THE HYPE OF REPRESENTATION: some thoughts on the roles of the hyperreal and the hyperobject in contemporary landscape architecture

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Abstract

This article argues that there are two main modes of representation in contemporary landscape architecture; the hyperreal and the hyperobject. The article compares and contrasts these modes identifying their various meanings and potentials. The hyperrealism of the images used by landscape architecture offices gives clients a sense of confidence and comfort in the world they and the designers are aiming to create. Seemingly innocent, these images can however serve to disguise the deeper, structural ecological and social problems facing contemporary cities and reinforce landscape aesthetics as exclusively picturesque. Contrary to this today in universities students and professors are trying to visualize landscape not as scenic but as complex environmental processes. The interest in visualizing flows beyond the scenic frame is heightened and made necessary by the overarching crisis of climate change and the advent of the Anthropocene. To produce a landscape architecture of our age, we need to grapple with these challenges and attempt to draw connections between the macro scale of hyperobjects and the micro scale of daily life.

Keywords

Hypereal, hyperobject, representation, time, image

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hy·per·re·al: 1 exaggerated in comparison to reality: *his characters are hyperreal rather than naturalistic*. 2 (of artistic representation) extremely realistic in detail.

hyperobjects: not yet listed in dictionaries other than Wikipedia according to which "are objects which have a vitality to them but you can't touch them, like race or class, or climate change. Their effects may be experienced even if they cannot be necessarily touched".

There is a serious rift along representational lines in contemporary landscape architecture. On the one hand the profession seeks to produce ever more hyperreal images of landscape views to sell their projects, whereas in the academy the primary concern is with trying to visualize environmental processes and relationships that are largely invisible to the naked human eye. Per the philosopher Timothy Morton, these invisibilities are known as "hyperobjects" – amorphous things like climate change, the 6th extinction, or the depletion of ground water; things we know to exist as large forces, but of which we can only see fragmentary evidence and are difficult to engage with.

Although hyperreal and hyperobject images are both made by computers, the former pretend to be seen 'naturally' as if by the human eye, whereas the latter can only be 'seen'—or rather mapped– by disembodied machinic eyes such as satellites and drones as well as through digital simulations of data derived from sensors. Setting these two modes of representation—the hyperreal and the hyperobject– in contradistinction opens up important issues regarding landscape architecture's historical moment.

The Hyperreal

If you look at the images that flash up on the websites of the world's major landscape architecture offices (Fig. 1) and keep an eye on the images they use to win design competitions it is plain to see that hyperrealism is the profession's preferred mode of representation. These increasingly immersive and high-resolution images share several key characteristics. First, they are perspectival and, as already noted, typically constructed from the single (human) viewpoint or, if the project is large then sometimes the viewpoint will be lifted to that of a bird. Second, they are generally structured in a picturesque, or more precisely a 'beautiful' manner, meaning they almost always have a framed foreground, a middle ground focus, and a background typically free of any urbanity or industry that would otherwise pollute the bucolic ambience of the scene. Where such pollution is admitted it is deliberately set in stark contrast to the redemptive green

of the design being advertised, which leads to the third point: the images are almost invariably verdant – every leaf bristling with life in the high-resolution detail. This means these images are also typically frozen in time - usually about 20 years into the future when the vegetation is mature. Needless to say, the scenes are generally sunny and occupied by stylish, fit, happy (mainly white) people enjoying themselves in a healthy landscape. One can only assume that the hyperrealism of these images casts a certain spell over clients and the public, giving them a sense of confidence and comfort in the world they and the designers are about to join hands in virtuously creating. And even though everyone knows these images are not telling the truth exactly, the ineluctable power of hyperrealism is that it stares you straight in the eye and insists that it is.

That clients, the public and no doubt many landscape architects like to indulge in the fantasy of an ecological paradise based on 18th century aesthetics (albeit produced now by computers) requires a level of psychoanalysis beyond the scope of this brief article, but I can, at least in passing, make some comments worthy of further discussion. Apart from their sappy nostalgia and their shameless kitsch – neither of which need automatically be negative aesthetic qualities– the problem with hyperreal images of landscape as eco-paradisical is not so much what they show, but what they don't. Seemingly innocent, these images can serve to disguise the deeper, structural ecological and social problems facing contemporary cities. Their dreamy pleasantries distract us from, and smooth over the simmering socio-political tensions that lie beneath the surface of biophilic gentrification. These images anaesthetize their audience, and by extension numb us to the possibility of any socio-political action other than passive observation. Finally, by recapitulating landscape as scenicly beautiful, hyperreal eco-paradisical imagery also forecloses the possibility of aesthetic invention in the discipline.

At the root of this brand of hyperealism are difficult questions of representational honesty for designers. And by raising this I'm not suggesting that we must now rerun the history of modern art as if expressionism, cubism, surrealism and minimalism are any better than picturesque hyperrealism, rather I am suggesting that if the paradisiacal and the ecological are landscape architecture's most important subjects–as I think they probably are– then representing them shouldn't be made to look either easy or conventional. To be clear, on the one hand I am for an honest aesthetic of ecology; one that shows its machinic roots and confesses to just how hard it is to restore ecosystems. On the other, I am also for a wildly dishonest aesthetic of paradise; one that is overtly full of fantasy. As Baudelaire famously said of 19th century theatrical stage sets "These things, because they are false, are infinitely closer to the truth; whereas the majority of our landscape-painters are liars, precisely because they have neglected to lie." (Baudelaire, 1965). As I see it, the problem with the hyperreal is that it finds itself suspended between truth and fiction without exercising and enjoying the full potential of either.

The Hyperobject

Contrary to perspectival hyperrealism fixed in time, in the salons today students and professors are trying to visualize landscape not as scenic but as complex environmental processes. These landscapes are often depicted as maps, animations, point clouds, or thick sections which often try to include the added dimension of time.

Of course, awareness that what we see as a given landscape is only ever a moment in larger processes of change is nothing new, but having digital tools to model and map these flows beyond the scenic frame certainly is. The interest in visualizing these flows is heightened and made necessary by the overarching crisis of climate change and the advent of the Anthropocene. In the sciences this anx-

Fig. 1 – Screen shots of hyperreal images from prominent landscape architecture firms by Madeleine Ghillaney-Lehar.

iety has manifested as the discipline of Earth system science which is devoted to modelling the fluctuations within and relationships between the hydrosphere, lithosphere, biosphere and atmosphere and most importantly, how human actions impact these systems over time. In the arts it has manifested as the discipline of Environmental Humanities in which the world is reevaluated as non-hierarchical and non-dualistic and the human subject is situated as just one actor in larger ecological and political networks wherein all species and all forms of matter have both rights and agency.

Together, the hyperobjects of climate change and the Anthropocene constitute our Copernican revolution; stretching our imaginations to new reaches of (earthly) space and time. Indeed, climate change demands that we now almost routinely connect the molecular with the planetary, just as the concept of the Anthropocene requires that philosophically, spiritually and materially we collapse culture into nature and situate ourselves in geological time. Further, if we now triangulate climate change and the Anthropocene with the horror of the 6th Extinction then we find ourselves looking into a mirror where human identity is being unsettled and interrogated as never before. It is little wonder then that there is a frenzy of aesthetic activity in both the sciences and the arts as we fumble in the dark to represent these extraordinary and emergent senses of place.

The school from where I write, (Penn) has been trying to articulate the nature of hyperobjects and our connection to them since 1969 when Ian McHarg first published his analytical 'layer cake' diagrams. These layered maps attempted to show in cartoon form how the earth works by building upon itself, but McHarg's achievement was not just that he succinctly described this process but that he then compressed his layers to form a template for how we should engage with it. In other words, for better or worse, McHarg gave us both analysis 'and' agency. Anu Mather has also devoted her career to articulating the hyperobject of the hydrological cycle and connecting it with culture and place. James Corner's early work shifted picturesque landscape imagery into modernism via montage, which in turn shifted mapping from positivism into the realm of the imagination to also build an argument for design. My own *Atlas for the End of the World* engages directly with the 6th extinction, by appropriating the apparent neutrality of mapping and turning it onto itself as a critique of modernity since the first Atlas was made in 1570. Sean Burkholder is now working with models that predict sediment flow (Fig. 2) and Keith Van Der Sys and Karen M'Closkey are using drones to map change in estuarine wetlands over time. This work is described in Figures 2 and 3.

Whilst acknowledging Penn's legacy in this regard it is important to also note that many others are working on trying to visualize hyperobjects. The ETH in Zurich has focused on point clouds derived from laser scanning and Brad Cantrell at UVA has, like Burkholder at Penn, focused on fluvial systems. In terms of sectional representations Diana Agrest's work out of the Cooper Union in New York (Agrest, 2019) also stands out (Fig. 4 and 5). Agrest's focus on extreme natural phenomena captures what I mean by emergent senses of place in the Anthropocene. Agrest's images are readings of nature that reveal the forces and materialities of the earth's crust and serve as revelatory preludes to new ways of conceiving of how we mark its surface and penetrate its depths.

The challenge for the contemporary representation of hyperobjects as I see it is three-fold: first, unless you are gathering your own data first-hand (as Burkholder, M'Closkey and Van Der Sys do) then the data being visualized, typically GIS, is prescribed. And while this data might appear objective and comprehensive –to tell the truth as it were– it is important to ask where it comes from and how it was derived and assembled. Similar to a confrontation with the hyperreal, one must look beyond the surface of the visualized hyperobject and ask what is 'not' being shown in this image.

Since the subject at the heart of the hyperobject is processes of change, the second challenge is to incorporate the 4th dimension of time and show how change occurs across different scales and resonates through different materials. Engaging with the aesthetics of time in and of itself is difficult enough, but the third and most important challenge is not only to illustrate change, but show how certain forms of human intervention (design) will inflect, redirect, accelerate or slow the change. Put another way, the challenge in working with hyperobjects is not to indulge in what we might now refer to as a digital sublime where swirling ocean currents, atmospheric flows, global urbanization and rising sea levels amount an apocalyptic deluge of data that can also anaesthetize its audience, but to embed us, with agency in the earth system's processes with greater precision.

If we are to produce a landscape architecture of our age then we need to grapple with these challenges and attempt to draw connections between the macro scale of hyperobjects and the micro scale of daily life. As with any major aesthetic shift in history this is not some easy thing, but one thing is for certain, if we are going to make progress we need to punch through the surface of the hyperreal.

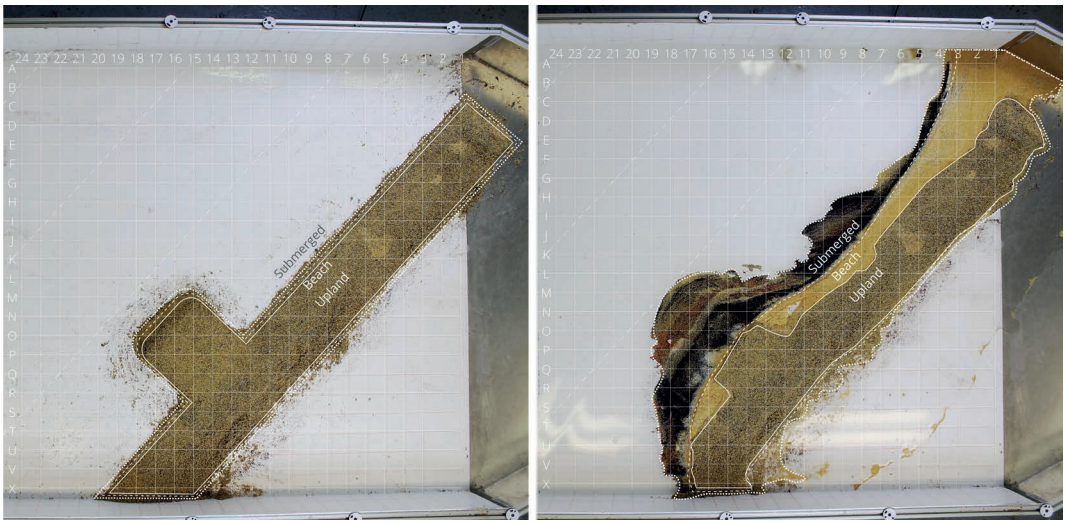


Fig. 2 –Image showing how large physical models can simulate sediment transport and shoreline morphology transformation through various water level and wave scenarios. (Source: image courtesy of Sean Burkholder, Theresa Ruswick, and the Healthy Port Futures project).

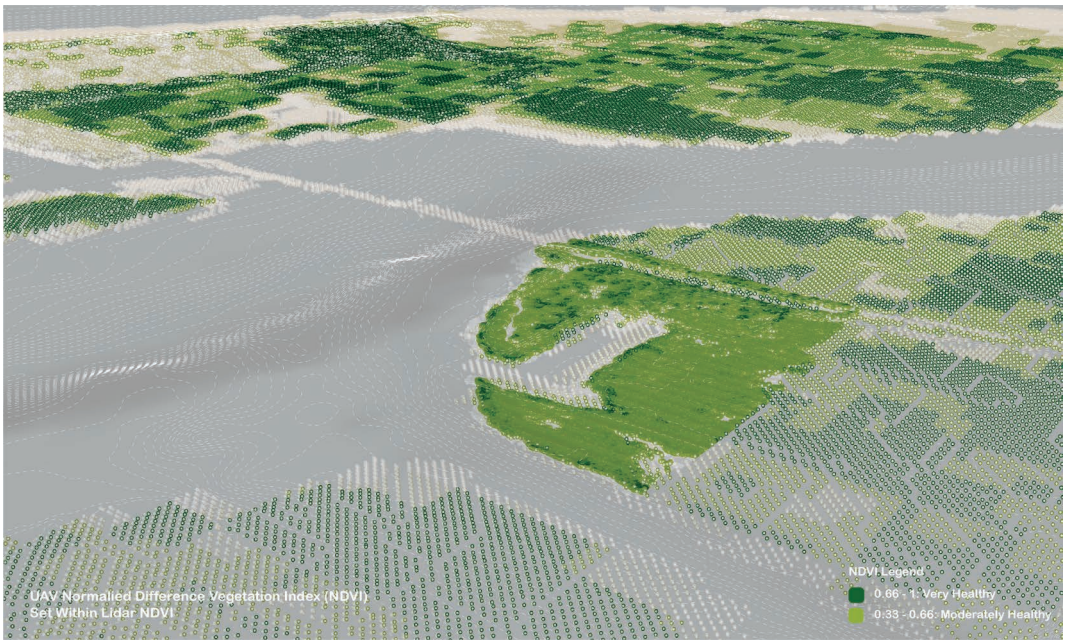


Fig. 3 –NDVI Image: Image of model estimating wetland plant health using a Normalized Difference Vegetation Index (NDVI) taken from UAV multispectral sensors. Since the amount of chlorophyll in plants reflects near infrared energy and absorbs red energy, NDVI is an effect means for quantitatively assessing the health of wetland plant communities. (Source: image courtesy of Keith Van Der Sys. EM-Lab, Weitzman School of Design, University of Pennsylvania).

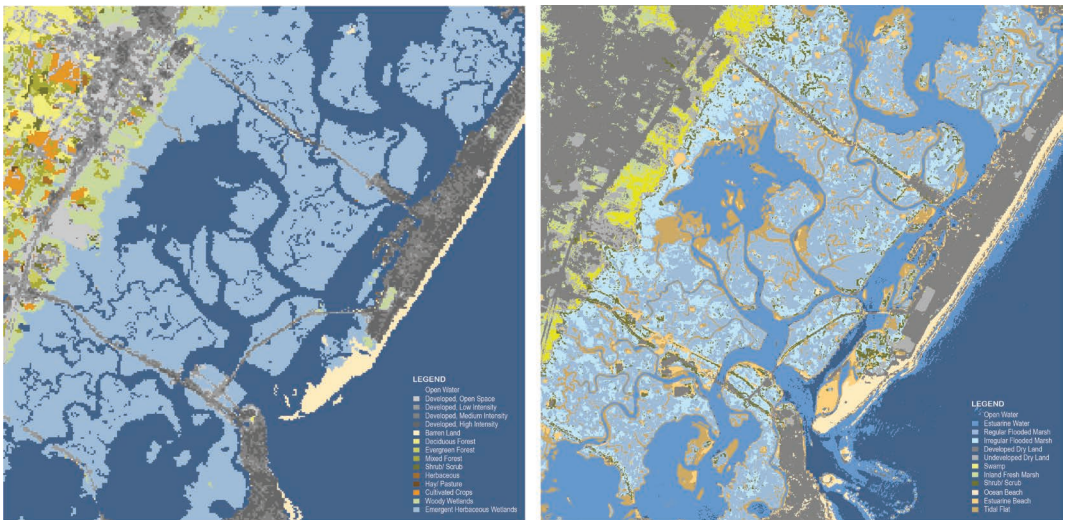


Fig. 4 –Wetland Classification Image: Image comparing existing landcover data (NLCD) and custom high resolution wetland landcover data. The high resolution landcover was created by using UAV multispectral imaging to train and recognize wetland plants and mudflats that were not otherwise depicted in the existing landcover dataset. Wetlands are most single most important environmental feature for sea level rise and storm surge modeling. Existing wetland datasets, however, are woefully insufficient for any accurate environmental modeling of vulnerable coastal conditions. (Source: image courtesy of Keith Van Der Sys. EM-Lab, Weitzman School of Design, University of Pennsylvania).

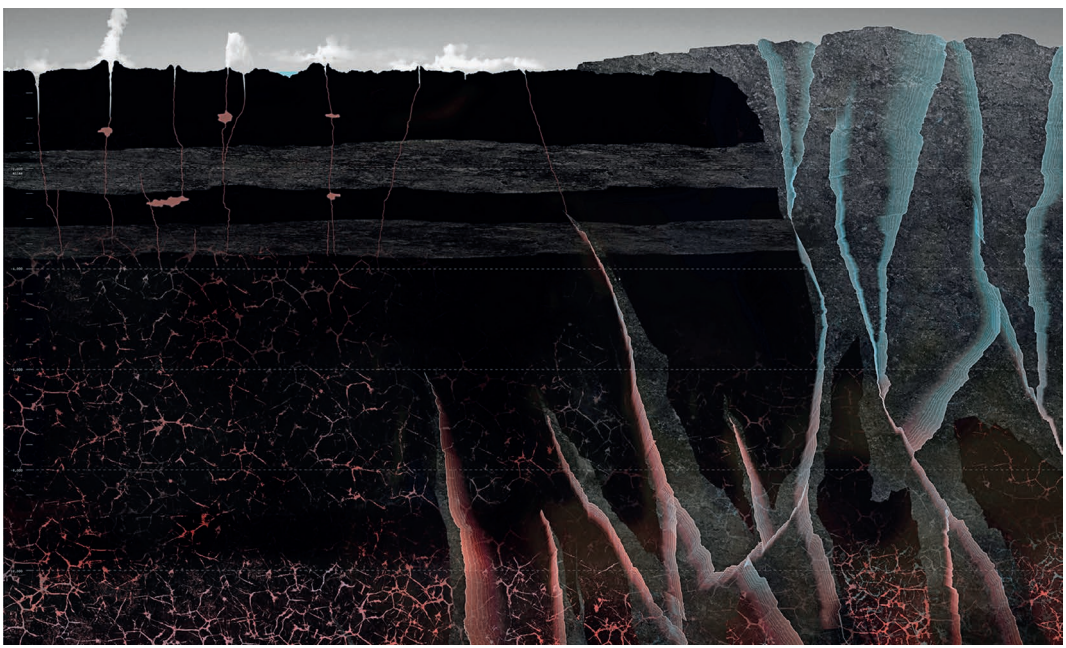
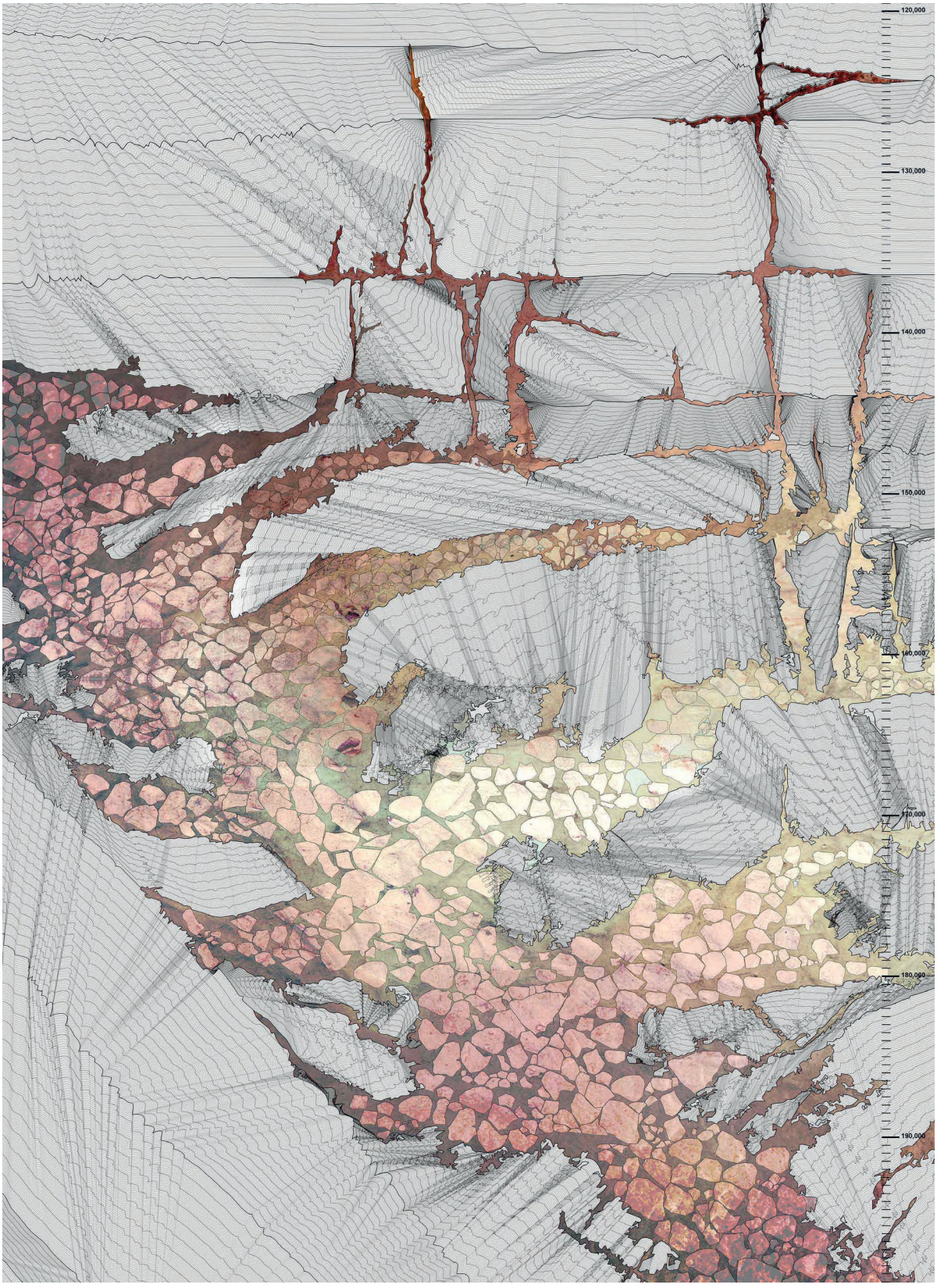


Fig. 5 – Architecture of Nature/Nature of Architecture by Diana Agrest. Liquid Tectonics, Yellowstone Caldera, Wyoming, Chung-Wei Lee. Section showing water circulation upwards, following the rhyolite rock structure with permeable and non-permeable rock (drawn to scale) (Source: image courtesy of Diana Agrest).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References

Agrest D. 2019, *Architecture of Nature / Nature of Architecture,* AD+ R and Cooper Union.

Baudelaire C. 1965, *Art in Paris 1845-1862: Salons and Other Exhibitions*, Trans. Johnathan Mayne, Phaidon, Oxford.

M'Closkey K., VanDerSys K. 2017, *Dynamic Patterns: Visualizing Landscapes in a Digital Age.* Routledge, London.

Morton T. 2013, *HYperobjects. Philosophy and Ecology After the End of the World*, Minnesota University Press, Minneapolis.

Weller R., Hoch C. and Huang C. 2017, *Atlas for the End of the World*, http://atlas-for-the-end-of-the-world.com

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Fig. 6 – Architecture of Nature/Nature of Architecture by Diana Agrest. Subduction and Transformations of the Mantle Rock, Mt. St. Helens, Washington, Hsing-O Chiang. Detail section of the Juan de Fuca oceanic plate at a depth of 120,000 to 210,000 feet, showing how magma chambers are produced by the melting process above the subducting oceanic plate.
(Source: image courtesy of Diana Agrest).