The Paleolithic Imagination:
Nature, Science, and Race in Anthropocene Health and Fitness

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Abstract
The widespread uptake of the Anthropocene concept over the past two decades has seen a concomitant rise in cultural forms that trade on nostalgia for Paleolithic life. Mud running, CrossFit, and the Paleo diet exemplify this trend, with the Paleolithic hunter-gatherer at the center of their popular prescriptions for healthy living. In this article we identify these practices as embodying the anxieties of the Anthropocene as well as its historical and racial elisions. By focusing on the oblique and subtle racializations of Anthropocene health and fitness cultures, we contribute to understandings of the cultural significance of the human body in the Anthropocene and the relationship between the biopolitics of health and geological life, arguing that the body is a key site through which the tensions and inequalities of the Anthropocene are played out. And by unraveling how the Paleolithic imagination is rooted in a distinctly capitalist, Euro-American attitude to the body in nature, we show the Anthropocene to be defined by uneven distributions of health as self-optimization, and health as environmental risk. The Paleolithic imagination demonstrates the tangled politics of race, science, and nature in the twenty-first century, in which global ecological instability, the biopolitics of health, the shadows of colonialism, and consumer capitalism converge.

Anthropocene Fitness Health Paleolithic Race

Highlights

- Analyzes mud running, CrossFit, and the Paleo diet as geohistorically specific body cultures of the Anthropocene
- Develops theoretical connections between evolutionary nostalgia and critiques of the Anthropocene
- Theorizes the complex positioning of the human body in Anthropocene discourse
- Contributes to decolonizing the Anthropocene by illustrating the coloniality and whiteness of some of its foremost cultural expressions

Introduction

Look for the avatars of North American fitness culture in the early twenty-first century and, among the expected array of chiseled bodies striking gender normative poses, the "caveman" athlete stands out among the crowd. This is the "hunter-gatherer" cast as a paragon of physical fitness: rugged from corporate wilderness adventures, with muscles forged by heavy weights and "functional" exercise, and fueled by a diet that approximates the Paleolithic past for optimal modern day living. In hand, imagine not club or bone but kettlebell or smoothie. From popular culture to philosophy, the caveman has long taken up representational space in Euro-American consciousness. Perhaps most famously in scholarly circles, the "noble savage" was venerated by Enlightenment philosophers such as Jean-Jacques Rousseau for his moral innocence and proximity to a virtuous "state of nature," against which the inequalities and brutalities of eighteenth-century Europe were juxtaposed. The racial and colonial overtones of the "noble savage" have since been widely rebuked (Ellingson 2001). The same scrutiny has not yet been afforded to the caveman athlete, whose corporeal virtues are also held up as evidence of the primacy of the premodern past against the decadence of modern life. Whereas in Rousseau the "noble savage" was imagined only for hypothetical comparison between premodern and modern societies, the caveman athlete is an increasingly prominent cultural figure to be *emulated* by health and fitness enthusiasts in the present. More than a representation of the past, his presence tells us that something of Paleolithic life can be restored through ascetic bodily regimes of exercise, adventure, and consumption.

How has the caveman become an icon of contemporary North American health and fitness? Why has the mimicking of Paleolithic life through work on the body become so popular in the past decade or so? This article seeks answers to these questions in mud running, CrossFit, and the Paleo diet, health and fitness cultures which position the body as both a proxy for ancient nature and the means for enacting its restoration. *Mud running* trades on the material and symbolic capacity of mud to awaken long-dormant instincts in the body. Set in picturesque landscapes, courses such as Tough Mudder and Spartan Race see paying participants haul each other over walls, shuffle through streams, and submerge in icy receptacles, all the while becoming caked in the Earth. *CrossFit* is distinguished from typical gym activities by its emphasis on "functional fitness", collectivity, and high-intensity movements with one's bodyweight and other "heavy things." It is widely posited as an antidote to specialized fitness pursuits and physically atrophying post-industrial labor, as well as a way to connect with one's "primal" self. And the *Paleo diet* advocates purifying the body of agricultural foods like grains and dairy, so that practitioners may align their eating with the presumed diets of Paleolithic hunter-gatherers, reunite their flesh with nature, and evade what movement founder Loren Cordain (2002: 77) calls "diseases of civilization." While each have been easily dismissed as fads or sites of conspicuous consumption for urban corporate types, following their shared invocations of Paleolithic bodies and societies impels a more critical, expansive analysis. In what follows, we argue that their collective conjuring of the Paleolithic imagination demonstrates the tangled politics of race, science, and nature in the twenty-first century, in which global ecological instability, the biopolitics of health, the shadows of colonialism, and consumer capitalism converge.

Towards explaining their surge in popularity, the concomitant rise of popular cultures of environmentalism synonymous with the Anthropocene provides the beginnings of an answer. It is no coincidence that mud running, CrossFit and the Paleo diet have taken off at an historical moment when questions of what it means to be human carry significant cultural and economic appeal (Braidotti, 2013), with movies, novels, and consumer experiences meeting the uncertainties of the present with an impulse to "get back" to prehistoric nature. Much like the Anthropocene concept itself, mud running, CrossFit and the Paleo diet appeal to post-apocalyptic survivalism, scientific discourses of variable rigor about prehistoric

bodies and societies, and regimes of (physical) mastery to project a coherent sense of human agency in times of ecological turbulence. Theirs is a critique that aggregates atomized social lives, technological reliance, disconnection from the elements, and the constricted bodily comportment of post-industrial labor into a totalizing narrative of *species* decline.

More than just sweeping social criticism, however, there is something about the active bodily intervention in history promoted in these cultures that resonates with the Anthropocene, both its claims and its elisions, and therefore invites analysis of how the Anthropocene is corporealized in contemporary health and fitness. A significant part of what distinguishes the cultural forms we are analyzing is their focalization of *work on the body* to realize the regressive ambition expressed in other forms of Anthropocene culture. Some social science and humanities work on the Anthropocene has addressed the human body, for example as so many "hydrocarbon derivates" that become geological (MacKenzie, 2014), and as site of techno-scientific solutions to global environmental problems (Sexton, 2018). These insights dovetail with emergent work on the interplay of bodies and worlds in the health sciences (Guthman and Mansfield, 2012; Senanyake and King, 2017). Yet the *cultural* significance of the human body in the Anthropocene, and the pursuit of health and fitness as a means through which the problems of the Anthropocene can be redressed, are comparatively underexplored. Having emerged together in the twenty-first century, mud running, CrossFit and the Paleo diet offer insights into the complex positioning of the human body in the Anthropocene. More specifically, they demonstrate the body to be a key stage for the expression of privileged Anthropocene subjectivities, in all of their imbrications with race, biopolitics, and consumerism. As such, they echo the historical and racial amnesia of the Anthropocene's invocation of a singularly culpable and vulnerable species (Moore, 2015; Yusoff, 2018; Davis et al, 2019; Karera, 2019) at the same time as endowing, with a posthuman kind of optimism, the sovereign athletic body with the agency to intervene in history. Key to understanding this is the conflation of geologic time with evolutionary time in Anthropocene popular culture (Heringman, 2014), which positions some bodies—and, it follows, some people—as active agents of history and others as inert matter, frozen in geological time to be emulated by modern-day health and fitness enthusiasts.

Our arguments about Paleolithic life becoming a model for contemporary health and fitness aficionados rest on a diverse archive of sources, including how-to-manuals, memoirs, manifestos, advertisements, popular books and published scientific research about mud running, CrossFit and the Paleo diet. Its contents are authored by entrepreneurs, health advocates, fitness enthusiasts, journalists, and exercise physiologists. A common theme is the invocation of science, particularly evolutionary and archeological science, to sing the health praises of the hunter-gatherer as physical specimen and social being. Much as the Anthropocene has itself become both a scientific and popular discourse that coheres around the question of what it means to be human—a question that carries racialized, colonial and class assumptions—so these fitness cultures look to the deep-time of Paleolithic life for solutions to the problems of digitized, consumer-centred societies. They appeal to scientific knowledge in offering sweeping critiques of these pressing 'real-world' problems, often bypassing social histories in the process and, tellingly, without acknowledging their own homologies with the consumer capitalist societies they critique. We draw inspiration from Donna Haraway's *Primate Visions* (1988) in exploring this knot of, on the one hand, science that legitimately critiques desk-bound lifestyles, industrial food systems, and climate crisis, and on the other, race science and colonial visions of human pre-history. One of her key insights is that both science and popular culture are storytelling practices, "intricately woven of fact and fiction" (1988:3). Note that this does not necessarily render the science upholding the Paleolithic icon fictive: Haraway is unwilling to jettison science even as she finds a range of inequalities perpetuated through scientific discourse. That said, in looking back to the deep-time of human ancestry as a wellspring of inspiration for mitigating Anthropocene problems, these fitness practices vary considerably in their appeals to scientific rigor.

Unraveling them is a way to broach the broad epistemic foundations of both nature and race in new forms of environmental awareness, and to distill their historical and geographical specificity.

Following a discussion of Anthropocene popular culture and ancestral health discourses, our analysis addresses each of our focal fitness cultures in turn. In the mud running discussion, we attend to the exaltation of a universal human athlete whose ancestry slips between the “caveman” and Western emblems of bodily excellence; with CrossFit we examine the influential thesis that there is a “mismatch” between the genetic inheritance of the athlete and our modern environment, which “functional” movements can undo; and finally, we look at the racialized underbelly of Paleo diet philosophy. By focusing on the oblique and subtle racializations of Anthropocene health and fitness cultures, we contribute to understandings of the cultural significance of the human body in the Anthropocene and the relationship between the biopolitics of health, geological life, and race and nature in the twenty-first century.

Anthropocene popular culture and ancestral health

Over the past two decades, the Anthropocene concept has expanded from a proposition about humanity’s effects on Earth systems (Crutzen and Stoemer, 2000) into a far-reaching discourse on nature-humanity relations. Notwithstanding the skepticism of some geologists towards its appeal in “pop culture” (Autin and Holbrook, 2012), cultural forms addressing or exemplifying the Anthropocene now abound. Think of ecotourism that responds to the “end of nature” by framing melting glaciers or shrinking biodiversity as something one must experience before their demise (Fletcher, 2018), or the boom in survivalist fiction and cinema in which climate emergencies catalyze dystopian futures (Clark, 2013; Whyte, 2018; Menga and Davies, 2019). Closer to home, think of the “Anthropocene Festivals” ongoing in universities, NGOs, and other institutions, that take play-based approaches to environmental governance (Ritts and Bakker, 2019). Each of these evince claims of anthropogenic epochal change reaching wide(r) audiences, a shift summarized by Jamie Lorimer (2012: 606) as the “public death of the modern understanding of Nature” as separate from Society.

Ensuing geological debates have been embraced and challenged by social scientists, humanities scholars, and artists, many of whom are practiced in analyzing attempts to historicize human agency in relation to nature, and have greeted the Anthropocene with a mix of cross-disciplinary enthusiasm and eyebrow-tilted fatigue. Leaning toward the latter, Robert MacFarlane (2016) quips that the Anthropocene has already become an “anthropomeme,” augmented by a plethora of concepts—Capitalocene (Moore, 2015), Plantationocene (Haraway et al, 2016), and Chthulucene (Haraway, 2016) among them—that shed light on its fault lines and erasures.

Two major points recur across this critical literature. The first turns on whether the Anthropocene adequately figures historical processes in its planet-altering time-scape. Accounts tend to identify either the agricultural revolution some 8,000 years ago (Gowdy and Krall, 2013), the Columbian “Exchange” (Lewis and Maslin, 2015), the Industrial Revolution, or the Great Acceleration and nuclear testing of the mid-twentieth century as the inception of the Anthropocene. In doing so, they risk a model of causality that fetishizes events and inventions. This critique points at an erasure of power relations, as well as of schools of thought that portended the problems named by the Anthropocene long before its twenty-first century coinage. For example, Richard Grusin (2017, p. viii) highlights the absence of feminist genealogies of thought in the delimiting of history “by the masculine authority of institutional scientific discourse that now seeks to name our current historical moment” (Grusin, 2017: viii). That feminists have been drawing attention to the violence engendered by masculinist human-environment interactions for quite some time (Plumwood, 2001)

eludes the authenticating story of the Anthropocene as a geological rift measurable *only* in the Earth's lithosphere.

Second, critics argue that in casting humanity as a single agent, the Anthropocene thesis positions all humans as equally responsible for and vulnerable to environmental catastrophe. Dipesh Chakrabarty (2009: 216) leads this critique of the homogenizing language of Anthropos, asking why the Anthropocene would be attributed to humanity-as-species "when the blame for the current crisis should be laid squarely at the door of the rich nations in the first place and of the richer classes in the poorer ones?" In making a similar case in relation to race, Kathryn Yusoff (2018: 11) points out the extinctions and devastations that have been deliberately overlooked in the making of capitalist modernity:

> If the Anthropocene proclaims a sudden concern with the exposures of environmental harm to white liberal communities, it does so in the wake of histories in which these harms have been knowingly exported to black and brown communities under the rubric of civilization, progress, modernization, and capitalism. The Anthropocene might seem to offer a dystopic future that laments the end of the world, but imperialism and ongoing (settler) colonialisms have been ending worlds for as long as they have been in existence.

Linking the body to geology, Yusoff argues that the line that marks human materiality off from inhuman materiality has enabled the extraction "of properties and personhood" (2018: 11) and is fundamentally "what operationalizes race" (15). So much for the promise of "becoming post-racial through Anthropocene speciation" (2018: 14): our geological age is defined by unequal exposure to environmental harm. Just how that speciation occurs, and the specific colonial forms that make it possible, however, must be explored with greater historical and geographical precision.

These critiques of the Anthropocene are extensions of the critique of humanism, an amorphous school of thought that hierarchically distinguishes humans from the rest of what gets called nature (Anderson, 2007; Braidotti, 2013). In a certain sense, Anthropocene culture can be understood as a resurgent humanism, one that repurposes questions of what it means to be human in expansive timescales, both prehistoric and posthuman. Reaching forward to dystopian futures, apocalypse imaginaries have been prominent in popular culture for several decades. Nigel Clark (2017) and Rebeckah Sheldon (2016), for example, have each shown the dystopian future in which human fertility is obliterated by environmental crisis to be a central cultural form of our time. Movies, television, and literature increasingly turn to futures of widespread extinction and chemical toxicity, ecosystem destruction, and social upheaval in their plots. Likewise, much of Anthropocene popular culture reaches back to a deep human past. Building on an intellectual tradition of making claims about civilization on the back of a presumed "fall" from the "innocence" of hunter-gatherer societies synonymous with Rousseau (Graeber and Wengrow 2018), such nostalgia utilizes the "posited authenticity of a past" to "denounce an inauthentic present", in Johannes Fabian's (1983:11) prescient words.

Noah Heringman (2014: 148) argues that it is human evolution, not stratigraphy, which takes center stage in Anthropocene popular culture, and on that stage stands the aspirational figure of the Paleolithic hunter-gatherer: "The Anthropocene abounds in stories about the Pleistocene, which was adjusted in 2009 to coincide with the Paleolithic – early hominin time as defined by archaeology." Heringman's focus is popular science, consumer culture, and art, which "continues to play a major role in these stories of human origins as a kind of text that enable the retrieval of a deep past"; others have unpacked the imbrication of evolutionary theory with Anthropocene fiction (Trexler, 2015). Part and parcel of the

Anthropocene, it seems, is wanting to “hear that we [humans] are players in evolutionary time” (Heringman 2014: 143).

Such scriptings of humanity—the dystopian future, and the Paleolithic past—recapitulate the colonial amnesia of the Anthropocene. Apocalyptic inaugurations of the end of the world neglect entirely the pasts and presents of colonial violence of world-ending proportions (Whyte, 2018), and, as we shall see, evolutionary wistfulness negates both history and power *since* the Paleolithic era, even as it attributes enormous power to individual human capacity to intervene in history.

This desire for agency amid the turbulence of the Anthropocene is key to understanding the appeal of Paleo-inspired health and fitness regimes, and to understanding the broader role of the *bios* (as lived human embodiment) within the *geos* (of the Anthropocene). Mud running, CrossFit, and the Paleo diet are clearly part of the neoliberal governmentality of the body, which responsibilizes individuals for their health, which packages healthiness into all kinds of products and consumer experiences, and which pitches the capacity of individuals to embody fitness (through aesthetics and athletic performance) as a key source of social capital. This culture of self-optimization dovetails with the biopolitics of obesity, which “demonize[s] fatness under the aegis of ‘health,’ both of the self and the body politic” (Guthman, 2009: 1113), and sits within the context of unequal access to and quality of healthcare.

As such, much of the existing work on mud running, CrossFit, and the Paleo diet illustrates the centrality of neoliberalism to their ethos and the spatialization of their popularity along privileged axes of identity. Lamb and Hillman (2015: 83) argue that mud running obstacle courses “serve as a functional site that produces rhetorical proof of one’s ‘fitness’ to survive and succeed within the milieu of corporate capitalism.” Here, the course is an allegory for how participants would like to believe capitalism’s reward system works (see also Eren, 2017). Similarly, Gressier (2017) asserts that the Paleo diet is an individualist response to a food system that prioritizes profit over health, while CrossFit has been recurrently described as a fitness “cult” for its cachet among middle-class and elite office workers (Dawson, 2015; Heywood, 2016; James and Gill, 2017; Nash, 2018). Because it is understood as interchangeable with beauty, self-control, capability, and health, “fitness” is the ambiguous thing for which good neoliberal biopolitical subjects reach.

What this scholarship does not capture is that mud running, CrossFit and the Paleo diet trade on the turbulence of what it means to be human in the twenty-first century. Their invocations of Paleolithic nature and bodies are not incidental to branding strategies or neutral references to healthier bygone times, but expressions of an historical moment that is suffused with questions about the place of humanity within nature. And their approach to the body as porous and plastic exemplifies *post*human subject formation (Braidotti, 2019) vis-à-vis health, declaring a defiantly agentic body in the face of Anthropocene consternation.

Some scholars *have* argued that our focal body cultures are rooted in the Anthropocene. Chelsea Leiper (2019: 124) highlights the Paleo diet’s imperative to bring “nature back (in)to the body” through careful food choices. This, she argues, is much like the increasingly popular practice of ingesting nonhuman microorganisms as an effort to “rewild” the human body, an idea that comes from new conservation practices with the same name (Lorimer et al., 2015; Lorimer, 2017). “Rewilding” the body by avoiding modern agricultural foods utilizes the Paleolithic era as a benchmark for health, seeking to bring contemporary body ecologies in line with those of pre-Anthropocene ancestors. In a similar vein, Stephanie Wakefield (2018: 88) takes a hopeful view of CrossFit as “reclaim[ing] and redefin[ing] human agency in the Anthropocene.” She argues that the Anthropocene can be conceptualized in terms of a “front loop phase” and a “back loop phase,” with the former “marked by the rise and spread of the modern liberal subject,” and the latter involving “the claims to human mastery over the

world...being literally washed away by rising seas and unprecedentedly powerful storms" (2018: 81). It is in the "back loop," where Anthropocene life is "released and reorganized," that she argues that Crossfitters reshape body and mind.

Such interpretations rightly situate these new health movements as experimental responses to the Anthropocene—and as it happens, we do think the Anthropocene can be useful as a geohistorial proposition that brings together the natural sciences, social sciences, and the arts alike. Conversations between these worlds, as Anna Tsing (2019: 3) has asserted, are "essential to learning anything about what's going on in our planet these days." However, in casting the Anthropocene as the singular backdrop to the emergence of mud running, CrossFit, and the Paleo diet, they lose sight of strong historical roots in European colonial exploration and science, the nineteenth century wilderness movement, and twenty-first century militarism, as well as neoliberal capitalism. And in eschewing questions of power and identity, these studies risk reproducing the elisions of Anthropocene culture that we have been tracking. Laura Pulido's (2018) work on the spatial distribution of risk to environmental contaminants along lines of race and class in the Anthropocene is germane here; so too is critical work that shows the self-management of health in some places (in Nikolas Rose's [2007] terms, the "ethopolitical") to be internally related to the deployment of imperial power to manage environmental circulations "elsewhere" (Braun, 2007; Ahuja, 2016). Bodily experimentation in the Anthropocene must be seen as inextricable from a wider field of unequal risk to environmental uncertainty.

Elizabeth Povinelli (2017: 172) has argued that biopolitics is nested within a binary between life (bios) and nonlife (geos): "The claim that human life is (now) also geological life, and the deep worry that this 'also' entails the extinction of things animate (and the triumph of the inanimate), plays out precisely on the fault line…between life as biontological, resourceful, and self-starting sovereignty and the geological as unsovereign, boot-strapping-less nonlife" (see also Povinelli, 2016). Yet as attested by the respective gaps in existing literature on mud running, CrossFit, and the Paleo diet, the relationship between the biopolitics of health and geological life is yet to be unpacked. To this we ask: what role does the active human body play in the "geontological drama" that is the Anthropocene?

Our hypothesis returns us to the operationalization of race and coloniality in Anthropocene speciation via Bruce Braun's (2003: 176) contention that, while divestment from biological ideas of race has paved the way to decouple race from bodily nature, external nature remains a pivotal site for the making of racialized identities. The racialized identities we examine here are articulated *between* the external roiling nature of the Anthropocene and bodily nature; or rather, we explore the positioning of bodies within that nature. If, as Yusoff (2018: 14) argues, the key political border of the Anthropocene has been the "division of matter (corporeal and mineralogical) into active and inert"—with the inert serving as a site of extraction and repository of toxins, the active mapped onto privileged people —then the 'fit' and 'healthy' body serves as a site through which the division between the active and inert plays out in popular culture today. Anthropocene body cultures mark off the body as agentic matter from passive, timeless matter of nature and other bodies, inviting the individual to intervene in their own body as a means of intervening in history. The body, in other words, is key to the staging of Anthropocene subjecthood which, as we will now show, is placed and racialized.

"Be more human": evolutionary nostalgia, the white athlete template, and survivalist futurism in mud running

Soiled water ripples and foams, broken by the forehead of a woman adorned with a 'Reebok Spartan Race' bandana. Her face emerges smeared with mud and, after a deep exhalation, she regains momentum and continues her wade. Dangling ropes sway as she disappears from view, and the camera pans out to reveal a mass of runners in her wake. As they

stumble into the same muddy ditch, a question overlays the screen—"How far will you dig ... to find yourself?"—before Reebok's campaign slogan fades into view: "Be more human."

This advertisement's imperative to "be more human" is the heart of mud running, a range of obstacle course running events worth more than $360 million (Rodriguez, 2014), in which 7 million people have partaken in the past decade (Dern, 2018). Participants pay $50-150 to traverse a course comprising hikes, climbs, and various assaults on the senses, usually set in a rugged locale within a few hours of the cities where they live and work. The most popular are Spartan Race and Tough Mudder, though scores of kindred events have sought to rival their success. Mud runs bear the hallmarks of what Michael Atkinson (2011: 103) describes as the "modernist adventure race," in which nature forms the object to be surmounted by the triumphant athletic body. Yet, just as other "alternative" physical cultures like surfing and snowboarding express connections to wilderness (Le Breton, 2000; Atkinson, 2011), mud running immerses participants in the elements. This is most conspicuously *earth*—mud, after all, is a mixture of soil, silt, and clay with water, and hardens across geological time to cover the Earth's crust—and various obstacles ensure runners are covered in the eponymous substance (Weedon, 2015). But it is also fire and water: at the "Arctic Enema" challenge in Tough Mudder, for instance, participants submerge themselves in a 25-foot swimming hole kept frigid by the recursive addition of ice chunks, while at the conclusion of Spartan Race, participants jump over 1-2-foot-tall flames.

While these obstacles make for spectacular social media content for runners, they also embody a chief rationale for the activity: reconnecting the essential "caveman" or "human animal" to "the wild." For example, Tough Mudder's course designer Nolan Kombol argues that mud running can incarnate "caveman days" in the easy, lazy present:

> These days, everything we do is easier. We drive instead of walk; we take the escalator instead of the stairs; we wheel our luggage instead of carrying it. Gone is that time, such as back in the caveman days, where we used our bodies to do everything. Tough Mudder gets us back to that innate experience of getting outdoors, pushing ourselves to the limit, getting muddy, and having fun with friends (quoted in Magin, 2012).

Spartan Race trades on this same image of prehistoric humanity as retrievable through muddy obstacles. Founder Joe De Sena argues that

> [T]he human animal is meant to run, jump, climb, hike, get dirty, and live in the wild. All people share these innate skills, and every human animal is capable of experiencing the thrill of unleashing long-dormant instincts (De Sena and Weinberg, 2012, p. 13).

Elsewhere, De Sena invokes the body as a receptacle of evolutionary time in arguing that obstacle courses are a:

> "HUMAN sport, very accessible, and the movements are what we have done for 1 million years on earth. It's authentic. We are a race, we are athletic in nature. At the end of the day that appeals in a big way to our consumers — so much so they share it" (De Sena quoted in Rodriguez, 2014, p. 17).

Note here that human nature is at once essential to us all and an aspiration—something that, though lost in the present, can be reclaimed through ascetic, athletic endeavor. Who exactly, though, is the industry invoking when calling upon the human race?

The incitement to jump, crawl, climb, and sprint "through the mud instead of around it" (De Sena and Weinberg, 2012: 13) is first and foremost an appeal to mud running's target

demographic. Tough Mudder founder Will Dean has made no secret of pursuing "white-collar urban professionals," whose jobs in finance or other urban managerial sectors mean they are professionally successful, but might not otherwise get their hands dirty: "Finance people are in a weird juxtaposition ...they make 100 times more than their fathers, but their hands are soft. We designed Tough Mudder to fill that void" (quoted in Stein, 2012). Heeding his own Wall Street background, De Sena has similarly remarked that "when I was in finance, everyone smoked cigars and had extravagant dinners ... but now, health and fitness are the new social status symbols" (quoted in Stein, 2012). He regularly links mud running's ethic of "getting your hands dirty" to high achievement in the boardroom; in a subscriber newsletter, he asserts that "Entrepreneurs should never be afraid to get their hands dirty. When we see red, we attack and we do whatever needs to be done." Mud running entrepreneurs appeal to urban professionals by promising the conquering of and communion with nature as an antidote to modern office abundance and sterility, as well as an avenue for enhancing status within urban corporate social worlds. Reflecting the entwined histories of evolutionary theory and capitalism found in social Darwinism, and the ease with which the Paleolithic imaginary sits with late capitalist values, the pursuit of entrepreneurial success and the reclamation of lost primordiality are frequently joined.

Such orientations to body and nature amongst middle-class urban professionals have a long history in the Anglo-American world. In the so-called "wilderness cults" of the nineteenth century, middle-class men undertook trials of strength in the "wild" as a means of preserving the masculine vigor and imperial future of the nation (Ray 2009; see also Pfister 2003). Understandings of the need for these men to leave their offices to foray into the wilderness to strengthen both individual body and body politic sharply diverged from prescriptions for the working classes, many of whom lived and worked in cramped, unsanitary conditions, and were marked by a prevailing symbolic correspondence between physical dirt and moral impurity (O'Brien and Szeman, 2014: 37). By contrast, the white, middle-class male body, weakened by the plush daily life of managing peoples and lands, needed to be re-hardened within and by brute nature (Putney, 2003). This genealogy of nation-building reaches into the present, with the heavy influence of military training on the layout of the course and affiliations with military charities such as the Wounded Warrior Project and Help for Heroes. Obstacle courses are a chance to "play soldier" for citizens who, in an age of post-conscription armed forces, can partake in the labor of military training without directly encountering or needing to contemplate its violent ends (McSorley, 2016). They have also become places of homage for the physical sacrifices of Anglo-American forces overseas. The moral and biopolitical imperative to perform feats out in the wilderness is not strictly new, but rather fuses the imperialist imperatives of the nineteenth century with post-9/11 militarism.

What *is* new is mud running's enfoldment in Anthropocene popular culture, in which wistfulness for Paleolithic pasts and references to future environmental apocalypse are rife. The obstacle course gives physical form to the Anthropocene's "evolutionary nostalgia" (Heringman 2014), acting as a material-symbolic metaphor for the integrated and militarized struggles of capital accumulation, evolution, and physical fitness. Consider its dystopian athletic survivalism, which corporealizes Anthropocene apocalypse narratives: mud runs are a way to test one's grit in conditions that we are invited to imagine survivors of an environmental apocalypse facing. This mood of "simulated apocalypse" (Renner 2012: 206) is evinced by Tough Mudder's "death waiver," which promises a symbolic confrontation with death but satirizes the idea of actually dying.

In the same spirit, Spartan Race obstacles approximate movements for survival in three distinct but overlapping time periods: the Paleolithic past (the deep ancestry of white urban professionals), the virile masculinity of Western civilization (their posited cultural ancestry), and a possible future in which they are returned—at least in a corporeal sense—to a state of nature. In following the principles of "functional fitness," the course charts an ancestry with

Ancient Greece in its name, as well as in its obstacles: the “Atlas Carry,” named after the titan condemned to holding up the celestial heavens for eternity, requires participants to carry a large stone, while the “Spear Throw” invokes both the deep past of hunting large mammals and the wars of Western antiquity. It also links the “human race” to a Western visual tradition of modeling the white body as the optimal body. Reebok’s ‘Be more human’ campaign centers Da Vinci’s Vitruvian Man, that “Man of Perfect Proportions” that has “come to mean Renaissance humanism; to mean modernity; to mean the generative tie of art, science, technology, genius, progress, and money” (Haraway, 2008: 7), and against which the bodies of indigenous people were measured across centuries of colonial violence (Pugliese, 2004: 294). Thus while the panhuman “caveman” appears to be the ‘human animal’ at the center of mud running’s rationale, the Vitruvian Man and the Spartan warrior, racialized as white, come in and out of focus as marketing tools, prescriptions for physical activity, and as assigners of subject positions.

Finally, “functional fitness” for the “human race” carries the implicit suggestion that movements such as spear throwing could be useful in a dystopian future: “Do you know how to throw a spear? What about climbing a rope?” asks Spartan Race staff writer Steffen Cook (2020), “When the zombie apocalypse happens and you need to revert back to more basic living, what are you going to do then?” Overtones of the zombie apocalypse, a recurring theme in Anthropocene novels (Marshall, 2015), reach their apotheosis in the Zombie Mud Run, in which participants join the Alliance to rescue the human race:

> You are among the few human survivors in this post-apocalyptic time of Earth’s history. Your mission is to get you and as many of your fellow humans through the mud, obstacles, and Zombies, to the Green Zone that is believed to have food, water, medical supplies, music, and yes, beer (Zombie Mud Run, 2017).

The tone here is playful, to be sure. But the call to physical fitness action through simulated apocalypse is specific to the blending of American militarism with Anthropocene consternation. Renner (2012) argues that older apocalypse narratives ruminate on the sociological outcomes of apocalypse, or their emotional currents for the protagonists; contemporary apocalypse narratives emphasize *physical* know-how. They too center the functional body; skills useless in the “present” will have to be recuperated for a future state of nature. The Zombie Mud Run further corporealizes this logic, calling upon participants to turn to their bodies as a timeless repository of survival skills for the “caveman,” for Western warriors, for the contemporary war hero, and for the uncertain environments of the future alike. In centering the human body as a proxy for what is natural in an “unnatural” world and endowing it with the agency to rise above nature’s passive matter, mud running joins Paleolithic nostalgia with colonial anatomical modeling and militarized survivalist futurism in giving physical form to privileged people’s sudden fears over environmental turbulence.

Genomic authenticity, becoming post-racial, and the agentic body in CrossFit

Whereas mud running invites participants to visit wilderness to rekindle primal corporeality, CrossFit promises instinctual awakening without leaving the city. After a morning workout, from the ordinary space of her parked car, *New York Times* journalist and CrossFit aficionado J.C. Herz (2014: xi) watches intrepid CrossFitters warm up, likening them to a pack of wolves or a band of wild horses:

> Each of them is a regular person. Male and female, younger and older, larger and smaller, their gaits overlap into the unity of animals on the run. It’s crisp outside, and as they gallop past I see the steam of their breath. Together, they seem less like

> ordinary people and more like wild creatures, a pack of beautiful animals.

CrossFit's premise, developed by Greg Glassman in Santa Cruz, California, is that functional movements performed at high intensity, in groups, leads to optimal fitness. Many agree: there are now more than 10,000 CrossFit franchises spanning six continents, with estimates as high as four million total members, many of whom pay upwards of $150 per month (James and Gill, 2017). CrossFit workouts take place in a "box," a term used to signify low-tech divergence from the modern gym. Boxes tend to be found in already- or soon-to-be gentrified streets, although the success of the franchise has increasingly seen them pop up in city centres alongside office blocks and cafes. Inside, members undertake WODs (Workouts of the Day), each a punishing combination of gymnastics, plyometrics, and weight lifting. For example, the "Barbara" workout comprises five rounds of 20 pull-ups, 30 push-ups, 40 sit-ups, and 50 air squats, with a 3-minute rest between rounds, to be completed in the fastest time possible. Whatever one's experience level, the scene at the end is of exhausted bodies heaving on the ground, at most able to muster a meek high-five.

CrossFit is underpinned by the thesis that agricultural, industrial and digital revolutions have gotten under the skin. Herz (2014: 6) describes the WOD as a "core drill through a couple of million years of psychic sediment" that not only improves physical conditioning, but also breaks through the civilizational decay that modern subjects embody. She argues that CrossFit is "the primal future of fitness," its strenuous workouts necessary to offset the "gadgets and creature comforts of a plush, sedentary, chronically ill society" (xi). This temporal play between modern illness and stasis, and prehistoric stimulation and motion, is CrossFit's underlying rationale.

There are striking parallels between Herz's account of CrossFit's primordial basis, and scientific studies on the evolutionary basis of its functional cross-training methodology. In an article in *Progress in Cardiovascular Diseases* entitled "Exercise like a hunter-gatherer: A prescription for organic physical fitness," O'Keefe and colleagues (including Paleo diet figurehead Loren Cordain, to whom we will soon turn) state a genetic basis for CrossFit, arguing that "the effectiveness of daily cross-training is written in our genome, which was forged via natural selection to allow us to thrive within the hunter-gatherer niche" (O'Keefe et al, 2011: 473). Their sketch of "fitness for life in the wild" (472) is based in evolutionary exercise physiology (as opposed to the caveman pop culture of mud running); three points in it are worth highlighting, as they are indicative of Anthropocene speciation and the articulation of that speciation to the biopolitics of health and genetics.

First, CrossFit promises to return participants to the time before a fall from "authenticity," a term repeated in its marketing and mythologizing. O'Keefe and colleagues posit a universal human species undone by discrete technological innovations. Much like Crutzen and Stoermer's (2000) influential marking out of the steam engine as the inception of the Anthropocene, the authors cite "[d]ramatic advances in technology such as those that ushered in the agricultural revolution (350 generations ago), the industrial revolution (7 generations ago), and the digital age (2 generations ago)" as the key moments along the trajectory of a uniform human downfall (O'Keefe et al, 2011: 472). A singular humanity and mechanistic technological determinism are two of the problems with Anthropocene discourse Hartley (2016) outlines; by obfuscating historical processes, they present the Anthropocene subject as simply, only human.

Second, the authors argue that there is a profound "mismatch" between the kind and amount of physical activity to which humans have genetically adapted and the "high-tech, sedentary, overfed, emotionally-stressed 21st century world" (O'Keefe et al, 2011: 472). In doing so, they invoke the human genome, shaped by natural selection and "essentially unchanged as

compared with our Stone Age ancestors" (O'Keefe et al, 2011: 472), to posit an undifferentiated humanity at a biological level. The moralizing language of sedentariness and overfeeding rescripts anti-obesity proselytizing (Gard and Wright, 2005) in the terms of evolutionary science. Humanity here is variegated only by an essentialist understanding of sex difference, which distinguishes the "forager" inheritance of women as distinct from the "hunter" inheritance of men. Here, the key to proper human movement is located in the undifferentiated human genome as nature, another tip of the hat to Anthropos universalized.

This "mismatch" is not only reserved for rationalizing the movements lined up in each WOD: in contradistinction to the loneliness of the treadmill, and extending beyond the normative aesthetic benefits typically promised by exercise proselytizers, CrossFit emphasizes human community as written into the human genome and realizable through collective workouts. Group exercise is not incidental to the exhaustion of the body's metabolic pathways; sociality is part of CrossFit's image of the "human animal" as indelibly social, part of a pack or band. As in mud running's use of the lexicon of neoliberal meritocracy to promote the practice, CrossFit's Paleolithic imaginary draws on the language of the boardroom to make its case. In *The Power of Human Community: CrossFit and the Force of Human Connection* (2012), for example, box owner Alisson Belger argues that belonging to a box can address the clash between the genetically wired need for community and the loneliness of modern urban life. To do so she weaves together stories of individual weight loss triumph, the way her community of box patrons help one another, and her vision for successful corporate partnership. Nostalgia for authentic nature and authentic community here are articulated through a late capitalist blueprint for corporate success.

These two points roll into a third, which suggests that the uniform downfall from authenticity can be undone at the scale of the individual by moving in ways that approximate "surviv[ing] and thriv[ing] as very active outdoor generalists in the wild" (O'Keefe et al, 2011: 476). This turn from humanity-as-species to individual ascetic labor is accomplished by marshalling *epi*genetics: CrossFit's methodology holds that the regular execution of variegated movements—similar in structure and kilojoules burned to "butchering a large animal," "digging tubers (in fields)," and "hunting, stalking animals" (O'Keefe et al, 2011: 474)—will induce changes in genetic expression. In other words, humanity's fall from the Stone Age to the digital age registers at the level of the genome, but exercise reverses that downfall at the scale of the individual body.

Rather than purifying the body of technological augmentations, CrossFit's focus on the genomic body and community is constituted in internet communities as much as in boxes. Arguing that CrossFit's digital presence enlists human evolutionary 'wiring' to help create an intensive communal experience, Heywood (2015: 20) argues that it exemplifies an "immersive model of sport" which accepts "the body's immanence and grounding as part of evolutionary history and the natural world," and recruits digital technology to circulate this body pedagogy. And, it should come as no surprise that the epigenetic take on the "mismatch" thesis has found its way into the marketing of movement-repatriation products as much as box memberships: to give just one example, "barefoot shoes," a favorite amongst CrossFitters, promise to undo the physical impairments wrought by modern footwear.

Of course, the evolutionary "mismatch" thesis is not the property of the CrossFit franchise, and there are many different ways evolutionary science has become folded into the contemporary storytelling of the human species. For example, the influential biomechanist Katy Bowman develops the thesis in her prescription for persistent movement, defined as "any motion that creates a change in shape of a body or parts of a body" (2017:3), over exercise; she has (gently) criticized CrossFit for its one-hour-a-day capsule approach to movement that is entirely compatible with postindustrial desk-bound life. Yet CrossFit is the thesis's most popular, and most profitable, form. With the spotlight on functional movement and human community as written into the genome, its body pedagogy joins mud running in

corporealizing the evolutionary nostalgia and the abstraction of humanity into post-racial and classless subjects of Anthropocene popular culture. In positioning the active body as a vehicle for accessing nature and a vessel of latent nature itself, it exemplifies a kind of 'good-Anthropocene' humanism that aims to populate the present and future with optimal bodies, fit for worlds they currently do not inhabit. Bodies are shaped not only in accordance with contemporary fitness aesthetics but with Anthropocene visions of fitness, "functional" in the past and for the future. This speaks to the bootstrapping-ness of privileged Anthropocene subjects, who are encouraged to see their own bodies as malleable by intense exercise and who are, via membership fees, able to secure the bounded space, community, methodology, and products to intervene in them. Post-racial evolutionary nostalgia and ethopolitics, made possible by various forms of consumption, position the CrossFit body as indelibly agentic matter.

"Diseases of civilization:" the colonial biopolitics of time in the Paleo diet

"The *Paleo Manifesto* explores a way of life that we've forgotten, and convincingly argues that we should rethink the way we live." This endorsement to John Durant's *Paleo Manifesto* (2013) comes from Tough Mudder CEO Will Dean, just below a similar entry from CrossFit NYC founder Joshua Newman. Like mud running and CrossFit, "rethinking the way we live" harks back to the Paleolithic period for corporeal remaking. Whereas the former advocates immersing one's body in nature and the latter emphasizes movement as an avenue for incarnating genetic nature, the Paleo diet calls for the ingestion of nature itself: roots, nuts, grasses, and fruits, as well as animals from land, lake, and sea. The diet, however, hinges less on what it *is*, than what it is *not*. Proponents see the human digestive system as preceding the agricultural revolution, and urge the purification agricultural food from one's diet. Grains, legumes, and dairy are off the menu, along with certain sugars and oils. While there is disagreement about the best way to "go" Paleo—animal:plant ratio is a source of contention, as is the role of high-carbohydrate tubers like the humble potato—there is agreement on what must be banished: post-Paleolithic grains.

The Paleo diet headlines the recent popularization of what Christine Knight (2015: 442) calls "nutritional primitivism": "the pursuit of ostensibly simpler, more natural and authentic ways of eating as part of a quest for health through diet." A key antecedent is Eaton and Konner's "Paleolithic Nutrition" paper, published in *The New England Journal of Medicine* in 1985, which argued that the human body has remained the same since the Paleolithic era, meaning that today's humans are "programmed" (1985: 283) for the ostensible diets of hunter-gatherer forebears. This variant of the "mismatch" thesis repeats the proclamation of a discordance between the "ancient" body and "modern" life as a corruption of our (genetic) nature. It was reworked for a general audience in *The Paleolithic Prescription* (Shostak, Konner, and Eaton, 1988), and set the scene for the rise of Paleo body cultures in the new millennium, which included Loren Cordain's popular book *The Paleo Diet* (2002) and the internet fame of figureheads such as Robb Wolf. Spin-off diets like the Whole30, which further excludes "natural" sweeteners like maple syrup, contributed to Paleo's ascent. In 2016, dieters had shared over one million photos of hunter-gatherer fare on Instagram under the #Whole30 hashtag (Rogers 2016), bespeaking a rich digital culture of advice- and recipe-sharing. Though data is limited, Schwarz and Stapell (2016:17) estimate that there are between one and three million followers of some version of the Paleo diet in the United States alone.

At the center of Paleo dietary cultures is the Paleolithic hunter-gatherer, who is said to be free from modern diseases and normatively attractive. Mark Sisson, author of the *The Primal Blueprint* and a popular blog calls this archetype Grok, the "man of the eon":

> By modern standards, he would be the pinnacle of
> physiological vigor. Picture a tall, strapping man: lean, ripped,

> agile, even big-brained (by modern comparison). And as for what's underneath? An enviable workup: low/no systemic inflammation, low insulin and blood glucose readings, healthy (i.e., ideally functional) cholesterol and triglyceride levels (Sisson 2009).

Indeed, in Paleo dietary cultures, the policing of a dichotomy between natural and modern foods blurs with desires for the perfect body. Perhaps the focus on reshaping the body, despite the masculine image of Grok, is the reason that the majority of practitioners are women (Schwartz and Stapell, 2013). Drawing on the long history of dietary restriction as women's culture (Bordo, 1993), the diet's promise of avoiding the "diseases of civilization" comes in and out of focus as a pathway for fat loss, which is exemplified (but not exhausted) by Esther Blum's (2014) *Cavewomen Don't Get Fat: The Paleo Chic Diet for Rapid Results*.

For most Paleo figureheads, the point is not that the Paleolithic hunter-gatherers lived a long life. Sisson, for one, subtly nods to Hobbes in saying "A short life? For most, yes. A brutish life? Some of the time," but posits that amidst the uncertainty, Grok "was free to live, rest, and enjoy his own moments of peace." Instead, it is the integration of the simple dietary practices of the hunter-gatherer with the plentitude of meats, nuts, greens, fruit, and various "superfoods" made available by the modern food system that is the key to optimal health. As Durant contends, the Paleo diet is "not about historical re-enactment"; rather, "it is about mimicking the effect of such a diet on the metabolism with foods available at the supermarket" (quoted in Kolbert, 2014). The rise of Paleo convenience foods and products attest to this: Walmart's Whole30-certified microwavable frozen meals and fast casual chain Chipotle's Paleo bowls are just a few examples of the mainstreaming of Paleo principles, while scores of companies such as Hunter&Gather, Primal Kitchen, Caveman Foods, Tribali Foods, Primal Palate, and Kettle&Fire produce keystone Paleo foods (like bone broth) and reinventions of kitchen essentials (like ketchup and mayonnaise). Such convenience products ensure that the ingestion of ancestral nature does not come at the expense of tending to the busy realities of post-industrial working life.

And yet stripped down, Paleo philosophy urges people to resist the temptations of processed food. Writing of the Paleo diet as the "dietary culture of CrossFit," Herz (2014: 202) captures this in aptly biblical prose:

> In the beginning, we existed in a state of innocent perfection, ideally adapted to our hunter-gatherer environment…and then we tasted sin, in the form of cultivated wheat and vegetables that were bred to be more appetising than the roots and leaves we'd been gathering from the wild … We can never return to our Edenic past, because nothing available to the modern shopper, even the grass-raised meat and organic vegetables, bears the slightest resemblance to what Paleolithic human beings actually ate. But by rejecting abominable foods, we can purify ourselves.

Here is the declaration of the "ancient" body's capacity to adapt, despite its "discordance" with the "modern" environment. By arguing for "training the palate to resist the extreme flavors of modern foods and, instead, to value and desire 'natural' Paleo foods" (Johnson, 2015: 103), the Paleo diet implies that evolutionarily-engrained desires for energy-dense foods can be overcome – if the subject combines knowledge with willpower. Glimpsed here, again, is a remarkably agentic body, with genetic propensities overridden by willful subjects.

In alternately drawing on and resisting the plenitude of the present to incarnate the prehistoric, Paleo eating speaks to the shadows of race and empire in Anthropocene popular

culture. This is evident, for a start, in frequent representations of indigenous peoples, whom are encased within the Paleolithic era in order to advocate the exclusion of agricultural foods. The "common counter-arguments" section of Loren Cordain's *The Paleo Diet for Athletes* (2012: x-xiv), for instance, presents tables comparing aerobic fitness, blood cholesterol levels, and body fat levels of "non-Westernized" and "Western" peoples. Cordain uses colonizing language to specify groups in the former category—"Eskimos," a name given to Inuit people by non-Inuit people; "Pygmies," a word invented by earlier anthropologists for a range of different ethnic groups in the Central African forests—and the moralizing label "couch potato" to describe "Western" populations. To shore up his contention that hunter-gatherer people are fitter than couch potatoes, Cordain draws on European observations of "other" bodies from several centuries of colonialism: Cabeza de Vaca's 1527 account of indigenous people in what is now Florida as "wonderfully well-built, spare, very strong, and very swift"; James Cooks' 1772 observations of the Maori, that "we never saw a single person who appeared to have any bodily complaint"; Jesuit missionary Jacob Baegert's 1773 description of indigenous Californians as "much healthier than the many thousands who live daily in abundance"; and anthropologist Arnold Henry Savage Landor's 1913 take on the "anatomical detail" of indigenous people in Amazonia as "perfectly balanced," with legs "marvelously modeled, without an ounce of extra flesh." Here, anthropological and medical knowledge about indigenous people spanning centuries is employed to mark out a nutritional pathway for cultivating the optimal body, at least according to contemporary body ideals ("without an ounce of extra flesh"), and as an explanatory device for the "diseases of civilization" that plague contemporary "couch potato" life. Other examples can be found in the use of studies that measure the bodily matter of contemporary hunter-gatherer groups against that of Western populations (e.g., Schnorr et al, 2014) to bolster claims that the Paleolithic era is the aspiration for cultivating one's health today.

It is also evident in the Paleo diet's transposition of ecological anxiety from "the environment" onto one's own body. Chelsea Leiper (2019) argues that the diet is a response to the Anthropocene's disturbance of ecosystems both global and microbial, as in bacterial ecosystems within the human body. Drawing on archaeological literature that shows a reduction in bacterial diversity from the transition from hunter-gatherer lifestyles to agricultural ones, and a ream of studies in the health sciences on issues from allergies to diabetes to obesity, she hints that "our body's ecology, like our planetary ecology, is in a state of disequilibrium or transformation" (Leiper 2019: 123). Paleo science holds that the body is an "endangered ecosystem," which dietary changes will help to "rewild." In line with the logic of much Anthropocene literature and popular culture, the Paleo diet's focus on one's own body as an "endangered ecosystem" passes over the historical, environmental, and economic processes that have placed some humans in some places in positions of willful choice vis-a-vis food, and others as passive exemplars of the embeddedness of humans within nature. Both subject positions here—the modern health-conscious subject (housed in an ancient body) that avoids modern temptations, and the inert hunter-gatherer with a dense and diverse microbiome—are stripped of context.

Questions abound that transcend the scope of this paper: might, for example, the environmental conditions and consequences of meat-heavy diets differ by context? What we want to highlight are the colonial workings of time in Paleo philosophy. By placing health and medical data of contemporary "non-Westernized" groups on the same analytical plane as groups encountered by European colonists, and then using these data together to argue for a return to the diets of the Paleolithic era, Paleo philosophy locates actually existing indigenous people in the Paleolithic era. This bounding of indigenous people in prehistory is, as Kyle Whyte (2018) argues, a key feature of Anthropocene popular culture, one that romanticizes some hunter-gatherer groups as unharmed by modern life, heralded as passive health exemplars which agentic subjects can imitate. It also submerges indigenous peoples' experience of contemporary ecological uncertainty as "déjà vu" of the entwined processes of

colonialism and capitalism (Whyte 2018: 12) beneath those privileged people's suddenly ecologized understandings of their personal health. And of course, implicit to the idea that indigenous groups are free of the "diseases of civilization" is that they are outside of "civilization": trapped as passive materiality in Anthropocene periodization while simultaneously heralded as aspirational figures of ecological harmony and bodily vitality.

Coloniality, Capitalism and Corporeality in the Anthropocene

If the Anthropocene is indeed a geologically-authenticated humanism befitting the twenty-first century, then mud running, CrossFit and the Paleo diet represent some of its foremost cultural expressions. These practices establish ascetic bodily labour as the means through which one can restore lost nature within. With Anthropocene art, film, and literature they hold in common a selective critique of contemporary life and a valorization of the Paleolithic past. The heroic overcoming of obstacles while laden in primordial matter, the "beasting" of workouts, and dietary "rewilding" are situated in a history of deep time that culminates in an enervating present. Yet they also attribute a profound agency to embodied practice, not just to reshape one's own body and mind, but also to redress a "fall from primordial innocence" (Wengrow and Graeber, 2015) that has specific implications for health and fitness in post-industrial, consumer capitalist societies.

Though we can contest the validity of approximations of Paleolithic life, as Graeber and Wengrow (2015) have done, it's at least as important to contest their whiteness, to see their story as something particular despite its parading as a universal species-experience. We are not disputing the idea that there is a mismatch between human genetics and the modern environment, and, to state the obvious, we are definitely not disputing that humanity is undifferentiated at the genetic level. Instead, we have sought to show that that these scientific claims are entangled – sometimes obviously, and sometimes ambiguously – with centuries-old race science, twenty-first century militarism, purified conceptions of nature, and consumer capitalism. We have also sought to show that the post-industrial plenitude and white-collar cleanliness of everyday life from which these health and fitness proselytizers survey the present is not a universal human experience, but rather specific to the urban American managerial class from which many participants are drawn. These Anthropocene body cultures are affirmations of agency by a largely white, middle-class American populous experiencing contemporary body-in-environment uncertainty as Anthropocene epiphany, instead of as the centuries-long experience of environmental harm leveled on communities of color as part of European colonization and extraction, capitalist development, and toxicity exposure.

Finally, it remains important to name the contradiction at the heart of these practices: that they have emerged from and fit perfectly with the consumer capitalist societies and post-industrial lifestyles they seek to critique. But this ideological fault line misses their imbrications with coloniality, race, nature and science that make them exemplary of Anthropocene discourse. We must ask whether there is a relationship between the casting of these secure bodies, seeking health optimization by evolutionary expertise, athletic prowess, and willpower as active matter, and the legibility of violent extractions, both historic and ongoing, from people and places as passive matter. For it is our sense that the age heralded as the Anthropocene is defined by uneven distributions of health as environmental risk and health as self-optimization, and that much work remains in unpacking the relationship between the two.

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