Bringing the Mountain to the Prophet:
Marshall McLuhan's Mythology in the Anthropocene

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Marshall McLuhan, prophet of the information age, did not anticipate the continuity and two-way commerce between nature and culture highlighted by climate change and captured in the concept of the Anthropocene. McLuhan's approach to understanding is visionary and nonmodern in the sense suggested by Bruno Latour, emphasizing continuity between form and content and—potentially at least—nature and culture. Yet the content of McLuhan's vision is modern because it ignores more-than-human nature, reinforcing the modern "great divide" between nature and culture. By bringing a mountain to the prophet, this essay illustrates both the absence of nature in McLuhan's media ecology vision and the ease with which his approach can be adjusted to a "deep media ecology" perspective acknowledging more-than-human nature. McLuhan's mythological approach is salutary for environmental communication. Although it does not produce rational-empirical knowledge, it can help integrate such knowledge into culture and policy.

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In the spring of 2017, the Heartland Institute—"the world's most prominent think-tank promoting scepticism about man-made climate change" ("Toxic Shock," 2012, para. 1)—undertook to send copies of a "report on scientific consensus" to every science teacher in the United States. Authored by the Nongovernmental International Panel on Climate Change (NIPCC)—whose name promotes confusion with the United Nations International Panel on Climate Change—the document attributes the notion of human-caused climate change to a political orthodoxy that subordinates science to the agenda of "climate profiteers" (Idso, Carter, & Singer, 2016, p. xiii). The argument should be taken seriously, not on its merits—it is easy to confirm the existence of the scientific consensus the authors deny—but because of the way it attempts to undermine the scientific community by simulating its language and form. The report is an attack on the depoliticized rationalism it purports to defend.

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Pointing to Mike Hulme's suggestion to build myths and stories around the problem of climate change, the NIPCC authors ask: "When Hulme talks about climate science, is he telling us the truth or one of his 'myths'?" (Idso et al., 2016, p. 52). "Myths" are thus set up as precluding "the truth." Given the NIPCC's denial of an undeniable scientific consensus, this anti-mythological stance may strike the reader as ironic. There is, however, a sense in which anti-mythological stances are always ironic, because the ultimate ground of any stance is mythological. Myth is an aspect of all understanding, regardless of whether it is accurate or misguided, rational or irrational. Myth is compatible with both truth and reason.

This essay explores this premise in order to endorse Hulme's call for creating myths around the scientific facts of climate change. It does so via an extended discussion of Marshall McLuhan, whose mythological account of the transformation of human experience by technology exemplifies the positive power of myth to illuminate and inform. McLuhan raised new questions about the role of information technology in human life. He pointed to electronic media as a new historical force, a cause for concern and hope, asking how different media affect our lived experience. More than half a century on, as the information age unfolds, this simple message—not a debatable proposition but a self-conscious awareness of technology's decisive role in culture—continues to resonate. McLuhan's message is his method, a mythological mode of understanding, an approach that might be instructive for the kind of climate communication Hulme proposes, and which the NIPCC authors sarcastically dismiss.

At the same time, the content of McLuhan's ideas offers at best an ambivalent contribution to environmentalism. Rachel Carson's *Silent Spring* appeared in 1962, two years before McLuhan's *Understanding Media*. Carson pointed explicitly to the negative feedback of human technology in the biotic ecosystem, auguring what has since come to be called the Anthropocene—the geological age marked and distinguished by humanity's presence (Crutzen, 2002). Given his knack for citing important books (Jacobs, 2011), it is striking that McLuhan makes no mention of Carson's seminal text in his own. As expressed in his essay "Environment, the Future of an Erosion" (McLuhan, 2016), McLuhan is a fellow traveler in Buckminster Fuller's "spaceship earth." McLuhan's biographer reports that he took an interest in the local urban environments he inhabited (Marchand, 1989). Foundational for the media ecology approach to media studies established by Neil Postman, McLuhan pursued what he understood as a relational or ecological way of thinking. Yet McLuhan's writings generally ignored more-than-human nature. McLuhan's global village is not the Anthropocene.

McLuhan made much of what his student, Walter Ong (1982), called the "technologizing of the word," but the Anthropocene represents a more comprehensive technologizing of the *world*, including processes that take place independently of human will and energy. Weather patterns and biology, as much as communication and culture, have been technologized. Technology, which McLuhan (2002b) understood as "the extensions of man," evokes an intermediate domain between humans and more-than-human nature. The Anthropocene refers both to a dramatic expansion of this domain and to the way it is shaped from both sides, so to speak—by nonhuman forces from one side, and by human intervention from the other. Changing the chemistry of the atmosphere and the oceans, transforming genomes, automating judgment and discernment, technology in the Anthropocene does not mark a clear boundary between culture and nature so much as intense commerce between them. McLuhan's mythological approach—his medium—is suited to thinking about this condition, yet among the prodigious number of ideas he floated, almost none direct our attention to it.

Assessing McLuhan's content and form in the context of the Anthropocene, this article discusses this ambivalence, aiming to extend McLuhan's media ecology toward "deep media ecology" (Arroyave-Cabrera & Miller, 2017; Stephens, 2017). The "mountain" in the title of this essay is a metonym for more-than-human nature, whose omission from McLuhan's vision it illustrates. McLuhan, a prophet, gestured with his method to the mountain, but he did not go to the mountaintop himself. Donald Theall (2001) calls McLuhan a "prepostmodern" thinker (p. 36), and McLuhan is read here as anticipating the kind of relational thinking associated with Bruno Latour, a self-described nonmodern rather than postmodern thinker. In Latour's terms, McLuhan was ambivalently modern and nonmodern: his mythological method is nonmodern, while the content of his ideas is modern. By bringing the mountain to McLuhan, I mean to point out that McLuhan's approach can be applied to the relationship between humanity and more-than-human nature, not just to the relationship between humankind and our technologies.

The argument proceeds as follows. First, I introduce McLuhan as a controversial academic and cultural touchstone whose mythological approach justifies calling him a prophet. Second, I introduce Latour's concepts of modern and nonmodern stances, pointing to parallels between McLuhan's and Latour's schematic visions of history to suggest that McLuhan anticipates Latour in some ways. I then examine, in turn, McLuhan's medium and his message—the form and content of his work. Whereas the former is thoroughly nonmodern, McLuhan's modern habits of mind mean that the substance of his vision is ambiguous—nonmodern in its interest in relational thinking but modern in the way it treats human existence as unfolding in a world of our own making. Finally, bringing the mountain to the prophet, I invoke the nonrepresentational field of a mountain to illustrate the absence of more-than-human nature in McLuhan's thought and to show how, at the same time, McLuhan's mode of thought can easily accommodate more-than-human nature. In conclusion, I argue that it is appropriate and productive to communicate climate change as a myth. McLuhan's popular success and continuing resonance points to the value of mythology as a vehicle for integrating technical knowledge into culture and policy in the Anthropocene.

The Prophet: Marshall McLuhan

Marshall McLuhan's contribution to scholarship is controversial, but there is little doubt of his cultural significance. Along with Buckminster Fuller, McLuhan is a source of the utopian ideology of Silicon Valley (Turner, 2006), part of the "prehistory of cyberculture" (Theall, 2001, p. 35). A child of the Canadian prairies who spent most of his career as a professor of English at the University of Toronto, McLuhan's *Understanding Media* (2002b) helped to found the field of media studies and to make the term *media* part of contemporary English vernacular (Meyrowitz, 2003). A political conservative and a devout convert to Roman Catholicism who was well over 30 by the time the 1960s rolled around, McLuhan emerged as an unlikely popular spokesman of that decade's counterculture in North America. In the 1960s and 1970s, McLuhan appeared on the cover of *Newsweek*, appeared as himself in Woody Allen's *Annie Hall*, held forth in an interview published in *Playboy*, and delivered talks to executives and managers at large North American corporations such as IBM and General Electric (Marchand, 1989).

McLuhan formulated his insights in memorable memes, the best known and most successful being *the medium is the message*. He presented his ideas—or "probes" as he called them—in a "mosaic"

form that sought to subvert the linear logic of language. Inspired by modernist writers such as James Joyce, McLuhan's mosaic is an aesthetic and—to the extent possible in written language—nonrational way of making meaning. It is an object lesson in how understanding can arise aesthetically rather than logically, as a not-entirely-articulate perception of coherence in a scattered and even contradictory set of points. This method corresponded, for McLuhan, to the relational way of thinking he aspired to. It reflected his preference for Aristotle's formal causality rather than efficient causality (causation is less a matter of how A acts on B, which in turn acts on C, than of how the interrelationships among A, B, and C shift and change). Joshua Meyrowitz (2003), who calls McLuhan's *Understanding Media* an "anti-text," argues that McLuhan "succeeded in his failure" (p. 192) to live up to the standards of printed texts. If McLuhan managed, with Joyce, Proust, and other modernists, to transcend the way print technology shapes discourse—not to mention the "scale pace or pattern" (McLuhan, 2002b, p. 8) of human life at large—then his message would be something he said his medium foreclosed.

Phillip Marchand (1989), McLuhan's preeminent biographer, relates various commentaries on his subject's disdain for empirical facts. McLuhan "sometimes wrote and talked as if he agreed with Faulkner's dictum that facts and truth don't really have much to do with each other" (p. 72). Marchand quotes an unnamed "associate" declaring that McLuhan "thought that bullshit was a very high order of thought" (p. 21). It is tempting to call McLuhan a bullshit artist—a label that might not conflict with his self-understanding as a "serious artist" (McLuhan, 2002b, p. 18; Theall, 2001). Invoking Ezra Pound's suggestion that artists are the "antennae of the race," McLuhan claimed that art and artists contributed "exact information" about how best to adjust to new realities created by technology. The putative exactitude here stands in contrast to the imprecision, inscrutability, and metaphorical nature of McLuhan's work as well as the association of art with the unsystematizable, tactile understanding Thomas Kuhn called "tacit" knowledge. If McLuhan's goal was "to increase freedom through art" (Grosswiler, 1998, p. 75), it is at odds with the widespread suspicion that modern art is, so to speak, bullshit. Suzi Gablick's (2004) comment about modern art applies to McLuhan's work: "a sense of fraudulence has, from the start, hung round its neck like an albatross" (p. 23).

Where the modern investigator collects and analyzes data, the prophet bears witness. She does not reason or reflect but simply perceives and declaims. Bearing a message so momentous that she does not fully comprehend it, the prophet offers not carefully calibrated prediction but speech that resonates, unfolding in and through the world. McLuhan's prophecy of a new electronic age is not a systematic forecast but a mythological manifesto resonating with subsequent experiences of digital culture. McLuhan did not necessarily know of what he spoke, but he spoke anyway, and he spoke with supreme, often off-putting, assurance. To read McLuhan, Marjorie Ferguson (2005) writes, "is to encounter a sublime sense of certainty, delivered in the voice of a man with a personal hotline to the Almighty" (p. 20). Peters' (2005) description of prophets fits McLuhan well: "just a blaze of light and a torrent of words, so confident that the word 'confident' does not even apply" (p. 62).

Identifying McLuhan as a prophet helps avoid the mistake of judging him on terms that were not his own. The value of McLuhan's vision is not that it precisely describes or reflects empirical details but in the striking extent to which it resonates with contemporary experience and discourse. Cited in 346 entries in the Oxford English Dictionary (Fitzgerald, 2001, p. 6), McLuhan had an almost Shakespearean knack for

coining a phrase. Rather than offering positive knowledge, he prophetically descried and described the coast of a continent few had perceived before him. Inaugurating the field of media studies, McLuhan's work is a ladder that many in the field would happily kick away (Marvin, 2013). It remains valuable, however, as an affirmation of the power of mythological methods—not as substitutes for rational empiricism but as necessary complements to it.

Modern Versus Nonmodern

Yoni Van den Eede (2017) observes a "cross-breeding" between substantive and relational ontologies in McLuhan's work (p. 160). I read the substantive-relational distinction as corresponding to Bruno Latour's distinction between modern and nonmodern perspectives, and Van den Eede's observation as an indication that McLuhan stands on the threshold between them. A modern stance, in Latour's terms, is grounded on conceptions of a "great divide" between "nature" and "society." The objective realm of scientific truth and the subjective realm of human culture appear from this position as two categorically distinct realms, forever untouched by each other (Latour, 1993). More generally, the modern stance implies a nonrelational ontology in which entities—including human individuals and human collectives— have a self-contained substance or essence apart from the field of relations they inhabit. The modern stance is associated with a Promethean attitude that seeks to subordinate nature to human priorities. Having conceived of history and nature as untouched by each other, moderns see history as a process in which humans progressively displace or appropriate nature. History moves into nature, colonizing it, pushing it aside, rendering it obsolete.

The nonmodern stance, by contrast, is based on a recognition that entities emerge from a series of relationships that do not cleave neatly into separate realms of nature and culture. Rather than an ideal of Promethean mastery, the nonmodern stance recognizes the relationship of humanity to more-than-human nature as one of continual negotiation and two-way movement. Nonmoderns are sensitive to how nature—fire in the myth of Prometheus—is never fully contained nor finally controlled by human technique.

Defining the self in terms of its relationships to others, the nonmodern stance invites the dissolution of the self into cosmic oneness. Latour's empiricism—his focus on the visible rather than the invisible—may prevent him from going this far, but he cannot avoid mythology. A pioneer of actor-network theory (ANT), Latour advocates assiduously tracing the ANT trails wherever they lead, scrupulously avoiding the kind of metaphysical speculation so conspicuous in mythological thinking. Yet Latour (2000) gives us accounts in which a pharaoh's death was not the result of tuberculosis, because there was no such concept in the world in which his death took place. He invokes a "parliament of things" in which objects of all kinds speak and act (2004). He sees concrete slabs having agency (2005). Such thinking—admitting the power of speech to transform and participate in the world and extending this power to nonhumans no less than to humans—is surely mythological. Latour may be an empiricist, but his flattened ontology brings us to the mythological level where there is no clear distinction between subjective experience and objective fact—where, in Peters' (2015) words, "expression and existence merge" (p. 15). Latour comes to a nonmodern, mythological stance through radical empirical examination

of relationships. McLuhan comes to it through a somewhat different radical empiricism—a phenomenological-mythological effort to perceive totality all at once.

For both McLuhan and Latour, modern culture, or what McLuhan called "print culture," represents "an interlude between two great organic periods of culture" (McLuhan, 2002b, p. 152). Latour's modern stance and McLuhan's print culture both refer to a kind of historical lapse during which the ultimate unity of symbol and substance (McLuhan) or culture and nature (Latour) was excluded from awareness. Latour, writing a generation after McLuhan, is less in thrall to the prejudices of modern or print culture and offers a more thoroughgoing relationalism, a full-blown nonmodern stance. McLuhan, for his part, remains an incipiently nonmodern writer. Held back by some substantive or essentialist habits of mind, particularly when it comes to thinking about two of his key terms—*man* and *technology*—McLuhan hovers on the cusp, ambivalent: modern in his Promethean and anthropocentric content, and nonmodern in both his mythological form and his interest in formal causality and relational ontology.

Like any prophet, McLuhan was both of his own time and ahead of it. One place this can be seen is in his understanding of *ecology*, a term that connotes the relational ontology of the nonmodern stance. McLuhan occasionally used *ecology* to describe his perspective, and the term has been firmly linked to his legacy by the media ecology concept. Reflecting the time and place in which he wrote, McLuhan's thinking is "ecological" in the sense of postwar systems theory and cybernetics. It is interested in relationships, but it does not apply the relational insight reflexively to the thinking subject or observer. Thus, McLuhan emphasizes equilibrium, homeostasis, and holism (*total* is one of his favorite adjectives), seeking to understand an encompassing big picture rather than the plurality, fragmentation, and diversity of position that ecology has come to connote in the intervening decades (Heise, 2002). "The partial and specialized character of the viewpoint . . . will not serve at all in the electric age" (McLuhan, 2002b, p. 5).

A more current understanding of the word *ecology* connects it to a leftist cultural politics that McLuhan had no ear for whatsoever. Complex civilizations that use ideographic or syllabary writing rather than alphabets belong, for McLuhan (2002a), in the same "tribal" category as nonliterate societies: "it is by alphabet alone that men have detribalized or individualized themselves into 'civilization'" (pp. 54–55). The implication, which McLuhan makes explicit, is that the culture of Chinese civilization and ideographic script is fundamentally the same as the culture of nonliterate hunter-gatherer bands. Given the glaring limitations of such a claim, it might be unnecessary to note that McLuhan's erudition in the Western tradition was not matched by a familiarity with Chinese culture. McLuhan's rural Canadian roots add an element of marginality to his otherwise hegemonic identity—something other Canadians seem to appreciate best (Jeffrey, 2005; Stamps, 1995)—but being Canadian evidently did not inoculate McLuhan against this particular ethnocentric generalization.

This is another place McLuhan's modern–nonmodern ambivalence can be seen. For Latour (1993), the discovery of the first great divide, or the technique of "purifying" culture from nature, leads moderns to imagine a second great divide separating them from the impure habitus of myth and illusion of their premodern antecedents. In locating Chinese culture on the premodern side of Latour's second great divide, McLuhan expresses the exceptionalism Latour identifies with the modern stance. At the same time, by heralding an electronic "reversal" into "tribal" culture in a "global village," McLuhan seems to prefigure

Latour's nonmodern recognition that the modern–premodern divide is not so "great" after all. McLuhan is modern in his embrace of the second great divide, even as his perception that this divide is imploding marks him as incipiently nonmodern. Prophets' visions outpace their understanding.

McLuhan's Nonmodern Form

McLuhan (2002b) says myth "capsulates a prolonged process into a flashing insight" (p. 82). Such insight is the stuff of prophecy, and it is McLuhan's stock-in-trade. We draw on our imagination—"flashing insight"—in order to know and experience the world as something more than the phenomenological here and now—"a prolonged process." In this respect, all that distinguishes scientific models from myths is a commitment to deliberate rationality over instantaneous insight. Indeed, there is a way in which modern or rational-scientific knowledge is a subset of the category of myth. Though constructed inductively with a commitment to maximum empirical grounding, once deployed for deduction, scientific models become myths. Any extrapolation from data is, in this particular sense, myth making.

"We have never been modern" (Latour 1993), then, because nonmodern epistemological methods (i.e., mythology) have never been eliminated. The categorical distinction between nature and culture is itself a myth—a model of reality—on which the modern stance has been elaborated. All myths establish a clear distinction between human and nonhuman, self and other (Baeten, 1996), but most myths offer a corresponding continuity, granting the individual a connection, as Jane Harrison (1927) wrote, with "something bigger, more potent, more lasting, than his own individual existence . . . one with the generations before and yet to come" (p. 19).

There are certainly modern myths—most obviously nationhood—that serve this function, but they seek mostly political rather than epistemological leverage. The modern stance sees knowledge as separate from mythology. In Latour's (1993) terms, it seeks to purify one from the other, to isolate epistemology from culture and meaning from form. The effort to separate culture and subjectivity from an objectivist, naturalist epistemology stakes a strong claim for discontinuity and analysis, refusing the "unconditioned" truth of myths (Kolakowski, 1989). The result is an anti-mythological mythology in which the world we inhabit is imagined to be independent of how we imagine it.

Of course most of the world *is* independent of our imagination, and the myth of purification is a uniquely powerful epistemological strategy when applied there. But the strategy breaks down as the object of knowledge moves closer to the knowledge itself. Knower and known ultimately merge, rendering confusion among those who insist on the purity of the modern stance. Witness a recent claim by a neuroscientist that "consciousness doesn't happen" (Graziano, 2016). Seeking to purify the world entirely of subjectivity, dwelling exclusively on one side of the modern great divide, the author of this claim imagines he has resolved what another version of the modern stance calls the "hard problem" of consciousness. This latter version acknowledges consciousness but, committed to purification, cannot bridge the gap between conscious mind and unconscious body.

The anti-mythological mythology of the modern stance, the defining epistemological strategy of modernity, comes at the cost of being unable to contemplate the continuity between subject and object, content and form, semiotics and physics. The nonmodern stance, on the other hand, recognizes subjectivity and objectivity as poles at the end of a continuum, along which we find "quasi-subjects" and "quasi-objects" (Latour, 1993). If there is no expectation that meaning and form are categorically distinct, the question of their relationship becomes less fraught. A divide persists, but it is not particularly "great."

Umberto Eco (1986) observes that, for McLuhan, "media" means both "code" and "channel." Given the centrality of the media concept to McLuhan's writing and legacy, the point is important, showing the analytical feebleness of one of McLuhan's key terms. But the critical edge of Eco's observation is blunted if we appreciate that he is applying modern expectations to a nonmodern method. The inseparability of *how* media transmit from *what* they transmit is a feature, not a bug, in McLuhan's mythology (Anton, 2017, p. 44). Every code is a channel, and every channel is a code. Form is content, and content is form. The means of representation are not separate from what is represented. McLuhan's is a nonmodern mode of understanding based on continuity rather than discontinuity. The medium is the message.

McLuhan understood the map of language as part of the territory of the world itself. This is why he constantly used puns and wordplay, treating them as sources of insight rather than just amusement. Movies, to cite just one example, represent "the reel world" (McLuhan, 2002b, p. 284). McLuhan (2002b) described a person's name as "a numbing blow from which he never recovers" (p. 32). John Fekete's (1977) wordplay, in which McLuhan and his epigones are described as "McLuhanatics," would have been significant to McLuhan, for whom homophony was not just an arbitrary coincidence of forms (Marchand, 1989, p. 63). McLuhan's mythological method relies on an appreciation of the way the distinction between form and meaning is less than absolute. In this way it is an "unpurified," nonmodern mode of knowing.

Modern Content in a Nonmodern Form

The nonmodern stance does not take the distinction between form and content to be categorical or fundamental, but this is not to say that it privileges form over content, or denies the value of the distinction. It is possible to contrast McLuhan's form with his content. When we do so, McLuhan appears only incipiently nonmodern. As we have just seen, McLuhan's form or method ignores the "great divide" underlying the modern stance. But the content of McLuhan's thought seems to reinforce it. Where Graziano, the neuroscientist, dwells entirely on one side of this divide, suggesting that consciousness does not happen, McLuhan dwells exclusively on the other side, suggesting that consciousness or perception is all we need to understand the "prolonged process" of the world. This is why he is so infuriating, or simply irrelevant, to strictly scientific thinkers.

Summarizing the content of McLuhan's work is tricky because it often seems incoherent. Still waters may run deep, but McLuhan's oeuvre is an instance in which deep waters are not still at all. McLuhan was a dichotomy-loving holist; an antimodern modernizer; a technological determinist who hoped to expand human autonomy; a celebrator of tactile, phenomenological experience who remained consistently abstract and conceptual; a cultural conservative effusing about a dawning new age; a

thoroughly literary thinker who seemed to revel in what he deemed the twilight of literary thinking. McLuhan's first book, *The Mechanical Bride*, gives him claim, with Barthes, to being a pioneer of cultural studies (Marchessault, 2005), yet his writing evinces little interest in the quotidian details of life as experienced by specific human subjects. Reconciling the irreconcilable is one of the key affordances of myth, and such contradictions are hallmarks of a mythological method.

Some of this turbulence may also be because the waters are deep only in places. McLuhan's later work in particular—what he published after *Understanding Media*—has been dismissed for its "breezy shallowness" (Winthrop-Young & Wutz, 1999, p. xiv). Even where the waters are deep, Alan Jacobs (2011) observes, "it's useless to take any one statement by McLuhan as indicative of his general orientation" (p. 130). There is at least one instance in McLuhan's sprawling and scattered oeuvre where he seems to anticipate the dynamic of the Anthropocene: "Man is an extension of nature that remakes the nature that makes the man" (McLuhan & Nevitt, 1972, p. 66).

The pronouncement is a nice summary—albeit in modern terms—of the key point McLuhan generally neglected. The notion that "nature makes the man" is at odds with the deeper signal that comes through the noise in McLuhan's barrage of ideas. This signal is that the future of humanity hangs in the balance not because of more-than-human nature at large but because of human-made technologies in particular. In effect, while McLuhan's method rejects the modern "purification" of subject from object or content from form, it embraces the related nature–culture distinction at the center of Latour's discussion in *We Have Never Been Modern*. Janine Marchessault (2005) claims that McLuhan "would refuse the nature/culture divide" (p. 74), and it seems that he *would.* However, because he dwells on the "culture" side of this divide, contemplating "nature" only as a space into which "culture" extends, we cannot say that he actually *does*.

Citing Erick Havelock, whose 1963 *Preface to Plato* appeared the year before *Understanding Media*, McLuhan interprets human history as defined by two broad modalities of psychology and culture, following from two basic communicative forms. The basic forms are spoken language on one hand and the technology of phonetic writing on the other. The corresponding modalities are oral or tactile culture and visual or written culture. Like Havelock, McLuhan understands phonetic writing as breaking the mythological, mimetic identity of symbol and substance, culture and nature, form and meaning. Phonetic alphabets purify or separate language from the sensual world in which oral language and ideographic writing participate, and in which a more "balanced," synesthetic "interplay of the senses" occurs. Phonetic writing is abstract, detached, and "linear," a form that accounts for the mechanistic cast of the modern mind. In McLuhan's history, modernity happens when the printing press carries the abstracting effects of the phonetic alphabet to a peak of intensity and scope.

McLuhan is remembered for his prophecy that electricity would reverse this modern condition, putting an end to the modern syndrome of mechanistic, abstract, "visual" thinking and bringing about what his student Walter Ong (1982) called "secondary orality." First suggested in the final section of *The Gutenberg Galaxy* (McLuhan, 2002a), published in 1962, electricity's "reversal" of print's effects was the theme of *Understanding Media*, which followed two years later. Electronic technology would "retribalize" culture where phonetic writing had "detribalized" it. It would end "linear," sequential patterns of thought

and being, "imploding" abstract literate culture back into the organic, holist, ecological simultaneity of oral culture. Electricity would resuscitate a relational form of understanding and being. It would reverse the alienation engendered by modernity. "The computer, in short, promises by technology a Pentecostal condition of universal harmony and unity" (McLuhan, 2002b, p. 80).

As a positive account of reality this is easy to poke holes in, though as a grand historical schema it is as richly suggestive and (im)plausible as any other. It points, in any case, to what is probably the most constant criticism of McLuhan: that he is a "technological determinist," disregarding human politics and culture as autonomous historical forces (Brantlinger, 2010; Carey, 1981; Fekete 1977; Williams, 2003). The position of McLuhan's most forceful defenders—that this critique is a complete "misreading" (Grosswiler, 2005, p. 284)—is hard to fathom. There is no denying the centrality of technology and technological change to McLuhan's narrative, or that technological change remains unaccounted for in his work. Rather than denying that this is technological determinism per se, it seems better to ask whether technological determinism might not have something to recommend it. As Peters (2015, p. 89) notes, flatly rejecting technological determinism seems to harden rather than soften the purified distinctions underwriting the modern stance. McLuhan's technological determinism is best read not as a disqualifying failure but as a first step toward breaking down Latour's first great divide between nature and culture.

But it is only a first step, and notwithstanding McLuhan's strikingly nonmodern method, he takes no further substantive steps to deconstruct the modern mythology of purification. McLuhan challenges a vision in which technologies appear as inactive channels between essential poles of nature and society, and to this extent, his "media" are a nonmodern concept, resembling Latour's "mediators" more than inert, neutral "intermediaries" (Van den Eede, 2013; cf. Latour, 2005). Yet McLuhan is modern in that his media are "extensions of man." McLuhan does not deconstruct the great divide between nature and society. Instead, he reconstructs it in terms of humanity and technology.

James Carey and John Quirk (1970) observed this first. Instead of treating technologies as mediating between human and nonhuman nature, McLuhan substitutes technology for nature. Instead of understanding technology as arising from human negotiation with the more-than-human world, he understands technologies as the unilateral "extensions of man" (the subtitle of *Understanding Media*). An often-cited précis of McLuhan's position—"we shape our tools and thereafter they shape us" (Culkin, 1967, p. 70)—expresses succinctly how McLuhan's hermeneutics are focused on the relationship between "man" and his technologies. Latour's nonmodern stance sees "symmetry" between human and nonhuman elements. For McLuhan, the line of symmetry runs between humans and our tools. The rest of the universe is mostly ignored.

This anthropocentrism, noted before (Harman, 2009), is connected to a distinctively Promethean stance. The purpose of *Understanding Media* is to pursue an "increase in human autonomy" (McLuhan, 2002b, p. 51), where *autonomy* means power over technologies whose relationship to the rest of more-than-human nature is unacknowledged and unexplored. McLuhan uses the tale of Narcissus as a metaphor for technology's power to enchant. In terms pregnant with Promethean ambition, he says: "Prediction and control consist in avoiding this subliminal state of Narcissus trance" (McLuhan, 2002b, p. 30). From a nonmodern perspective, McLuhan himself is Narcissus, fascinated by the reflection of humanity in

technology's mirror and disregarding more-than-human nature entirely. Exquisitely sensitive to technology's interactions with human physiology, psychology, and sociology, McLuhan remains numb, as he might have said, to technology's interactions with the rest of the world.

Bringing the Mountain to the Prophet

Expressing the relationship between human culture and more-than-human nature as a series of interconnections rather than a great divide, the Anthropocene is a nonmodern concept. It reflects a renewed recognition that nature and culture flow into each other. To the extent the distinction between nature and culture corresponds to the distinctions between form and content, object and subject, McLuhan's mythological form is nonmodern. As we have seen, however, the content of McLuhan's form is modern because, focused on humans and our technologies, it hardly touches on more-than-human nature at all. As human technique transforms the environment humans inhabit, McLuhan sees the "extensions of man" becoming "man's" environment. Culture passes into nature, but nature does not pass into culture.

To cast this into relief, and to carry McLuhan's prophecy into the Anthropocene, I bring the mountain to the prophet. The mountain here is Rukapillan, a glacier-capped volcano at the western edge of the Andes cordillera in the southeast corner of the Araucanía region of Chile. Although Rukapillan has its own distinctive voice, it speaks here for all mountains and for the more-than-human world in general. It illustrates the shortcomings in McLuhan's incipiently nonmodern stance and speaks to how his mythological method—with its hair-trigger sensitivity to the way representation flows in and out of nonrepresentational realities—is fertile ground for thinking about how culture and nature flow in and out of each other. McLuhan's method is an excellent way to think about the Anthropocene.

"If the hill will not come to Mohamet, Mohamet will go to the hill." When Francis Bacon put these words in the mouth of the prophet of Islam, he aimed at an anti-mythological point: that the world is inert to whatever significance our beliefs and mythologies attribute to it. Yet this very inertia raises mythological concerns. "Only the mountain has lived long enough to listen objectively to the howl of a wolf" (Leopold, 1970, p. 137). This well-worn quotation from Aldo Leopold calls attention to the way the relative permanence of mountains, along with their tremendous solid form, gives mountains an ontological depth that seems to rival conscious subjectivity. As in Latour's universe of nonhuman "actants," Leopold's mountains take on a kind of agency, sharing the world with humans as much as with wolves.

Mountains thus express a mythological continuity as well as an anti-mythological distinction between nature and culture. Mountains move us more than we move them, and human culture responds to them as it responds to the earth itself. Mountains affect the courses of roads as well as rivers. They constitute the boundaries of cultural and political communities no less than biotic communities, shaping the currents of discourse as much as currents in the troposphere. Mountains provoke Freud's "oceanic" feeling, and, from Kant to Burke to Schopenhauer, they are staples in discussions of the "sublime." Like the ocean or the sky, their presence points to an immensity that dwarfs perception—a reality that does not so much reveal itself as engulf the beholder.

If myths as we know them are stories told by humans, mountains speak of the way the world extending beyond the horizon of awareness (where consciousness doesn't happen) is the source of these stories. Mountains make the fundamentally mythological proposition that the world itself, prior to and independently from human life, is meaningful. They speak of the way myths are less a matter of culture projecting itself on to nature, than of nature and culture flowing through one another.

This can be glimpsed by considering the ubiquity of human-made images of Rukapillan in the area surrounding it (see Figure 1). These images of the mountain appear on billboards, signs, some rooftops, and even in the form of a small, conical building. Mountain images are central elements in the logos of the two municipalities that lie at the foot of the mountain as well as in advertising and marketing for local enterprises of all kinds, from hotels to shoe stores to hairdressers to schools. Representations run the gamut from photorealistic to abstract, highly stylized symbols. Their profusion expresses the volcano's presence, making visible the entanglement of nature and culture that modern "purification" obscures.

The most stylized of these images—inverted triangles of various colors and textures—are most compelling in this respect. Their resemblance to a mountain is ambiguous. Whereas they are straightforward representations of the mountain in their context, when removed by photography from that context and shown to people unfamiliar with their origin, most did not identify them as representations of a mountain at all. These more abstract images, it seems, have begun to take on some of the abstraction of linguistic symbols. Ideographs more than icons, their meaning is not in their form in isolation, but rather in the more extended form of the territory in which they are found.
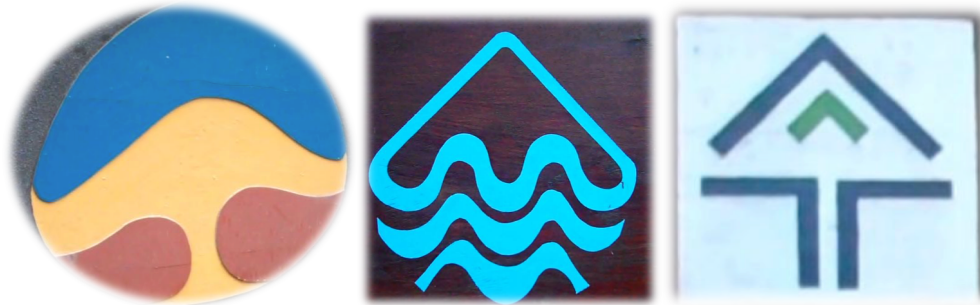

Figure 1. When separated from the mountain itself, abstract images tend not to be recognized as representing a mountain. Photographs by the author.

What makes these abstract images recognizable as representations of the mountain, in other words, is the presence of the mountain itself. Expressions of the mountain's presence as much as the presence of humans, they are meaningful because they are part of a network that is at once physical and semiotic, at once material and linguistic, at once natural and cultural. If the message of these signs is the mountain, the mountain itself is part of how this message is conveyed. It speaks both in and of the mythological level, where the distinction between symbol and substance is less than absolute, where the medium is the message. Recalling McLuhan's refusal to distinguish code from channel, and his corresponding claim that the content of a medium is always another medium, we might say that the mountain is at once the form of the content and the content of the form.

The mountain refutes the premise of the technological determinism critique of McLuhan: it shows that more-than-human actors matter. Moreover, the mountain punctures McLuhan's anthropocentrism, extending his mythological symmetry between medium and message to Latour's symmetry between nature and culture. Technological "extensions" of humans are not history's only nonhuman actors. Both humans and our technologies are extensions of something else.

Fundamentally, the mountain expresses that the modern stance is incomplete or inadequate for some purposes. Meaning is not purely cultural. It is not found (if it is found at all) on one side of a great divide separating it from form. Instead, it emerges from an impure world in which content and form, presentation and re-presentation, nature and culture flow constantly into one another. Our myths do not arise from an autonomous human center, but rather from what Barthes (1982)—in his quintessentially modern hostility to myth—called "the turnstile" of meaning and form. They arise, that is, through the mutual immanence of culture and nature, human and nonhuman, unconsciousness and consciousness, subject and object. Myths index the way we *are* (unconsciously or impurely) the world, even as we are (self-consciously or purely) separate from the world.

Conclusion

McLuhan can be read as a proto-nonmodern writer, a precursor to Bruno Latour, and to the relational way of thinking of which Latour is a leading exponent. McLuhan's mythological, literary approach to understanding is an age-old method that predates print technology and what Latour calls the modern "purification" of culture from nature. *We have never been modern* because modernity does not render this approach irrelevant. Mythological perceptions are not antithetical to scientific findings. Such is the unremarkable, nonmodern lesson of McLuhan's remarkably unscientific work.

The content of McLuhan's mythology, I have argued, is what makes him only ambivalently nonmodern. In vague but compelling terms, McLuhan foresaw the challenges and benefits of the information age, as electronic communications transformed human culture. What he does not seem to have foreseen is the nonmodern dynamic of the Anthropocene, as the relationships between human and more-than-human nature intensify. Notwithstanding his willingness—at once backward and forward looking—to use nonrational, nonmodern methods to seek understanding, McLuhan embraced a modern, Promethean narrative in which "man" colonized or displaced nature with technology, surrounding himself with his own extensions. In McLuhan's vision, history passes into nature as "the extensions of man" become the environment humans inhabit.

The mountain has shown us reciprocal extensions in the other direction: the more-than-human world extending into human life and culture. It shows us the continuity between the world and our representations of it—something McLuhan's nonmodern, mythological approach is highly sensitive to. But the mountain also makes clear McLuhan missed something important: myths are not made by humans and our tools alone. The mountain thus helps us communicate the Anthropocene, pointing to the mythological dimension of climate change. To speak of climate change as a myth is not to say, as the authors cited at the beginning of this essay would have us believe, that it is untrue. It is instead to recognize it as one of Latour's hybrids, a quasi-object constituted in ideas as much as in physical facts,

a site where culture and nature mingle. It is to recognize, in the words of the astrophysicist Adam Frank (2018), "a biosphere that is also awake to itself and can act for its future" (p. A25).

Technocracy is a central feature of contemporary life, but the halting, often regressive response to the slowly unfolding challenge of climate change testifies to a gap between policy and the needs identified through technocracy's rational empiricism. Narrowing this gap is not a matter of becoming more modern—of purging myth from the world and purifying knowledge of imagination. It is not a matter of reducing culture to technocracy, but of maintaining and extending a cultural framework in which rational empiricism is respected, valued, and trusted. Technical rationality needs myth in order to be incorporated into what Habermas (2004) called "the practical consciousness of the social life world" (p. 82). This is why Mike Hulme suggests building myths around climate change, inviting the modern sarcasm of the NIPCC authors. As Hulme (2011) writes, "science has universalised and materialised climate change; we must now particularize and spiritualize it" (p. 330). Mythology is the means to this end.

The validity of scientific rationalism is underwritten by an ontological integrity that is not itself scientific; scientific models are not the perfect reflections of the world that the anti-mythological mind would take them for; scientific knowledge depends on communities of trust; and it is impotent and worthless to democratic purposes if it is not recognized and acted on by the larger, more-than-scientific community. For these reasons, the popular, prophetic success of Marshall McLuhan's mythology should not be taken as a reason to dismiss him. It is better understood as an instructive example of how mythological understanding can complement rational empiricism. Myth can easily diverge from empirical facts, but such divergence is not its defining feature. Enlightenment may consist in minimizing this divergence—in making reason and myth sustain each other.

Alan Jacobs (2011) suggests that once we have recognized the value of McLuhan's humanist approach to understanding our technical age, there may be no need to continue to read his work. It is a stark assessment, but it is not entirely at odds with what I have tried to say here: that McLuhan's nonscientific, nontechnical, and nonmodern approach is what is most valuable in his work. In line with the principle that the medium is the message, I endorse McLuhan's way of knowing more than any specific knowledge he suggested. The Anthropocene means the human species is transforming the planet on which it evolved in ways we cannot fully understand or foresee, though we surely need to try. McLuhan's method stands as a vivid reminder that we will best succeed if we allow nonmodern mythology to complement modern epistemology—or more prosaically, if we recognize continuity between the arts and the sciences.

The force of this reminder is, of course, inseparable from the content of McLuhan's vision. Neil Postman (2000) dubbed the broad set of concerns McLuhan raised about the relationships between humans and our technologies "media ecology." Media ecology combined a nonmodern, mythological approach with a distinctly modern hope for increased human autonomy. Yet mythology is well suited for emphasizing not just the autonomy of humanity and its relationship to technology, but its intimate, constitutive connections and continuities with the more-than-human world. McLuhan's mode of thinking can thus easily be extended into a more thoroughly nonmodern perspective, alive to the continuities

between humans and the rest of the world. This more environmentally sensitive perspective has been called "deep media ecology" (Arroyave-Cabrera & Miller, 2017; Stephens, 2017), and it embraces the integral awareness McLuhan extolled to extend the psychological and cultural concerns of the global village into the environmental concerns of the Anthropocene. It recognizes media technologies not only as conditioning human perception but also as transforming (contaminating) the more-than-human ecosystem from which they themselves—together with human perception—emerge. This is what the mountain brings to McLuhan.

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