

SEA CLIFFS AND THE SUBLIME: A CONVERSATION

D. Graham Burnett and Diana Agrest

AGREST: Graham, it is a pleasure to have this chance to sit down together and talk. I have the clearest memory of your visit to my studio at Cooper a few years ago, when you presented on the sea. I remember how struck I was by your decision to open that vast subject with the students by means of a close reading of the Wallace Stevens's poem "The Comedian as the Letter C." We centered on that text, and across the time of our collective reading, you brought us to a contemplation of the sea as something like the antithesis of human being. An anti-mirror. The failure of language, rooted in the failure of an I-Thou relationship. It was an affecting seminar.

BURNETT: Thank you, Diana. Now you have presented me with the chance to review the work that came out of your studio, *Architecture of Nature/Nature of Architecture*, over the years, and I see how powerfully those same themes—the challenge of scale, the drama of extremes, the limits of the human—inform every page of this book.

AGREST: The aim of this research, as you say, was *exactly* to look at extreme natural phenomena, and from there to focus on the materiality and forces at play in them, using the tools and ways of seeing of the architect. I believe that in architecture, as in other fields, one only learns from extremes. Focusing on the extreme, one can understand conditions that prevail in less extreme forms in other phenomena.

BURNETT: Understanding and extremity. Ah, well, yes. And also no, of course. You remind me of a story. Just last week, my daughters and I were on a small, open boat making a slow turn around the island of Capri. The magnificent rock formations loomed up before us: natural arches

and precipitous cliffs that drop into the sea; the caves high up in sheer faces of stone, and the caverns opening into the deep at the crashing waterline. As we quietly rounded the northeast corner of the island, Francesca, nine, sitting on the bow, looked up and said to me, anxiety clear in her eyes: "those cliffs are scary." And she was right, of course. Being at the bottom of a very high cliff that drops into the ocean *is* frightening, somehow. Now it *could* be "rationally" frightening because something might fall off the top and hit you. But we were way too far out in the water to have that be a real possibility. She was not afraid of that. Indeed, there was nothing to be afraid of in any rational way. And she sensed this. Hence, the puzzle—the queerness of the occasion. Its heightened air.

What she was noticing, of course, is a phenomenon that has been of great interest to philosophers for a long time. She was experiencing the queasy power of an encounter with the "sublime"—the affective-cognitive shiver Kant dissected so closely in the *Critique of Judgement*. It was very interesting to take a moment with



Experiencing the sublime. View from the water of two Promontories in Capri emerging from the Tyrrhenian Sea on the south side of the Gulf of Naples. Photo: Diana Agrest, 1982, personal collection.

her, there on the bow, and to ask her (and myself) why it is that this kind of situation—an inhuman thing, large and close—touches us so deeply. Kant, of course, thinks he has figured out why this happens, and his answer remains, for me, extraordinary. But put his answer aside for a moment. In looking at the images prepared for your studio, in considering the projects that the studio took up, I am reminded of the problem of the sublime: extremity of scale; absence of the human.

AGREST: But the sublime is an aesthetic category, and, as I conceive of this project, the intention here is not an “aestheticizing” of nature. These drawings are tools for understanding. The aim is expanding knowledge about natural phenomena and the Earth in the field of architecture. It is not about representing natural phenomena as art.

BURNETT: That may be so, but the sublime sits right at the conjunction of understanding and extremity, and the understanding is very much in play in any aesthetic experience, at least as far as Kant is concerned. By invoking the sublime, I am hoping to lay the groundwork for a clarification that I think you might offer to a certain kind of possible critique: this book presents explorations of big things in nature. The scales are vast and there are no people.



View from the water of three promontories from opposite side. Photo: Diana Agrest, 1982, personal collection.

AGREST: The question of the absence of people, which I would call the human figure as this is about representation as a tool for thought, is not about considering nature as such, separate from humans. It is rather related to the actual scale of the phenomena we are working with. Just as this is not about trying to make art from nature, it is not looking at it from a social science perspective. We are developing these explorations from architecture, and in this sense, the presence of a human means something entirely different. The human can be understood, from my perspective, in different ways, such as the place of “man” in architectural theory or the presence of the user through program and function.

BURNETT: To be sure. And yet, it is also the case that architecture has long been driven by a double consciousness in relation to the human. On the one hand, there is that Vitruvian man at the heart of each built space, each architectural form. On the other hand, however, there is that Promethean-*cum*-Faustian reflex that repeatedly traduces the human in the direction of the monumental. The works in this book could be understood to participate in the latter program, no?

AGREST: Not at all. Not as I understand them. Approaching these explorations of nature the way we do here is an implied *criticism* of the prevailing approach to architecture that indeed focuses almost exclusively on “expressive” monuments—those centered on the architect or on the client, king, pope, corporation, or other institution, and in a way the absence of the human figure is not to monumentalize nature as such but rather is done to avoid placing man at the center of it all.

BURNETT: Interesting. Let’s go back to Capri for a moment. And to what Kant has to say about Francesca’s heart-shiver beneath the cliffs. What he offers is an account of that shiver that exquisitely suspends a simple-minded distinction between thought and feeling, cognition and affect. Recall how a judgment of the sublime works, according to the Third Critique. It is a

kind of heart-beat of thought, and consists, like a pulse contraction, of a systolic evacuation followed by a kind of diastolic swelling. First, the naked, overwhelming *magnitude* of the object produces a harrowing realization: “My god! That’s so gigantic that, before it, I am reduced to a speck of insignificance in the cosmos.” I think your own interest in the extremity of many of the projects in this book participates in that posture of humility—not to say humiliation—before the grandeur of nature at its largest, deepest, and oldest. But the sublime as such requires that a diastole follow hard on the heels of that first trigger in the cycle. The systole, again: “Oh, that cliff, tsunami, volcano, supersedes me nearly infinitely, and by doing so, leaves me approaching naught in my nature, reduces me to a sense of myself as nearly nothing, sets me winging on course the trajectory of which recedes asymptotically to the zero line.” But then, all of that merely sets up the crack-back that births the true terror-exhilaration of the sublime: “Wait! However big that thing is, *I am bigger*—since I am a rational agent and *that thing has no mind*.”

We can think of that second component as something like the narcissistic self-salvage by which we bounce back to ourselves from the nihilistic negation occasioned by a real reckoning with our impotent fragility.

My point in reviewing all this is not to inquire of you whether you are in fact sympathetic to such a metaphysically robust treatment of the human. Rather, I want to set up a reading of the project presented in this book of yours. Since, in my view, what you are up to here is really best understood as a kind of cataloging of contemporary gestures in the direction of a recognizable program—call it the “neo-sublime.”

This new program trades heavily on the *aesthetics of information*. In these cases, what we stand before that occasions a moment of nugatory vertigo is not a big cliff or a deep cave but a colossal mass of *data*. And the work of figuring

out how to recover a sense of what we are as human beings *before the data* is very much the aesthetico-political challenge of our times. In much the same way that the Kantian sublime managed the question of who we were supposed to be *before a “godless” nature*—the dominant aesthetico-political challenge of the early nineteenth century. The question then becomes, what is the diastole by which we “recover” ourselves (in some form) from the terror-shadow of *the data*. I think it is something like this problem that unifies the projects in this book. The best of them demonstrate *both* an unhinging brush with the magnitude of the data sets, *and* a program for achieving a point-of-view adequate to that (immanently devastating) encounter—a “perspective” capable of “withstanding” it. Indeed, perhaps even “transcending” it—through form.

AGREST: It is possible that something like this is what is at issue when, in the studio, we talk about “potentials.” I often try to emphasize in the process that underlying all the complexity, the data, everything we deal with as architects—through all of this, through a confrontation with all of this, it possible to reveal unseen aspects of the object of study. That is where the drawing and the work of representation come in. They are tools that in terms of dealing with this kind of subject afford powerful and different ways of approaching scale and magnitude and mass. We’re not trying to replicate the data “faithfully” or at least not “literally.” One could use triple curvatures and topological geometry, but then it would result in an attempt to emulate natural forms stylistically. On the contrary, I encourage the work with physical models produced as part of their readings of natural phenomena. These incorporate a haptic dimension, through a lot of experimentation with actual materials, from plastic to metal, plaster, wax, or rubber mixtures. These models are not replicating their referents but rather reinterpreting them. These activities may create or suggest the kind of “perspective” you are invoking. They may make more than the models themselves; they may make the “point of view” as well.

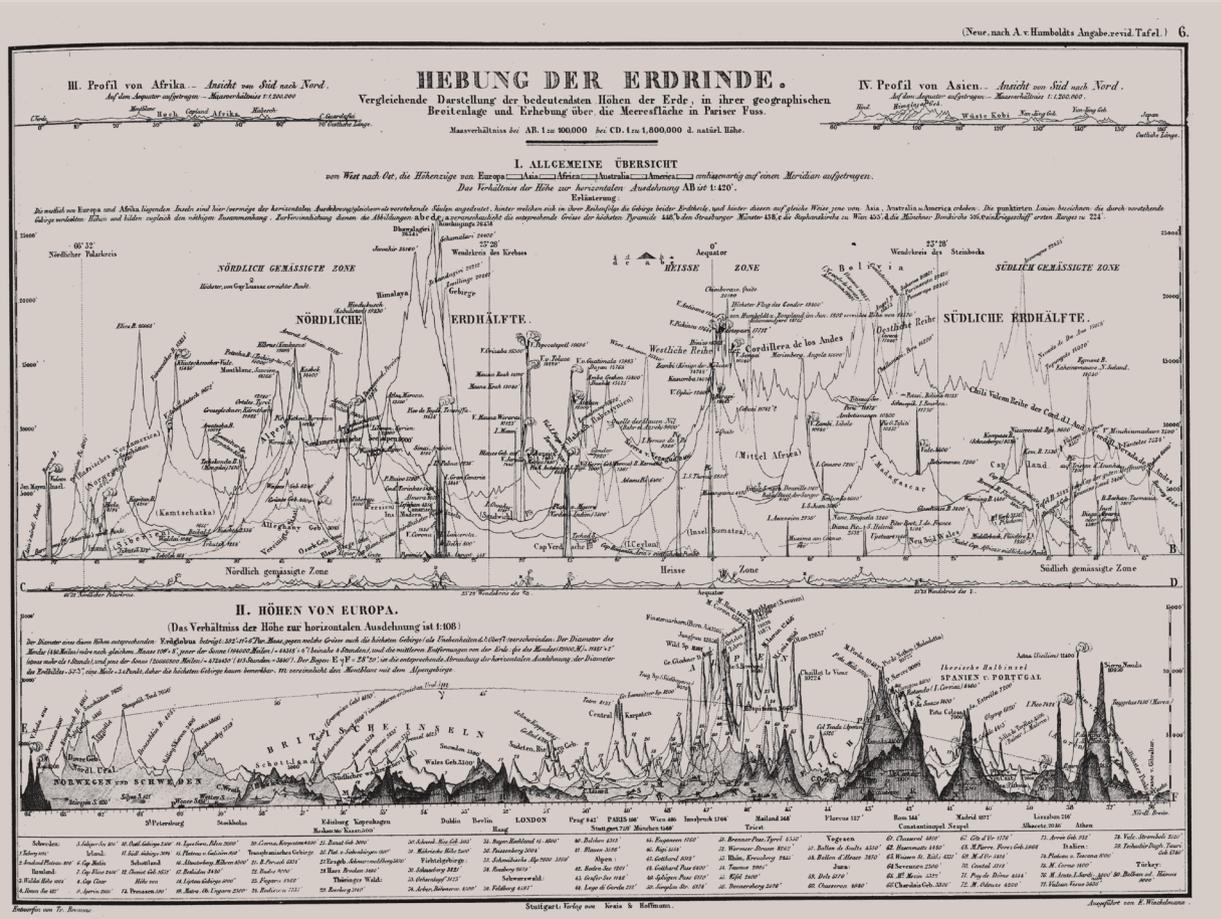
BURNETT: Yes, exactly! I can see exactly how that might work. It puts me in mind of that powerful line at the end of Heidegger's essay "The Thing," the moment where he calls for a "step back" from the modes of thought that represent and explain, in order to begin the work of recovering the thinking that "responds and recalls." The work of recovering ourselves from the data-terror may involve exactly this. And it may begin with human hands on a lump of clay—exactly like Heidegger's jug, which of course began in the same way.

AGREST: I sometimes insist on sketching by hand—as in the study of tornadoes—where the forces that are at play are so complex. Looking at the renderings done by means of data-intensive computation, I realized that this was totally inadequate. They needed to be drawn by hand

with a soft pencil or brush where the hand and the mind, where the gestural and the body, partake in this exploration echoing, in a way, the dynamic complexity of the tornado itself.

BURNETT: This juxtaposition—the data armature versus the free-hand image—recalls a central tension in the history of science that I have worked on quite a bit: the history of cartography. Map making. I think that many of the images in this volume can be productively considered in relation to the history of cartographic representation. This is a key locus for thinking of data in relation to earth forms and earth processes.

From the fifteenth to the early nineteenth century the terraquous globe was significantly "apprehended" by the expanding program of



Elevation of the Crust of the Earth. Comparative rendering of the most prominent heights on Earth placed according to their geographical latitude and elevation relative to Paris at sea level. From the Atlas in Alexander von Humboldt's *Kosmos: Draft of the Physical Description of the World Volume V*, ed. Bromme Traugott (Stuttgart: Kraiss & Hoffman, 1851).

European natural science by means of twinned processes: on the one hand, you had a program of “global inventory,” the collection and collation of the *stuff* of the planet (plants, animals, minerals, etc.); on the other hand, you had a continuous enterprise of “mathematical cosmography,” the intersecting work of surveying and wayfinding and positional astronomy that produced increasingly extensive and reliable geographical representations of the surface of the earth. My own argument is that the early nineteenth century saw a significant new intersection of these projects: by this point, the geographical armature of the Earth has been substantially fixed, and the vast abundance of natural phenomena substantially cataloged. In the early years of the century—paradigmatically in the work of Alexander von Humboldt—one sees a dramatic development: a preoccupation

with the *spatialization of inventory*. Which is to say, a new interest in investigating the geographical distribution and geospatial configuration of plants, animals, rocks, and even human beings. Out of this work—biogeographical and structural-geological—comes many of the most important developments of nineteenth-century science: Darwin’s theory of evolution by natural selection above all. I am here giving a very compressed account of a complicated story, but the gist of it holds: the early nineteenth century saw a revolutionary crossing of two world-knowing traditions, geography and natural history. Spatialized thinking about the stuff of the Earth proved revolutionary.

I rehearse all this because, as I look at the images in this book, I find myself tempted by an analogy to that early nineteenth-century moment.



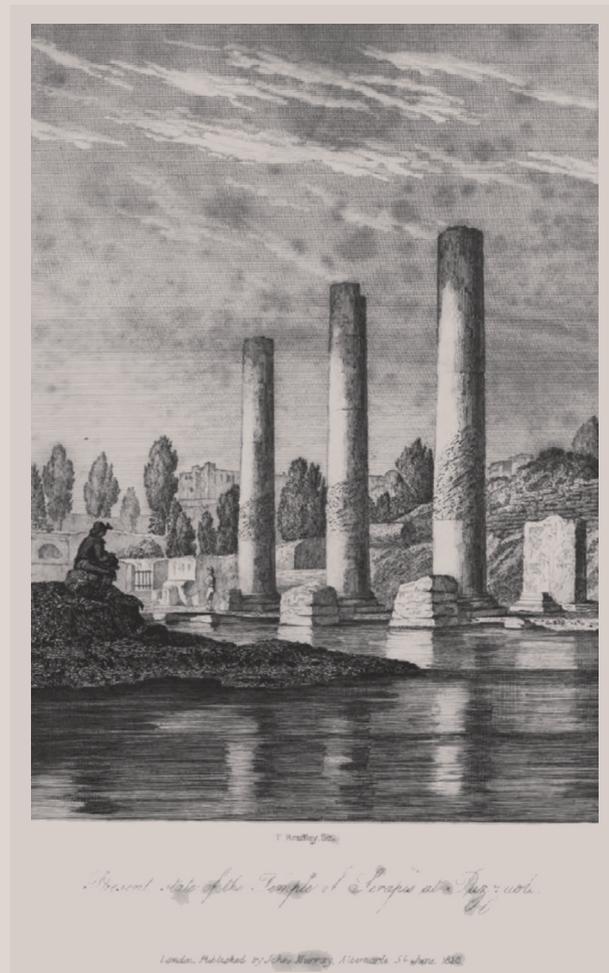
Geography of Plants in the Tropics; A natural painting of the Andes, based on observations and measurements, which were made from the 10th degree north to the 10th degree south latitude, in the years 1799 to 1803, by Alexander von Humboldt and AG Bonpland. 36”x24” depiction of the Chimborazo extinct volcano in the Andes occidental Cordillera. From “Essay on the Geography of Plants” by Alexander von Humboldt and A. Bonpland, Tubingen-Paris 1807.

I wonder if it is possible that we are in the middle of a comparable transformation. The rise of GIS systems and the new computational and representational tools that are part of every architect's formation now, coupled with the wide availability of extraordinary data sets that bear on Earth environments and history would seem to afford conditions not unlike those that occasioned the "Humboldtian Turn" in the first decades of the nineteenth century. Are we in the midst of something similar? Do images like those that have come out of your studio represent a new crossing of geospatial frames and collatory Earth-data? It seems not-impossible to me. More work would need to be done to deliver on the suggestion, but it is an alluring notion. Not least because the intellectual and cultural consequences of the last time this happened were enormous! One is left to speculate as to what may follow on the heels of this iteration of a new geospatial-data complex.

AGREST: Humboldt is a very interesting reference: his studies of Chimborazo, his Romantic preoccupation with extremes, his interest in volcanism. Look at his images against the one in this book, the model of the Kilauea Volcano in Hawaii. This image works like X-ray vision, revealing the forces that produce the hundreds of daily mini-earthquakes that happen within. Other models depicted in this volume reveal the geological history of the structure of the salt domes found in the Gulf of Mexico, both on land and under water. This model is very interesting because in fact the salt dome formations, which are up to fifteen kilometers in height, are very irregular. But by making drawings in both horizontal and vertical sections the configurations could be generated by planes made with a laser cutter—the planes were then manipulated afterwards by hand. That is a wonderful example of how you use architecture tools in this kind of work. It would have been impossible to do this sort of model any other way.

BURNETT: Yes. And what we have here are these images. Images that use an architectural

idiom to try to understand the dynamics and forms of the natural world. I had not thought of it before, but looking at it this way, I recall one of the key moments in the history of nineteenth-century science: Lyell's writings on the Temple of Pozzuoli in the *Principles of Geology*. As you may know, this classical-era temple presented a profound geological puzzle to the naturalists of the late eighteenth and early nineteenth centuries. The story goes roughly this way: when the temple was excavated, it was noted that the columns had been bored by marine snails in a region that began about nine feet off the temple floor, and extended to a height of about fifteen feet. Not above. Not below. How the heck could *that* have happened? A mystery!



Temple of Serapis at Pozzuoli Frontispiece of Charles Lyell's *Principles of Geology* of 1830. "This representation of the Temple of Serapis is a reproduction of that by Canonico Andrea de Jorio in his 'Ricerche sul Tempio di Serapide, in Pozzuoli.' Napoli, 1820." The ruins of the temple's columns were seen by Lyell as an indication of former sea level differing from that of 1820.

The resolution of that mystery (short answer: volcanic ash, compacted to a height of nine feet, protected the lower part of the columns when subsidence drew the whole temple under water to a depth of fifteen feet; subsequent uplift pushed the whole thing above sea level) had tremendous implications for understanding of the physics of nature. That the whole temple had been subjected to such forces *and the stacked marble column-blocks had not collapsed* powerfully indicated that these large-scale changes had occurred very slowly and smoothly—gradually. This afforded key support for those defending gradualist and “uniformitarian” accounts of geology—and even biology. Charles Darwin, after all, was hugely affected by Lyell’s account of the Temple of Pozzuoli.

My point here is that the work of interpreting the dynamics of nature in this episode hinged on specifically architectural forms and specifically architectural representational techniques. In that sense, your project here, Diana, can cite a distinguished precedent.

AGREST: You have brought us back around to Naples I see—from the cliffs of Capri to the Temple of Pozzuoli.

BURNETT: Yes! Quite right. The Temple is just a little northeast of the island. And maybe full circle in another way: back to the sublime. Since the discovery of “deep time”—a central consequence of Lyell’s uniformitarianism—afforded a vertigo from which, one might argue, humanity has never really recovered. Deep time was too deep. It was, we might say, the final half-heartbeat in the Kantian sublime, in that the diastolic conceit of human transcendence has never quite thumped back against the systolic evacuation occasioned by the discovery of the empty eons of geological time.

AGREST: So we come back to fear.

BURNETT: Yes. And to the human held at naught by the vast—by the mere magnitude of what obtains. My own view is that every effort to cognize this “absence of us” must be activated dialectically—must be used to bring us back to some new formulation of the basic work. And that basic work, for me, as a humanist, is the “singing of the we”—the project of not merely trying to “define” or “account for” the relevant first-person-plural, but actually trying to *generate* and *perform* it, as in the choral occasion of joined voices. Let us hope that this book of yours, so apparently people-less, returns those who read it to the central problem of “us.” Of us now.

