

UR URREAK
AGUAS TURBULENTAS
EAUX AGITÉES
TURBULENT WATERS

interdisciplinary Lab

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AQUARIUM FRAGMENTS

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Gems of the ordinary. These fragments are the semantic equivalent of bits lining aquarium floor, the so-called substrate comprised of small pieces of gravel, pebbles, sand with shards of shells mixed in, or chips of crushed crystals. While they look mundane if you hold them in your hand, substrate materials shimmer and shine like small treasures thanks to the refraction of light in the watery medium, in which they are immersed. To achieve a comparable effect with respect to the ideas expressed here, put yourself in an aquarium frame of mind: let the light of meaning be refracted through the waters of sense held in the glasshouse of your experience of the world. In line with all other phenomenological experiments, this one will attempt to disclose the precious, if rarely noticed, appearance of ordinary reality, its extraordinary nature stamped right on its superficies, which we tend to overlook in the hustle and bustle of our fast-paced lives.

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Translucent, not transparent. Despite the advances of lighting and water maintenance systems, the medium of the aquarium is translucent rather than transparent. It keeps a sort of semi-opacity. I am not referring to residual materials floating in the water, but to the fact that the seen, including the animal and vegetal inhabitants of the aquarium, is also the seeing, whether photosensitive or endowed with organs of vision that our human eyes are akin to. There is no transparency, because the seen is not purely and merely seen; it is also a subject of the gaze. On both sides of the glass.

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A paradigm of sustainability: the base and the circle. The rather curious history of aquaria teaches us a practical lesson about environmental sustainability. In mid-nineteenth century, English naturalist Philip Henry Gosse recounted the first attempts at creating a prototype of the modern aquarium. A relatively recent idea at the time was that the possibility of “maintaining the balance between animal and vegetal life” had to rely on chemical principles.¹ Applied to the aquarium, the principle was that of water oxygenation, which could be ensured by plants supporting animal life. So, in 1850, two small goldfish were placed in a water tank together with specimens of *Vallisneria spiralis*, also known as tape grass. After a few days, when the decaying parts of plants diminished water quality, pond snails

were introduced into the tank. Not only did the snails feed on the products of vegetal decay, but they also produced a large quantity of eggs that served as additional nutrients for the fish.ⁱⁱ What we have before us in a miniature, exquisitely condensed form are two crucial ideas on the subject of sustainability. First, plants are the organic foundation of life on earth and in the water. As its “base,” they sustain life itself. Second, once the base is assured, a sustainable system is circular. Plants provide oxygen for the fish and the snails, whom they also feed with their decaying parts. Snails, in turn, feed the fish (with their eggs). We ought to confront the discourses of sustainability, aiming to reconcile ecology and economic development, with the sustainable self-arrangement of ecosystems.

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Ocean gardens. One of the old names (or paleonyms) for *aquarium* is “ocean garden.” Yet another English naturalist, Henry Noel Humphreys gives his readers a practical advice about seaweeds: “Certain success is only to be secured by chiselling off a portion of the substance on which the weed is growing—thus transplanting it with its own soil, as it were, about its roots, into the ocean garden of the Aquarium.”ⁱⁱⁱ An ocean and a garden. Is there anything more self-contradictory than the combination of these two environments? Aside from their respective aquatic and terrestrial connotations, they are (or seem to be) the polar opposites of one another: the wild and the cultivated, the limitless and the well-defined, the unstable and the stable, the sublime and the beautiful. And yet, isn’t much of the humanly mediated natureculture or culturenature a mix of the extremes? If so, then, metonymizing the world, ocean gardens are both our history and our destiny.

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Perspectival variations. Difficult as it may be, try putting yourself in the place of the fish and the crustaceans looking at what is happening on the hither side of aquarium glass. They spot the shapes of bipeds, blurry and moving, some of them smaller than the others, their cheeks or noses pressed into the see-through separation. What passes through the minds of the aquarium’s inhabitants in those moments? How do they experience its hard, unbreachable, yet clear barrier? As the end of the world? Do they speculate about the nature of the ghosts from that both distant and near reality? Do they imagine that the beyond is populated by destructive demons or by guardian angels? Do they see *us* as the ever-changing participants in a show put on display *for them*? Do they communicate with one another about the aliens from beyond the glass? Beginning to contemplate these and related issues, we would inch a little closer not to an amphibian perspective, but to a perspectival amphibology.

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Elemental encounters. Air on one side, water (suffused with oxygen, to be sure) on the other. Whatever else the aquarium stages, it also puts forth a certain version of an elemental encounter that is apparently controlled, with divisions of roles and milieus clearly demarcated. Of course, absolute control is an illusion, given the mix of the extremes we have observed in ocean gardens. A neat separation between different elements is impossible. Still, such a separation exists, the physical proof of its existence lying in a glass wall. In dealing with the confluence of impossibility and actuality in the segregation of the elements from one another the question is: what mode of relating to the elements

does the aquarium express? The impossible becomes possible in a *controlled* environment, but this highly specific, circumscribed place is meant to be representative of every place, wherein the living find themselves. Ideally, each place is to be an aquarium, as far as the organization of the elements is concerned. The emergence of controlled environments is symptomatic of a desire to attain total control over places, climates, and the planet itself. Needless to say, this desire is frustrated from the get-go (hence, the aspect of impossibility). The more frustrated it is, though, the stronger it grows, its symptoms cropping up everywhere (hence, the facet of actuality). To encounter the elements otherwise, it will be necessary to work through our desire for control, to destabilize its signposts, to interrogate its asphyxiating attachments, to discover for what it serves as a substitute.

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The aquarium and us; the aquarium in us; we in the aquarium.

When we visit an aquarium, we find ourselves in it and outside it at the same time. In the building, we are facing the glass cases or the vitrines, outside-within. Our gazes transport us beyond the glass, into the watery medium and its vegetal and animal inhabitants, within-outside. Fabiana Barreda gives a literal twist to this two-fold movement when she inserts human figures, drawn on a semi-transparent support, into the aquarium. Barreda phenomenalizes, renders visible, a process that imperceptibly happens in every aquarium visit: absorbing the sensory impressions of the aquarium, we receive the aquarium within us, while we ourselves are in the aquarium.

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Modern, all too modern. In *Zoo and Aquarium History*, Vernon Kising observes that around 3,000BCE animal collections for nonutilitarian purposes emerged in Mesopotamia, Egypt, China, and possibly India. "In contrast, aquarium evolution is less complicated since it sprang forth as a relatively modern concept during the 1850s."^{iv} We have glimpsed a couple of isolated episodes drawn from that period in writings by Gosse and Humphreys. A "modern concept," however, goes beyond a more or less arbitrarily chosen historical timeframe and relates to the *concept of modernity*. The elemental sense of modernity is water; according to Zygmunt Bauman's famous formulation, modernity is liquid. The absence of stability, fluxes and flows, perpetual change are all characteristics of the modern condition. That said, fluidity is channeled within the rigid molds of capital, consumer desires, and financial speculation. In other words, fluidity is *contained*, like water in an aquarium. With the rise of surveillance capitalism, we must add to the above list of features a panoptical system of translucency, of digital observation, that puts transactions, localizations, and behaviors on display before an impersonal gaze. Modernity is life in an aquarium.

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The show must go on. So, the aquarium is a dramatic stage, replete with lighting and props, a chronometry and a choreography of action and interaction, and a material demarcation between the actors and the spectators. Its main purposes are to collect and to display: to gather together a group of rare or otherwise noteworthy animal and vegetal water-dwellers and to exhibit this collection for recreational, educational, and related purposes. To what light and sound effects can be subject the inhabitants of an aquarium? Is there a limit, at which a habitat (however artificial it may be) cannot

serve as a stage or a backdrop for the projection of our meanings, desires, words and images, sonorous sequences and throbbing lights, as, for instance, in Francisco Ruiz de Infante's 2012 "Performance-Mapping"? There is more than meets the eye here, too. Flip the perspectives, as we have already cursorily done, and the marine actors become the spectators, while human visitors to the aquarium are actors before *their* gazes. At least two shows are going on simultaneously: one taking place in the water, the other in the air. What sort of a shifting, kaleidoscopic collection is forged out of aquarium visitors? And what kind of a display do they (we) put on?

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A lab of the future. The quintessentially modern nature of the aquarium places it in an interesting situation. The modern is the ever new, always disassembling and reconstructing itself in an orientation toward the future. In this sense, the aquarium is not only a reflection of the present, but also a lab for what's to come. It could well be that, after the fragile conditions sustaining life on earth further deteriorate—the air becoming unbreathable, the soil no longer arable, water dangerously polluted, and so forth—we will need to restitch a habitable environment bit by bit, caring for the base and the circulation of life within a limited sphere similar to an aquarium or, perhaps, a terrarium. In case human colonies are established on other planets, the same principle would have to hold. We are not dealing with the stuff of science fiction (even though many recent sci-fi movies and works of literature point in this direction) but with real possibilities arising on the horizon of human and other-than-human histories. A gigantic aquarium or terrarium looms over us from that horizon...

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Out of control. We have touched upon the attempts to create a carefully controlled environment in and through the aquarium, attempts that are, from the get-go, doomed to failure. We would do justice to the uncontrollable aspects of an ideally controlled mini-universe if we responded (or reacted) to them in an equally uncontrollable way within an ideally controlled version of human conduct. This is, precisely, what Pilar Soberon does when, in her drawings, she follows the movements of the aquarium's inhabitants, letting them guide her hand and the drawing implements she holds without predetermining the course of the line, without looking at paper nor deciding on a preexisting blueprint for the entire artwork. To be with aquatic movements in movement, to synchronize oneself as much as possible with the uncontrollable course of lives, is yet another mode of being in the aquarium.

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Unveilings. As the subtitle of Gosse's classic book on the aquarium suggests, the goal of this cultural-scientific invention is to "unveil[...] the wonders of deep sea." Unveiling is the basic impulse of a modern attitude to nature. We want to wrest nature's secrets from it, to demystify it, to analyze it into chemical and molecular components. On the other end of the spectrum of thinking about and relating to nature is ancient Greek thought, according to which, as pithily formulated in a fragment by the pre-Socratic philosopher Heraclitus, "nature loves to hide." It follows that we love to undo that which nature loves to do, namely to hide. At a very basic level, our relation to nature is *contra natura*. We drag living beings and life processes out into the open, admiring the results of their unveiling as the expressions of truth, objectivity, and scientific progress. The aquarium, according to its initial modern

conceptualization, is the apparatus of unveiling, bringing deep sea dwellers to the surface of appearances. The depth in question is, therefore, more metaphysical than physical: it has to do with efforts to render accessible that which is withdrawn in nature's peculiar tendency to hide.

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Contamination. Who belongs in an aquarium? What has, or takes, its proper place there? These questions are vast. So vast, in fact, that they overflow the limits of the aquarium and address themselves to the rivers, the seas, and the oceans. As I have argued most recently in my *Dump Philosophy*,^v the saturation of water with masses of anthropogenically produced waste (micro-plastics, heavy metals, sewage filled with residual pharmaceutical materials, and so forth) has reached such a magnitude that our mental representation of water should change. It is no longer a clean, fresh, and transparent liquid, but a dump for the byproducts of our industries—in a word, a hydrodump. Today, contamination is the rule, rather than an exceptional problematic pocket in an otherwise clean world. It does not respect boundaries between bodies or countries: the micro-plastics, heavy metals, etc. that are in the water (or in the hydrodump, into which water has been converted) are also in the fish and crustaceans who live there, in the algae and seaweeds, in the humans who consume them... The same goes for light and sound pollution in urban areas that turn our senses into garbage receptacles and for the aesthetic consumption of the aquarium. Do our aquaria reflect the dump that water and its inhabitants and we, the spectators on the other side of the glass, have become? Is there a place for the visibility of garbage that, in its total mass, will soon overtake the biomass of ocean-based life? In *Turbulent Waters*, Marisa Gonzalez invites us to consider these and related questions, contemplating the uncanny effects of the dump on the aquarium.

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Collection or community? From the point of view of natural scientists, aquaria were and are the collections of living aquatic plant and animal specimens. Is it legitimate, though, to speak of collections of living beings? In natural science museums, collections may include herbaria, as well as taxidermic or fossilized animal remains. A collection is literally something put together, collocated in the same space and time. A community, in its turn, is organized around a being-with (*co-*, *con-*, *com-*, *cum-*) that is shared among its participants, a co-presence actively given and passively received. A collection grows and diminishes by accretion or loss; a community develops through the sharing of life. Communal relations are interactive and interpassive. The cross-species and cross-kingdoms communities forged in the aquarium reinvent this natural-artificial environment from within, showing in the flesh what living together entails—the inhabiting that is inseparable from co-habitation.

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Aqua vita nuova. In a poem by Joseph Brodsky, where the pain of separation is inexpressible and where the scream of extreme suffering is silent, one gradually metamorphoses into a fish.^{vi} The mouth is “like that of a fish, opened to / produce a soundlessly bubbling ‘la’.” The waving hand “suspended in the air / acquires the quality of a fin.” In the midst of these transformations, one finds oneself “in the acknowledged comfort of an aquarium, / where there are no tears shed and no songs sung.” Although it is positively acknowledged, the comfort of the aquarium is false. The unheard scream is still more

heartrending than a scream produced at the top of one's lungs. The tears remain unseen, because, as they are shed, they are nothing but water in water, indistinguishable from the medium of life in the aquarium. What would a truly comfortable aquarium be like, albeit in an unacknowledged or under-acknowledged way? Could sadness and joy, suffering and elation, be expressed in it otherwise, thanks to the sharing of life, a community of aquatic existence? Would this be an aquarium of the future—the aquarium that nearly merges with the contours of the future—worth constructing?

Notes:

ⁱ Philip Henry Gosse, *The Aquarium: An Unveiling of the Wonders of Deep Sea* (London: John Van Voorst, 1856), p. 4.

ⁱⁱ Gosse, *The Aquarium*, pp. 8-9.

ⁱⁱⁱ Henry Noel Humphreys, *Ocean Gardens: The History of the Marine Aquarium* (London: Sampson Low, Son & Co, 1857), p. 50.

^{iv} Vernon Kising, *Zoo and Aquarium History: Ancient Animal Collections to Zoological Gardens* (London & New York: CRC Press, 2001), p. iii

^v Michael Marder, *Dump Philosophy: A Phenomenology of Devastation* (London & New York: Bloomsbury, 2020).

^{vi} Joseph Brodsky, "Aqua vita nuova." <https://www.culture.ru/poems/30603/aqua-vita-nuova>. Translations mine.

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