwin's moral sense – the ability to form new habits to conform to society.

A species-*typical* human being, from all accounts, resides primarily in the love and play modes, rather than the fear, rage, or panic modes, and uses higher order thinking rooted in positive social emotions to imagine and cooperate with others (Liedloff 1977; Sorenson 1998; Wolff 2001; Young 2019). To be human is to be deeply capable of getting along skillfully and positively with other humans and with other than humans. Species-*a*typical human beings tend to live with forms of fear and rage (resentment, contempt), necessarily resorting routinely to more evolutionarily primitive forms of interaction such as dominance hierarchies, territoriality, routines, and rules, with a lack of ability to relationally attune to others as equals, making cooperation and compassionate morality more difficult (Narvaez 2008, 2014). Later I describe the evolved system of care for human children that fosters species-typical nature.

1.3 Capacities That Make Humans a Proper Member of the Species

Aristotle conceived the human telos as *eudamonia*, etymologically meaning well spirited or blessed, based in the activity of the soul in accordance with *arete* – virility, excellence, or virtue – in other words, a person "who fully realizes the potential of human nature"; for Aristotle, this means living an animal life of sensation and appetites but governed by a rational principle (the golden mean) (Callicott 2013: 254). What Aristotle hinted at but did not spell out is that appetites and senses are initially designed during early childhood, and that one's blessedness-eudaimonia and virility-excellence are set on their actualization pathway by childhood experience. Mencius (1998) too identified the importance of childhood experience but did not give specifics for growing his "sprouts" of virtue. What childhood

experiences are central? Like all animals, humanity developed a system to foster species-typical development (described in the next section). Specifically, humanity's developmental system evolved to optimize normal development for actualization of human nature, which over the lifetime encourages relational attunement and the use of abstracting capabilities in a communal fashion, spanning Aristotelian virtue.

But it is important to also point out that the SBHG, and those who live with similar habits, have more than Aristotelian virtue. They are also bonded to and cooperative with their landscapes; they feel integrated with the natural world (e.g., Cajete 2000; Deloria 2006; Descola 2013). They live as if all of nature is alive, sentient, and animate (Harvey 2017). Senses are tuned to receiving the personhood of the other than human. Appetites are controlled in relation to sustaining the biocommunity's well-being. Rationality is rooted in living on the earth, according to its laws, not against them. To be fully human in a species-typical manner means to be a communal, earth-respecting creature. In contrast, the species-atypical human beings common today demonstrate a lack of fittedness with the local landscape and often display a mindless or even destructive attitude toward ~~nature.~~

I now address the two gaps, biosocial ecology and transrationality, in more detail. Both influence phronesis.

2 Bottom Gap: The Biosocial Ecology of Phronesis Development

Western science has recently demonstrated mechanisms for what non-civilized societies implicitly understood: that children are humans in the making, that treatment in early life makes or breaks cooperative human nature (Sahlins 2008). We know now scientifically that early childhood experience influences everything, from neurobiology on up to virtue (Narvaez 2014; Narvaez, Panksepp et al. 2013). In other words, "first" and "second" nature are intertwined and can be separated only artificially (similar to studies only able to statistically – artificially – separate genetics and environment; Ho 2010).

Human beings are biosocial beings: Our biology is constructed by our social experience in early life and our subsequent sociality is highly affected by our biological capacities thereby shaped (Ingold 2013; Narvaez 2014). For example, Allan Schore (2019) describes how mother's attunement with her infant builds the child's mental health (represented by attachment, which is part of socially constructed interpersonal neurobiology):

> Secure attachment thus depends on the mother's psychobiological attunement not with the infant's cognition or behavior, but rather with the infant's dynamic alterations of autonomic arousal, the energetic dimension of the child's affective state. To enter into this rapid

> communication, the mother must resonate with the dynamic crescendos and decrescendos of the infant's bodily-based internal states of peripheral autonomic nervous system (ANS) arousal and central nervous system (CNS) arousal). This autonomic activity occurs at an unconscious level. . . . the psychobiologically attuned mother of the securely attached child not only minimizes the infant's negative states in comforting transactions but also maximizes his or her positive affective states in interactive play. Regulated and synchronized affective interactions with familiar, predictable primary caregiver create not only a sense of safety but also a positively charged curiosity, wonder, and surprise that fuels the burgeoning self's exploration of novel socioemotional and physical environments. This ability is a marker of adaptive infant mental health.
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> (p. 10)

Because of neonate immaturity and an evolutionary history as social mammals, mostly all human capacities evolved to be shaped by this kind of early care by mother, and soon thereafter by a band of adults who, also having supported mother and child prenatally, become allomothers (other nurturers) postnatally, provisioning the care and calories to grow humanity's large social brain (Hewlett and Lamb 2005; Hrdy 2009).

Among many inheritances, including genes, humanity evolved a species-specific community-based nest for the young that optimizes species-normal development (Konner 2005; Oyama, Griffiths and Gray 2001). Germ lines would die out without the sensitive care of a species' developmental system to foster its nature (Gottlieb 1998). In humans the developmental system shapes an intelligent healthy person who is cooperative "all the way down" to the functioning of the vagus nerve, stress response, and other physiological systems (Narvaez 2014; Porges 2011; Schore 2019). First called the "hunter-gatherer childhood model" (Konner 2005), our lab named it the *evolved developmental niche* (EDN) or *evolved nest* as we study its effects (e.g., Narvaez, Gleason et al. 2013; Narvaez, Wang et al. 2013). The EDN comprises the common characteristics of child raising documented around the world among SBHG. It includes soothing perinatal experiences, extensive on-request breastfeeding and affectionate touch, no coercion or punishment, multiple responsive caregivers and positive social support, and self-directed play in the natural world with multiaged playmates (Hewlett and Lamb 2005; Narvaez 2014). All these components are linked to child well-being and prosociality via neurobiological mechanisms co-constructed by the caregiving environment (e.g., Narvaez 2014; Narvaez, Panksepp et al. 2013). The evolved nest is what love looks like for a child; it is love in action. It is critical for species-typical ethogenesis (Narvaez 2018b).

Humans develop good bodies and brains with loving supportive care – nested, companionship care – that even helps shape moral personality (Kochanska 1994; Narvaez 2014). From all accounts, SBHG exhibit

secure attachment and good self-control and have deeply cooperative personalities (e.g., Narvaez 2013; Sorenson 1998). They display throughout life a nonverbal *communicative musicality* in coordinating action with others, a propensity that healthy babies demonstrate early on (Trevarthen and Delafield-Butt 2013). A nested experience helps prioritize flexible, attuned social relations, undergirded by capacities for self-regulation. Well-regulated neurobiological systems allow for smooth, cooperative interrelations (Carter and Porges 2013), and these contribute to the characteristics identified by Darwin (1871) as foundational to humanity's moral sense: social enjoyment rather than social irritability, concern for the opinion of others rather than disregard of others, desire to conform to rather than oppose social norms, habit development for social fitting in rather than impulsive reactivity. All of these conduce to social fittedness, a requisite for virtuous behavior according to Aristotle (Nussbaum 1988).

But the influence of evolved nested care is more than what the civilized consider social fittedness. It involves a sociosensual getting along with others, an embodied "felt" consciousness oriented to feeling good harmonizing with others in a selfless unity, enhancing community well-being (Sorenson 1998). This way of living in the world characterized what Sorenson called *preconquest consciousness*, found in all close-to-nature societies prior to contact with western *postconquest consciousness* in the last hundreds of years. Rooted in *feeling* and a liminal awareness of connection and wholeness of life, individuals and groups harmonize naturally with other than humans as part of the community. Participating in the fullness of life, human appetites, senses, and rationality are empathically embedded in the biocommunity. Children learn to feel and be attentive to the wholeness of the world. Practical wisdom in this case reflects an ongoing process, an intuitive pragmatism aimed at feeling and living with a living earth community (Cajete 2000; De Quincey 2005). And, because humans regularly make mistakes or get out of balance, communal healing practices are also routine (Katz, Biesele and St. Denis 1997).

3 Top Gap: Transpersonal Rationality

The top gap, transpersonal rationality, entails an intertwining of species-typical consciousness, thinking, and truth, whose nature reflects the quality of the biosocial ecology of development, all of which are critical for the application of practical wisdom.

Although there has been some discussion of an extended mind among western philosophers (e.g., Clark and Chalmers 1998), it is typically limited to informational devices rather than inclusive of a participatory consciousness embedded in a living world. The latter view, part of *preconquest* consciousness, matches better with what we have learned from quantum physics. Physicist David Bohm (1994), articulating the new physics of interconnection, described the universe as a dynamic holonomic implicate

order in which an explicate order, the concrete manifestation we call the physical universe, is enfolded. Bohm explains how quantum reality overturns the static dualistic, subject–object worldview. Instead of separable elements, the world is unbroken and in dynamic interactive flux. Participation is entwined with observation. These notions are apparent in eastern traditions where *wu*, non-being, no-knowledge, or wordless participation in nature, reflects approaches to life such as the Tao (Lao-tzu 1963). *Wu-wei*, unmotivated, spontaneous action through nonaction or unforced action, attends to the unfolding of life in the moment.

Bohm distinguished two kinds of thought. One form is *insight-intelligence*, an experiential awareness that arises from allowing the flow of shared space with others. Much like the aims of Socratic dialogue, insight-intelligence transcends individual emotions, beliefs, and will. This intersubjectivity is a co-creation of being through the interpenetration of various centers of subjectivity, a holistic and organic mutuality (De Quincey 2005). Insight-intelligence taps into transrational reality, the deeper consciousness within the implicate order (the unmanifest), what preconquest consciousness and *wu* appear to access routinely. In the industrialized, westernized world, this form of thought typically only comes to attention in sudden "eureka moments."

Bohm contends that we can mistakenly confuse the manifest for the whole, based on thought processes representative of the other form of thought he named, much more familiar to the industrialized, westernized world, and matching up largely with *postconquest* consciousness. It consists of static habits of mind, a fossilized consciousness, such as beliefs, which reside within an individual's brain and can be measured. These form part of the *explicate* order, a small concrete manifestation of a complex holonomic universe. According to Bohm, only the transrational form of thought is orderly and creative whereas thought-in-the-mind can get stuck in its own feedback loops, even culturally shared loops, losing connection with the deeper consciousness. In Taoist terms, *wu-wei* is missing.

Transrationality, generally, characterizes preconquest consciousness and is apparent still in noncivilized human societies (Descola 2013). Transrationality refers to "objective nonpersonal, nonrational phenomena occurring in the natural universe, information and experience that does not readily fit into standard cause and effect logical structure" (Bernstein 2005: xv). Much like Bohm's description of a deeper consciousness, eastern philosophical views and ancient western views developed practices that emphasize genuine living as experiencing being "lived through" (e.g., Pearce 1981; Rohr 2015). Embracing the flow of life energy enlivens a process of being (*wu*) and of becoming wise (Bourgeault 2003). The Axial sages emphasized the need to let go of the ego so that life's energy (*qi* in Chinese thought) could flow freely (Ivanhoe 2017). Because everything is connected, life energy will balance when we are in the right state of being. Instead of embracing dogma or logical formulations, conclusions,

or ideas, life is an interpersonal dance, sometimes described as love: "Ideas inform us, but love forms us – in an intrinsic and lasting way" (Rohr 2015: 104). To be thus connected to transrationality is to become human, to change and find the indwelling of transcendent love and support. The spirit of transformative love, as opposed to ego-driven action, can be seen in actions that are patient, kind, generous, gentle, joyful, and self-controlled (as described in Galatians 5:22).

Experiences of becoming, how we are nurtured, influence forms of perceiving and "knowing." Truth is learned tacitly from embodied experience, without effort, building the implicit mind's associations, interpersonal attachment style, and worldview, so it matters what experiences one has (Narvaez 2014; Polanyi 1958). Truth for preconquest consciousness involves intuitive knowing and the honest sharing of feelings with interests and desires transparent to others (Sorenson 1998):

> feeling and awareness are focused on at-the-moment, point-blank sensory experience – as if the nub of life lay within that complex flux of collective sentient immediacy. Into that flux individuals thrust their inner thoughts and aspirations for all to see, appreciate and relate to. This unabashed open honesty is the foundation on which their highly honed integrative empathy and rapport become possible. (pp. 82–83)

There is no deception but a full exposure of the self, similar to what Cooper, in his book *A Time Before Deception* (1998), learned from his interviews and observation of multiple North American Native American societies: Lying was considered a sign of insanity in that "a person who does not speak truth must not know reality, and thus is to be pitied" (p. 3). In contrast and more familiar to readers, postconquest truth addresses instrumental knowing, focused on extracted facts and abstract propositions, often ignoring or dissembling feeling. Sorenson noted in his decades of observing preconquest societies that contact with postconquest people could be disastrous. He noted that those who are educated in western ways adopt logico-mathematical reasoning routinely "automatically and without awareness" and thereby "paralyze[d] the cognitive processes of the liminally focused" (Sorenson 1998: 105). Because postconquest consciousness is governed by intellect and dialectical reasoning, by its nature it suppresses, "conquers," or invalidates the Indigenous, feeling-oriented, consciousness (De Quincey 2005; Sorenson 1998).

Vastly different perceptions are represented in the preconquest or Indigenous (First Nation) consciousness (a.k.a. Indigenous worldview; Four Arrows and Narvaez 2015; Redfield 1956). Its receptive openness embraces more than human-only interactions, perceiving sentience all around. Indigenous animism does not so much speak about harmony with nature as being *alive to* nature as a community of persons deserving

respect (Harvey 2013). One is perceptive of all relationships in one's vicinity, those whose lives one's own life "touches," from human persons to animal persons, plant persons, river persons, and so forth (Harvey 2017). It is a kin-centric orientation of practical cooperation, rather than an abstracted ethic (Martinez, Salmon and Nelson 2008).

Practical wisdom from this perspective displays an interconnected, nonegoic stance attentive to mindset and manner of being. Attending to relationships means attending to virtue, which means attending to manner – of respect and acknowledgement. Among First Nation peoples, communities purposefully engage in practices that emphasize connection to "all our relations" including the other-than-human practices such as greetings and gratitude prayers, storytelling (only in winter among Native Americans), trance dancing, and vision quests (Katz et al. 1997; Narvaez, Four Arrows, Halton, Collier and Enderle 2019). The principles of the Honorable Harvest guide one to ask permission to take a plant or animal life, and take "no" for an answer (Kimmerer 2013).

Nonegoic action embraces inclusivity, aware that all is sacred and interconnected. One must not let one's ego get carried away with puffiness or umbrage (group teasing mitigates this possibility; Lee 1979). Human humility forms a key virtue for interacting with all relations (Cajete 2000; Narvaez 2019). Humans consider themselves younger members of the biocommunity who have much to learn from the rest – whether tree beings, winds, or specific animal beings of the local landscape. To act otherwise is to be imprudent.

Practical wisdom is guided not only by meaning-making narratives and root metaphors but also by what is believed to be rational. According to William James (1912), rationality has at least four dimensions: moral, aesthetic, intellectual, and practical. To judge rationally means to maximize all four dimensions simultaneously. Indigenous sustainable wisdom aligns with this view, adding in a transrational or spiritual dimension. According to Native American traditions, to live fully and well means to cultivate these dimensions and their interdependence throughout one's life (Cajete 2000; Narvaez et al. 2019).

4 The Current Species-Atypicality

As many have pointed out (e.g., Bohm 1994; MacIntyre 1981), we can be imprisoned by the habits of our upbringing. Experience in early life and the shaping of neurobiological systems undergird implicit worldview – for example, Is the world a supportive safe place for me to grow and be myself (Tomkins 1965)? Worldview becomes engrained in functions of attachment, self-regulatory systems, and prosociality which are built by a responsive childhood (e.g., Kochanska 1994). Early life can set up a disposition of openheartedness or of bracing toward others. For example, a person with secure attachment will trust others and give them the benefit of the doubt,

employ flexible social skills, and display a more positive view of human nature (Tomkins 1965). In contrast, unsupportive care (e.g., patterns of being left alone in distress, physical isolation) or later trauma is associated with an anxious self that braces itself against others. A person with insecure attachment will be distant or manipulative, having learned not to trust but to consider self or others as unworthy, displaying limited social attunement skills (Crittenden 1995). In other words, if early experience toxically stresses a child, she can become dispositionally threat-reactive as an adult: The stress response activates easily, undermining higher order capacities. When the major stress response activates from perceived threat, blood flow shifts away from the neocortex toward peripheral muscles, preparing us for flight or fight if needed, at the same time undermining our ability to think (Arnsten 2009; Sapolsky 2004). Perception changes. For example, vision expands under calm and narrows under threat (Rowe, Hirsh and Anderson 2007; Schmitz, De Rosa and Anderson 2009). We become more or less attentive to particular relational "facts," based, for example, on attachment style. The state of our biochemistry can push our thought processes in one direction or another. In this way thought processes are deeply connected to the state of a person's body, even for people largely disconnected from conscious awareness of their body wisdom and intuition. Habitual self-protective thought processes, perception, and attention are fostered by early toxic stress. According to TEM (Narvaez 2008, 2014), this state represents a self-protectionist mindset. As Aristotle noted, ethical decisions depend on perception (Aristotle 1988, NE 2,8, 1109(b) 23).

Perception involves attention, schemas (conceptual structures) like internal working models of attachment, and various cognitive heuristics that can plague thinking like confirmatory bias. If we are not aware or careful, we can be caught in the closed loop of neurobiological states activating conceptual schemas that seem real but are illusory, such as dualism and outgroup inferiority.[2] Scholarship can be marinated in misinformation, with creative energies "diverted to support what is fixed and rigid" and

> if there are rigid ideas and assumptions in the tacit infrastructure of consciousness, the net result is not only a restriction on creativity, which operates close to the "source" of the generative order, but also a positive presence of energy that is directed toward general destructiveness.
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> (Bohm and Peat 2000: 294, 269)

A general worldview, of safety or threat, can be carried into situations, shaping relational affordances and affecting flexible socioemotional intelligence, pressing the individual either toward relational attunement and connection or toward self-protection.

Civilization has pressed its people into undercaring for children, fostering deep insecurity in the child that influences capacities on all levels,

including nature connection (Narvaez 2014). Civilization has increasingly isolated itself or destroyed wild nature. If a child, then adult, is *not* regularly immersed in a supportive social world and a complex natural world, the abilities to feel, perceive, respond, and intuit nature and others are diminished (Shepard 1998). In this way, species-atypical development may force *postconquest* consciousness on children by pulling them off their pathway for growing a psychic awareness of and immersion in spirit, *wu*. Spirituality, awareness of the unmanifest, of the greater-than-self Oneness, relies on right hemisphere functioning, capacities grounded in supportive early life experience that must be maintained throughout life (Narvaez 2014; Schore 2001).

Phronesis involves paying attention to the right things. When we get stuck in a closed loop we then are unable to receive insight, the active subtle energy in the universe of a different order from the explicate order, our material world. Approaching situations with focused calculative thinking, representative of postconquest consciousness, separates and categorizes complex dynamic living systems, misleading perception and confusing understanding. Closed-loop thought is so insidious it has largely narrowed down reality for much of western culture and scholarship to materialism, mechanism, and measurement (De Quincey 2005). This postconquest consciousness is what many philosophers and psychologists study and think is representative of human nature. So it could be argued that most western scholarship and view of the world is stuck in feedback loops of misunderstanding, misleading, and misdirecting our actions. For example, C.A. (Chet) Bowers (2003) describes how the leaders in the industrialized world take for granted several root metaphors that act like a straitjacket on thought and action: individualism, self-interest, dualism(s), linear progress, centrality and superiority of human beings, positivism (the need for an experiment to know anything), and belief in an insensate natural world. Metaphysical understanding, like these, forms the framing for moral action and practical wisdom. For example, take the assumptions about self-interest. If you presume it is a dog eat dog world, then it would be practically wise to get all you can. From a Kantian perspective it would be your duty to promote your genes. From a consequentialist perspective that is best too – maximize your genes' interests. At the societal level, it seems good to set up systems to support the strong over the weak, and institutions that concretize these efforts (e.g., World Trade Organization, Wallach and Woodall 2004). Among traditional societies, immersed in a preconquest consciousness, self-interest in an adult would be considered a sign of immorality or insanity (Sahlins 2008).

5 Phronesis and the Mismatch

Clearly, there is a mismatch between species-typical goodness and contemporary human beings, between evolved nest provision and what passes for child raising today. It is clear that many human beings, particularly

many in high-income nations, do not display the species-typical characteristics described (emphasizing instead individualism, tribalism, and/or anthropocentrism), nor have been provided or experienced the typical pathway to becoming a fully capacious specimen. Unnested individuals instead have emphasized intellectual abstraction – relationally and emotionally detached imagination (Narvaez 2014) – having been forcefully divorced from their embodied intuition. Postconquest people have suffered a great loss of humanity:

> The loss of relationship, with its consequent alienation, is a kind of supreme evil in the universe. In the religious world this loss was traditionally understood as an ultimate mystery. To be locked up in a private world, to be cut off from intimacy with other beings, to be incapable of entering into the joy of mutual presence – such conditions were taken as the essence of damnation.
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> (Swimme and Berry 1992: 78)

Because of civilized persons' species-atypical upbringing (coercion, isolation, disconnection), it is understandable that those writing about ethics in the last few centuries would consider natural ["first"] human nature to be immoral and in need of coercive education and sanctions (e.g., Hobbes 1651/2010; Pinker 2011). It is evident that the "first nature" of unnested humans tends to be relatively dysregulated in terms of self-regulatory and physiological well-being (e.g., immune, stress response, endocrine systems such as oxytocin), systems scheduled to be shaped well by supportive early life care. Along with ill-being – evident particularly in the USA – social fittedness is undermined, misdirecting moral functioning toward self-protection and impairing practical wisdom, especially from a planetary perspective (see Narvaez 2014, 2017, 2018a).

Western enlightenment culture typically assumes reality to be rooted in conscious processing of materialistic, measurable entities, a left-brain-dominant orientation that also emphasizes a controlling ego over everything else (McGilchrist 2009). It becomes "rational" to spend most time in the calculating-categorizing mindset, ignoring uniqueness of each moment and nature's complexity (Myers 1991). It becomes routine to feel superior to and to justify dominance over the ~~more~~ than human (Merchant 2003). Learning through mimesis and imitation, we follow what we see others do, hence the power of advertising, movies, and social media. When we see others treat others cruelly, we learn to do the same. When adults and peers fear nature, destroy it or treat it as if inert, we learn to do the same. The biodiversity apocalypse taking place now is not so disturbing if you have been trained over and over to perceive most insects and animals as "pests" deserving of extermination rather than treated as partners in the ecosystem. Pouring toxins on gardens and yards seems reasonable in an "us-against-nature" worldview. Individuals learn

to brace themselves against the other, both human and other than human. The minority of humans benefitting from the widespread destruction are often unaware of how damaging their lifestyles are, often believing they are entitled to benefit from what they consider "human progress," despite widespread collateral damage now on a planetary scale.

For a modern human, practical wisdom may be anthropocentric because the nested bonding-to-nature capabilities are underdeveloped. Yet, even the type of anthropocentrism displayed has been narrowed. Unnested modern people perceive the world through a relatively narrow lens in comparison to our recent ancestors. As economist Max-Neef (1991) noted, modern, WEIRD societies have had a tendency to focus on maintaining bank accounts and material wealth, at the expense of other forms of poverty such as (a) health and safety protection, (b) affection and bonding, (c) understanding (dependent on education and media), (d) participation in societal decision-making, (e) identity and self-actualization (derailed by imposed values, exile, etc.).[3] Reviews of empirical psychological studies have identified these same needs (Fiske 2003; Narvaez 2018a). The focus of modern institutions on economic wealth has clearly come at the expense of ecological and social wealth because everything is turned into a commodity (Korten 2015). Max-Neef pointed out that "each poverty generates pathologies" (1991: 19). Importantly, modern societies, like the USA, tend to focus problem-solving on the *symptoms* of missing basic needs rather than meeting the needs whose neglect caused the problems in the first place. Using closed-loop thought, adopting implicitly the root metaphors mentioned earlier, theories are developed to address the symptoms of postconquest life.

Scholarship often ignores the baselines and processes for human becoming and being, narrowing evolutionary inheritance to genes rather than a host of extra-genetic inheritances (Narvaez and Witherington 2018; Oyama et al. 2001). For example, some evolutionary psychologists assume all characteristics of contemporary subjects are evolutionarily adaptive (rather than *functionally* adaptive for the individual to survive a poor environment; Narvaez, Gettler, Braungart-Rieker, Miller-Graff and Hastings 2016) and try to figure out why natural selection promoted them (e.g., rape, child maltreatment; Lewis, Al-Shawaf, Conroy-Beam, Asao and Buss 2017). Without awareness of humanity's epigenetic malleability postnatally, nor how embodiment shapes worldview and thinking capacities, nor the importance of early experience to shape both body and mind, nor the normality of species-typical transrationality, practical wisdom will be aberrant.

6 Integration of Indigenous Consciousness

Like Kant we can infer from facts to values using hypotheticals (both problematic and assertorical types work here). We can infer that if we want species-typical human beings, we must provide the species-typical

manner of bringing about their becoming, the evolved nest; or in mirror form, if we want to avoid species-atypical beings (and their destructive ways), we need to avoid taking the risks of not providing the evolved nest. If we want species-typical practical wisdom for living on a living earth, we need to raise and maintain species-typical capacities.

Assuming the necessity of species-typical practical wisdom, in face of ecological disaster, can civilization shift its consciousness? Would it be possible to integrate Indigenous consciousness? Science itself has been shifting worldview, breaking down modern philosophy's assumptions which are often contrary to human experience: "(i) a mechanistic, materialistic, nonanimistic doctrine of nature, (ii) a sensationist doctrine of perception, and (iii) a denial that divinity is naturally present in the world" (Griffin 1993: 199). Physics and biology are providing evidence of Whiteheadian–Hartshonean descriptions of panexperientialism: that the basic unit-events of the world have something analogous to what humans call desire, feeling, purpose, and memory, and that each unit-event has some self-organizing capacity and creative influence on the future, but also carrying past "habits" into the future in a social process of becoming (Griffin 1993).[4] Among the populace, extra-sensory transrational experiences appear to be on the rise, or at least there is greater acknowledgement (Bernstein 2005). Without the biosocial ecology of the nest, such experiences are often frightening, misinterpreted, or dismissed.

To find integrative ways of living that support species-typical development, civilized humanity must move back "inside nature" to enhance and balance local landscapes and ecologies. To become fully human, we must restore fundamentals for fostering human potential: humanity's evolved nest and companionship lifestyles; well-being of families and children as central concerns; cultivation of adults who grow into wise elders capable of mentoring others; rituals and practices that maintain nature and transrational connection. As western consciousness shifts, First Nation peoples are sharing their longstanding wisdom to assist in widespread transformation (Narvaez et al. 2019). One Indigenous practice inspired David Bohm's recommendation of using human circle dialogue to promote insight-intelligence (Factor 1985): a group dialogue with no advance agenda, perhaps using a talking stick, fostering open, receptive attention that is not goal driven (Ross 2014). The group may then notice a flow of meaning, a collective movement of thought among the members, not attributable to any particular member, but an emergent wisdom providing needed guidance – a communal practical wisdom.

7 Conclusion

The argument here encompassed the following. For practical wisdom to be addressed, one must first understand what kind of creature human beings are and how they become. A natural history account of human

beings and their development suggests that humans are biosocial beings and a special kind of social mammal whose sociality was fundamental to ancestral adaptation. Importantly, mammalian sociality, but especially human sociality, is fostered by a particular developmental system, one of many inheritances beyond genes identified by evolutionary systems theory. The human developmental system or evolved nest is particularly intensive. Key outcomes of the niche include self-regulation, social bonding, nature connection, and humility, all of which contribute to the earth-cooperative nature of species-typical human beings. These factors influence what we consider practical wisdom. But we have slipped in our understanding of human beings and the development of human nature and what practical wisdom entails. Contemporary human behavior misleads on what species-typical human nature looks like and how children are raised (with boys especially derailed from species-typical development because of less built-in resiliency, Schore 2017).

Theorizing about phronesis should follow a principle of species-typicality, not that of civilized human beings, who are often raised in species-atypical ways. Species-typicality involves both provision of humanity's evolved developmental niche and fostering capacities for transrationality. Theorizing should also follow a principle of ecological realism: Human beings are earth creatures who rely on earth's bounty and well-being for existence.

If we can restore our Indigenous consciousness, which requires the evolved nest and the fostering of our species-typical neurobiology and sociality, we can relearn the particularities of our local landscapes and pragmatically, relationally, collaborate with them. Keith Basso (1996) noted in his study of White Mountain Western Apaches that "wisdom sits in places." Practical wisdom, too, sits, or better, dances in places. Practical wisdom dances where nurtured, where earth-loving creatures live cooperatively with all their relations, both human and nonhuman kin.

Notes

1. The author appreciates the support of Templeton Religion Trust through the project "Self, Virtue and Public Life."
2. The USA in 2020 is a contemporary demonstration of a society that undercares for its children, offers limited support to its people, and whose citizens show high levels of self-centeredness, distrust, and vindictiveness (Derber 2013).
3. It must be noted that societies vary in practices. Some are better at attending to more of these areas and some are less (e.g., USA).
4. Panexperientialism solves the mind–body problem by acknowledging that other than human entities are only different in degree, not kind, from human beings. Evolution describes then "the emergence of species of mind, not of mind as such" (Hartshorne 1962: 125).

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