

# Under Ground

In an age where the human has been fundamentally displaced and disoriented, physically as well as philosophically, how do we make ecological and aesthetic sense of this new and drastically “enlarged arena”? Further, how might we rethink cultural disciplines like architecture, which allow us to inhabit the world in conceptual, experiential, as well as mechanical terms? Should architecture displace itself as well, in order to establish new affiliations beyond the human? And if so, what does it mean for architecture to define itself as something no longer significant for ‘us’ alone?

*“It’s the end of the world as we know it.”*

—REM<sup>1</sup>

## INTRODUCTION

The rapid-fire advancements of the Industrial Revolution, beginning with the invention of the steam engine in 1784, introduced the circuitry and atmospheric effects that have come to define the world we live in.<sup>2</sup> This initial proliferation of machines automated and extended the human capacity to transform embodied energy into fuel, resulting in unprecedented rates of production. Such proliferation fostered an ongoing obsession with the machine, both in terms of its functionalism and its aesthetics, which extended into the postwar years of the 1950s. Within the discipline of architecture during the first and second waves of Modernism, Le Corbusier’s carefully cultivated industrial “machine aesthetic” and Alison and Peter Smithson’s prototype for a mass-produced plastic “House of the Future” personified such themes.<sup>3</sup>

Beginning in the eighteenth century and peaking in the nineteenth, mortality from urban conditions accelerated exponentially. While significantly attributed to infectious diseases and poor sanitation, possibly an even larger factor was industrial pollution.<sup>4</sup> This phenomenon was understood ecologically but solely as a localized condition. It wasn’t until the late 60s that global concerns regarding the collateral effects of industrialization on both human and environmental health arose with a sense of urgency. In 1970, the same year that Richard Nixon signed the National Environmental Policy Act that resulted in the formation of the Environmental Protection Agency, Robert Smithson completed Spiral Jetty. This rugged landform composed of mud, rock, and salt was sited within a “natural” setting that was itself shaped by decades of industrial activity in the Great Salt Lake of Utah. Arguably the most influential work to emerge from the burgeoning Land Art movement, Spiral Jetty personified skepticism among a new generation of artists for the rhetoric of progress associated with industrialization. At the same time, there were a series of major publications in 1969 and 1970 that signaled a similar philosophical shift within the related fields of sociology, architecture, and landscape architecture, including John McHale’s *The Ecological Context*,

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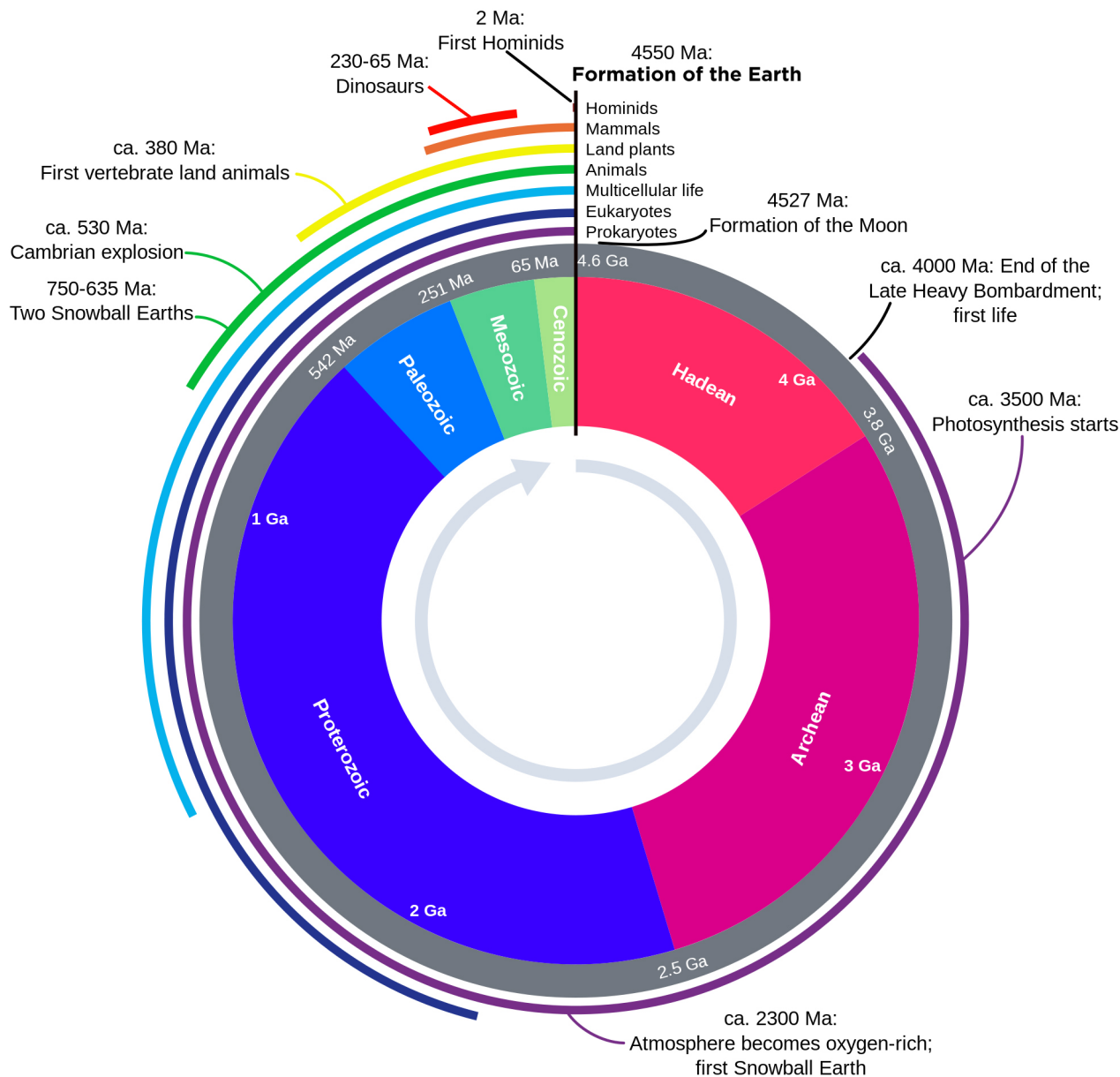
Reyner Banham's *Architecture of the Well-Tempered Environment* and *Los Angeles: The Architecture of Four Ecologies*, and Ian McHarg's *Design with Nature*.

We might understand our current moment as a redux of the late 60s and early 70s.<sup>5</sup> After four decades of relative indifference to environmental issues, contemporary artists, architects, and landscape architects find themselves faced with an increasingly alarming ecological crisis. Forty-three years after Nixon signed NEPA with the declaration that the 70s "absolutely must pay its debt to the past by reclaiming the purity of its air, its waters, and our living environment,"<sup>6</sup> Barack Obama called for new and urgent legislation on environmental regulation. At a speech at Georgetown University, Obama stated simply, "We need to act."<sup>7</sup> If anything, the growing signs of environmental degradation that became apparent to the public in the late 60s, seen principally at local scales and at most a national problem, have escalated into a global crisis. What has become known as the Anthropocene can be understood as a new geological age characterized by human's anthropic effects on the planet. Though the term has been popularly adopted and is in use by most scientists, it remains officially in limbo. Most consider the onset of the Anthropocene to be tied to the onset of Industrialization in the late eighteenth century, but there is a faction fighting for its datum to be Oppenheimer's Trinity nuclear test of 1945. Nevertheless, they agree on the human as a primary agent of massive ecological change. This era of the Anthropocene lends a tangible identity to a new period in which we live—a period of increasing existential threat.

Timothy Morton goes so far as to suggest that this looming ecological catastrophe may have, in fact, already happened. He likens the threat to "a slow-motion nuclear bomb" ignited at the dawn of the Industrial Age, the irreversible and catastrophic effects of which have only recently become evident.<sup>8</sup> In a sense we already know Morton's hyperobjects because they are our environment; despite their invisibility, the anxiety they induce is already our *milieu*.<sup>9</sup> Global warming, for instance, can be understood as a hyperobject, in that it is "massively distributed in time and space relative to humans." The principal result of global warming, commonly referred to as climate change, may be impossible to represent in its totality. However, it has unmistakable effects and manifestations across vast scales and localities, whether in the form of regional droughts or the global phenomenon of glacier retreat, each of which index the hyperobject as a material, albeit elusive, entity in the world.

These hyperobjects have a way of fundamentally displacing human orientation in the world, and according to Morton, force us to *grok*<sup>10</sup> that we now inhabit a new and dramatically different world. Beginning in the eighteenth century with William Kent's famous leap over the garden wall and subsequent discovery that "all nature (is) a garden", stretching to Nixon's exhortations in the late 70's for the creation of the EPA, we have witnessed a gradual erosion of a once-dominant concept of world premised on a constructed fantasy that humans exist outside of "nature" (itself a human construct). Ian McHarg suggests that this 'leap over the garden wall' "...did not occur until a new view of nature dispelled the old and a new aesthetic was developed consonant with the *enlarged arena*."<sup>11</sup> In the eighteenth century, this "new" aesthetic was the picturesque, which unlike the geometric world of Renaissance ideals, elevated larger scale works that operated both aesthetically and functionally, blurring the boundary between natural and artificial. Its defining characteristics came from "nature" itself, and included asymmetry, sudden variation, and wildness. Because of its capacity to work loosely and at larger scales to design productive landscapes (orchard, farm field, forest, etc.) the picturesque also became a way of thinking about regions and cities.

Over two hundred years later we are sitting at one of these new world junctions, the Anthropocene, trying to make ecological and aesthetic sense of a drastically "enlarged arena". In the eighteenth century, this "enlarged arena" brought on by the presence of the "machine in the garden"<sup>12</sup> engendered a departure from geometry and containment to



an interest in the aesthetics of nature itself. This period produced the odd truism “Nature abhors a straight line”. In the twenty-first century, the arena has enlarged drastically, exponentially, beyond the local and global to the galactic, but most importantly, the human is no longer the center of this universe. We are so far beyond the inside/outside dichotomy that we have superseded the dialectic to an as of yet unknown third condition.<sup>13</sup>

Unlike its anthropocentric predecessor, this new world does not seem to tolerate separation between humans and nonhumans but rather imposes an “asymmetrical confrontation” between the two.<sup>14</sup> Whether we are prepared for this or not “nonhumans have finally infiltrated human social, psychic and philosophical space.”<sup>15</sup> Morton argues, “hyperobjects seem to force something on us, something that affects some core idea of what it means to exist, what Earth is, what society is.”<sup>16</sup> Dynamical systems such as those described by Morton are understood as a lineage including Goethe, an ecological concept that Sanford Kwinter ascribes originally to Alexander Von Humboldt and his notion of “Alles is Wechselwirkung”, translated as “Everything is connected” (but more aptly, according to Kwinter, as “All is

Figure 1: Stratigraphic chart which visualizes the Earth’s geological ages over the course of 4.6 billion years. Noticeably, the age in which humans occupy the planet is too small to be legible. Image Credit: International Commission on Stratigraphy.

Interaction“). We walk away understanding that Von Humboldt invented the habits of thinking about form and nature as an expression of interactions that more or less incorporate or synthesize the environment itself.”<sup>17</sup>

Similarly, the recent development of “speculative realism” in continental philosophy orients itself around a fundamental questioning of anthropocentrism that holds some affinities with philosopher Alfred North Whitehead and in general “process philosophy”. As Steven Shaviro argues in his recent book *The Universe of Things: On Speculative Realism*, this critique of anthropocentrism, coupled with the increasing threat of ecological catastrophe, recognizes “that the fate of humanity is deeply intertwined with the fates of all sorts of other entities,” and that, given “how closely related we are to all the other living things on this planet, we cannot continue to consider ourselves unique.”<sup>18</sup> Hence, this mode of thought displaces the centrality of the human subject, replacing it with a new conception of the world as a world of objects without subjects. In this new world, the human becomes merely another player among many; whether rocks, plants, weather systems, or fellow mammals, each entity maintains its own forms of interaction with the other. And it is this interactive, or “interobjective” condition that characterizes a world in which no object is privileged over another; hence, a world without subjects. In this new conception of the world then, the human can no longer be viewed as central or unique to, and thus apart from, its fellow nonhuman objects, but rather, always and already a part of them.

Thus, if the human and the nonhuman alike are seen to “inhabit some etheric shared space between objects”<sup>19</sup> in a world without subjects, how might humans engage this new existential condition in practical as well as discursive terms? In other words, in an age where the human has been fundamentally displaced and disoriented, physically as well as philosophically, how do we make ecological and aesthetic sense of this new and drastically “enlarged arena”? Further, how might we rethink cultural disciplines like architecture, which allow us to inhabit the world in conceptual, experiential, as well as mechanical terms? Should architecture displace itself as well, in order to establish new affiliations beyond the human? And if so, what does it mean for architecture to define itself as something no longer significant for ‘us’ alone?<sup>20</sup>

#### **UNDER GROUND: A FOLLY FOR THE ANTHROPOCENE**

Anthony Vidler writes that “as a vehicle for all sorts of fashionable literary notions, from the sublime to the picturesque, the folly exhibited them in a kind of museum of meditative objects.”<sup>21</sup> Whether deployed at the Garden at Ermenonville in the late eighteenth century or at Parc de la Villette two hundred years later, the folly is a unique cultural typology in that it is located within the discipline of architecture as well as that of landscape architecture. The folly also provides a unique space for design experimentation and theoretical inquiry unfettered by the prosaic utility or practical constraints of building. In part due to its association with excess, the folly is frequently reviled or regarded as a useless object. Despite this association, however, or perhaps because of it, the folly provides a screen on which to project innumerable provocations, whether louche, decadent, or reflective of dark ideals of terror and decay. As such, the folly might also be seen as a cultural typology conversant with fine art; in particular, conceptual works of land art and installation art. Bernard Tschumi’s interest in the folly dating back to the initiation of *20th Century Follies* in the late 1970s is premised precisely on the concept of a “useless architecture”<sup>22</sup>. Tschumi’s follies were theorized by Derrida as *La Case Vide* (the empty case), meaningless or anti-symbolic and therefore empty vessels whose only meaning derives from changing forms of human occupation<sup>23</sup>— an ambiguous architecture that despite its functionless and to some extent non-architectural status should not necessarily be confused with sculpture, land art, or installation art.<sup>24</sup> In this, the folly would seem to be a strangely extra-disciplinary typology that migrates between architecture, landscape architecture, and the fine arts.





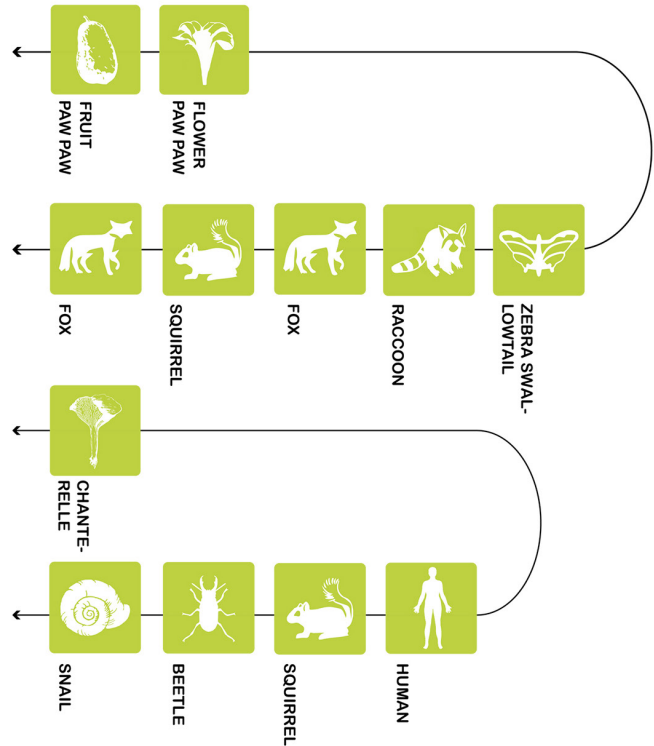
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A similarly ambiguous definition of the architectural folly can be found in the introduction to the catalogue of *Osaka Follies*, an exhibition staged at the Architectural Association in 1991. Arata Isozaki writes: the folly “isn’t quite architecture...isn’t quite sculpture. Rather, the folly is a thing that structures new meaning through public contact.”<sup>25</sup> These two definitions of the architectural folly suggest that, despite its uselessness as a conventional building, aesthetics activated by it might be seen as having their own form of usefulness or performativity, albeit an intellectual or conceptual one. Sensory experience carries with it the potential to promote discourse and, in turn, new forms of cognition, awareness and, eventually, action.

Commissioned by and situated within the sprawling sculpture park of the OMI International Arts Center in Ghent, New York, this proposal seeks to evoke human displacement and disorientation, as a physical and a philosophical condition, in material, formal, and spatial terms. An ambiguous object located somewhere between human and nonhuman space, the folly privileges neither. Instead it seeks to engender the paradoxical condition of simultaneous proximity and separation between the two. In this way, the human’s experience of the folly mirrors that of human society’s experience of a planet altered by the effects of climate change—it is an experience characterized by ambiguity, uncertainty, and the uncanny associated with new forms of intimacy between humans and nonhumans. As such, the folly is understood to be an object belonging to the new and drastically “enlarged arena” of the Anthropocene age.

The folly is comprised of self-supporting gabions, filled with a matrix of local stone and prodigiously planted with natives designed to foster biodiversity among an extended ecology of insects, birds, and small animals. Humans are able to enter the folly but in a way that is intentionally uncomfortable, claustrophobic, and displaced from any point of assumed privilege. In this way, the gabion structure operates as a double enclosure for human as well as nonhuman inhabitation, producing variable forms of interiority and with it an intentionally ambiguous threshold between human and nonhuman space, degrees of interiority and by extension, architecture and landscape. Configured as nine hollow “columns” or vertical planters, the interiors of which are filled with gravel, soil, and vegetation, modest interstitial spacing between each of these columns generates a second interstitial interior for human occupation.

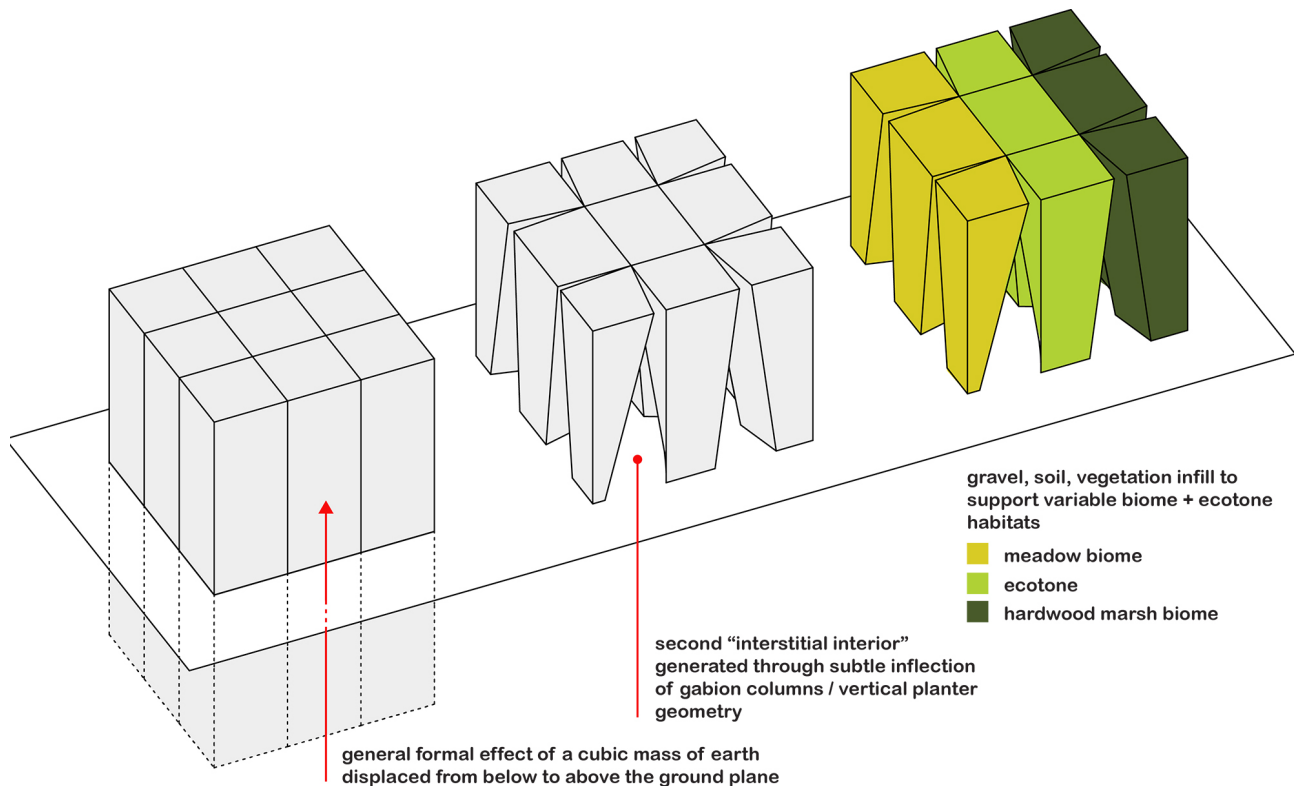
Figure 2: *Under Ground: A Folly for the Anthropocene*. Rendering / photomontage of proposed folly situated at the edge of OMI International Art Center’s sculpture park in Ghent, New York, an inherently ambiguous space belonging neither to “nature” nor “culture”. As such, this edge condition necessarily serves as a zone of exchange between human and nonhuman forms of inhabitation, for which the folly provides a space of intensification as simultaneously a “cultural object” located within the sculpture park’s space of exhibition and a “natural object” both visually and ecologically linked to the tree line. Image Credit: *pneumastudio*.



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Figure 3: *Under Ground: A Folly for the Anthropocene*. Left: Axonometric rendering of the folly, which depicts the project’s principal formal gesture: a large section of earth, along with its various nonhuman inhabitants, displaced from the ground. In turn, this formal and material displacement serves to displace the conventions of human-nonhuman relations. Right: Ecology diagram which illustrates human as well as nonhuman forms of inhabitation that the folly supports, the latter of which includes vegetation, insects, and wildlife. The Paw Paw tree (*Asimina triloba*) is a fruit tree native to North America, related to the tropical papaya. It is not widely distributed due to a recent (10,000 years) Quaternary extinction event. Ecologists have been re-propagating the Paw Paw because its clonally growing root systems buttress stream bed edges and its fruit was an exotic bounty favored by Thomas Jefferson. Image Credit: pneumastudio.

Taking the form of a series of crevice-like spaces, this second interior forces the human body to bend, duck, and slither, suggesting to human occupants that these spaces, while physically accessible, were not necessarily designed for them. Furthermore, the materiality and atmosphere of the folly’s second interior confronts the occupant with a quality of “nature” that is typically kept at a more comfortable distance, a quality akin to David Gissen’s concept of “subnature.”<sup>26</sup> He offers up the term dankness as an aesthetic that “...contains qualities relative to specific local materials or regions (a terroir, so to speak)” as well as the idea of wetness and constraint as producing pleasure.<sup>27</sup> As such, the folly’s second interior simulates material and atmospheric qualities characterized by dampness and lack of daylight; a dark, musty “underground” environment conducive to the proliferation of moss, slugs, and spider webs. In this way, the gabion structure is merely a graded container for gravel, soil, and roots, in effect a displaced section from the earth itself, hosting various subterranean nonhuman objects and processes that are typically concealed in the depths of the ground. All the while, the more familiar forms of “nature”—the plants, trees, butterflies, and birds inhabiting the top of the folly—are intentionally lifted away from the human and thus remain physically, and to some extent, visually inaccessible. As a result, the human’s conventional orientation to “nature” can be understood as displaced in multiple ways: No longer safely above ground, the human moves into and, in effect, underground, thus occupying a simultaneous interior/exterior condition, philosophically as well as experientially, whereby human–nonhuman distinctions are rendered ambiguous.



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## ENDNOTES

1. "It's the End of the World as We Know It (And I Feel Fine)" is a song by the alternative rock band R.E.M., which appeared on their 1987 album *Document*. The song's apocalyptic bent hit a collective nerve.
2. Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford University Press, 1964), p.35.
3. For more on Le Corbusier's "machine aesthetic," characteristic of his work prior to World War II, see Reynier Banham, "The Machine Aesthetic," *Architectural Review* (April 1955). For more on the aesthetic of mass consumption and expendability characteristic of the postwar period, see Nigel Whitely, "Toward a Throw-Away Culture: Consumerism, Style Obsolescence, and Cultural Theory in the 1950s and 1960s," *Oxford Art Journal*, Vol. 10, No. 2, The '60s (1987), p.3–27.
4. W. Walker Hanlon, "Pollution and Mortality in the 19th Century" (UCLA and NBER, September 30, 2015).
5. In his essay "Whatever Happened to Ecology?" published in the 2010 *Architectural Design* issue *Eco-Redux: Design Remedies for an Ailing Planet*, Anthony Vidler suggests that questions related to "ecology" and "environment" initiated by McHale and Banham have only recently resurfaced in architecture discourse.
6. Richard Nixon, "Statement About the National Environmental Policy Act of 1969". Signing of the National Environmental Protection Act of 1969, Richard Nixon Private Residence, San Clemente, California, January 1, 1970. For more on Richard Nixon's formation of the EPA, specifically as it relates to architectural discourse in the early 1970s, see Reinhold Martin, "Environment, c.1973," in *Grey Room*, no. 14, Winter 2004 (MIT Press), p.78–101.
7. Barack Obama, "Remarks by the President on Climate Change", Georgetown University, Washington, D.C., June 25, 2013.
8. Timothy Morton, *Literature and the Environment*, University of California at Davis, Fall 2008 (iTunes U).
9. *Ibid.* Morton defines hyperobjects as "'hyper' in their inescapable relation to some other entity," whether "directly manufactured by humans or not."
10. The word "grok" is considered American slang according to the O.E.D. The word's first known usage was by Robert Heinlein for his 1961 science-fiction novel, *Stranger in a Strange Land*, where it is defined as follows: Grok means to understand so thoroughly that the observer becomes a part of the observed—to merge, blend, intermarry, lose identity in group experience. It means almost everything that we mean by religion, philosophy, and science—and it means as little to us (because of our Earthling assumptions) as color means to a blind man.
11. Ian McHarg, *To Heal the Earth: Selected Writings of Ian L. McHarg* (Washington D.C. Island Press, 1988), p.41-43.
12. For a reading on this topic, see Leo Marx, *The Machine in the Garden: Technology and the Pastoral Ideal in America* (Oxford University Press, 1964)

Figure 4: Under Ground: A Folly for the Anthropocene. Axonometric diagrams that depict the following:

- 1.) The project's principal formal gesture: a large section of earth displaced from below to above the ground plane.
- 2.) The folly's nine-square columnar structure: made out of gabion, the folly's formal system provides two types of enclosure, one for nonhumans (the interior volume of each column), and one for humans (a second "interstitial interior" located in between the columns, which is produced by inflecting the column geometry)
- 3.) Ecotones and biomes: An ecotone is a transition zone between two biomes. It is where two communities meet and integrate, a transitional area that typically sponsors greater species diversity and population than its adjacent biomes. Image Credit: pneumastudio.





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Figure 5: *Under Ground: A Folly for the Anthropocene*. Scale model of the folly installed at Clermont Historic Site in Clermont, New York for a group exhibition titled "Potential Fields" organized and sponsored by CR10 Arts. The model is comprised of the following materials: 3D prints, modified plastic aquarium plants, aquarium pebbles, floral wire. Image Credit: pneumastudio.

13. Sanford Kwinter, "Combustible Landscape" in *Projective Ecologies*, Chris Reed and Nina-Marie Lister, eds. (Actar, 2014), p.338. "This is what I will call 'Immanentism' a further central feature of 'ecological thinking' according to which the distinction between organism and environment, inside and outside, is merely one of degree: a greater or lesser compression or dilation of information or life."
14. Timothy Morton, "Art in the Age of Asymmetry: Hegel, Objects, Aesthetics," *Evental Aesthetics* 1, no. 1 (2012), p.130.
15. *Ibid*,133.
16. Timothy Morton, *Hyperobjects: Philosophy and Ecology After the End of the World* (University of Minnesota Press, 2013), p.15.
17. Sanford Kwinter. "Combustible Landscape" in *Projective Ecologies*. Chris Reed and Nina-Marie Lister, eds. (Actar, 2014) p. 338. From Kwinter we also receive the notion that what's truly happening in any given landscape isn't what's seen but in "...the embedded structure that holds it together, to the organization of forces and especially to the history and sequence of their appearance in the system."
18. Steven Shaviro, *The Universe of Things: On Speculative Realism* (University of Minnesota, 2014), p.1.
19. Timothy Morton, "Art in the Age of Asymmetry: Hegel, Objects, Aesthetics," in *Evental Aesthetics* 1, no. 1 (2012), p.136.
20. Timothy Morton, "Architecture Without Nature," in *Tarp Architecture Manual: Not Nature* (Spring: 2012), p.3.
21. Anthony Vidler, "History of the Folly," in *Follies: Architecture for the Late-Twentieth-Century Landscape*, B.J. Archer and Anthony Vidler, eds. (Rizzoli, 1983), p.10.
22. For more on the architectural folly as "useless architecture", see Bernard Tschumi, "Broadway Follies", in *Follies: Architecture for the Late-Twentieth-Century Landscape*, B.J. Archer and Anthony Vidler, eds. (Rizzoli, 1983), p.42.
23. Jacques Derrida, "Point de Folie—Maintenant L'Architecture", in "Bernard Tschumi: La Case Vide—La Villette", *AA Files*, No. 12 (Summer 1986), p. 65-75.
24. For more on a discussion of follies in relation to Bernard Tschumi's work, see the interview "Architecture Beyond Architecture: Cathryn Dwyre and Chris Perry in Conversation with Bernard Tschumi", in *PAJ: A Journal of Performance and Art*, No. 109, a special issue on *Performance and Architecture* guest-edited by Cathryn Dwyre and Chris Perry (MIT Press, 2015), p.8-15.
25. Arata Isozaki, "Osaka's Green Crossroads" in *Osaka Follies* (Architectural Association, 1991), p.5.
26. For more on the concept of "subnature," see David Gissen, *Subnature: Architecture's Other Environments* (Princeton Architectural Press, 2009).
27. *Ibid*, p. 42