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Nuclear Ecologies: making violent atmospheres in Cormac McCarthy's "Blood Meridian".

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Abstract: This paper will examine the characterisation of atmosphere in Cormac McCarthy's 1985 novel *Blood Meridian* through an on-going doctoral study in *Architecture by Design*. Set against an anthology of troublesome desert clouds, the paper aims to illuminate the complexities in making at a particular extreme – the construction of contaminated atmospheres – through interdisciplinary making. In doing so, it moves between a literary work and the American landscape through the design methodology of an architect and foregrounds the problematics of a work-in-progress: the speculative design of a "Bath House" from the novel. The project aims to situate the novel's desert space as a collection of research objects and explores its atmospheric environments, how they interact, exchange, and are made material.

Keywords: *Blood Meridian*, dust, nuclear, contamination, design

[FADE IN: BLACK]

Black smoke fills the air.

It's January 12th 2007. A solitary oil derrick burns somewhere in the desert of West Texas. It is consumed in orange fire and smoke chokes the air – acrid, thick, filthy, black. It gathers into an enormous plume that drifts in the wind, forming its own shadowy meteorology that recasts the sun-struck desert as a nighttime scene; a haze of soot stains the empty air of the desert's open terrain. This atmospheric disturbance shifts across the landscape while directors Joel and Ethan Coen work nearby, filming their adaptation of Cormac McCarthy's novel No Country for Old Men. The monstrous black cloud encroaches. The scene is interrupted. They can no longer see or breathe. Shooting is cancelled for the day.

1. Breathing Dust

This anarchic cloud is not the result of some sort of industrial misadventure, instead it is the work of another director, Paul Thomas Anderson, as he and his crew conduct a “controlled burn” on the set of *There Will Be Blood* (Fennessey, 2017). As much as it is smoke, soot, and ash, this cloud is also the physical manifestation of a director’s singular creative vision, here inadvertently exerting itself on his contemporaries as an interruption. It is in this lacuna of the Coen’s lost day of filming, and the loss of an unknown set of contingencies never to make their mark on film, that the cloud marks its own place within the American history of atmospheric disturbances.

It is perhaps appropriate that the filmic adaptation of a Cormac McCarthy novel wears the veil of this airborne intrusion – his oeuvre is contoured by a deep interest in the distinct atmospheres of the American desert, their qualities and capacities, and the propensity of the landscape to produce and host troublesome clouds that forcibly exert their presence. This paper will examine this characterisation of atmosphere in his 1985 novel *Blood Meridian* through an on-going doctoral study in “Architecture by Design”, using an interdisciplinary methodology that works between architecture and literature in both design research and production. In doing so, the paper aims to creatively illuminate a particular difficulty in making at an extreme – the construction of atmospheres – through a work-in-progress: the speculative design of a “Bath House” based on the novel. Set against an anthology of man-made clouds, this project situates the novel’s desert space through a collection of research objects which explore its atmospheric environments through a design-making methodology.

One of the more remarkable features of *Blood Meridian* is the agency it ascribes to desert. The novel tracks the murderous peregrinations of a band of scalphunters as they rove the American borderlands of the mid-19th century and while this formidable terrain is the setting for their barbaric acts, to interpret it in the limited capacity of a literal “back ground” would be a mistake. The way in which desert becomes animated is instrumental to the way the text operates. Deploying his polysyndetic style to powerful effect, McCarthy performs a kind of spatial switch whereby landscape is drawn to the fore and desert comes to occupy the primary narrative space usually reserved for the literary construction of a central character. The accumulative description of the borderland environment excavates an innate potency in landscape whereby the double-logic of the word “desert” – a word that marks an absence – is challenged. In *Blood Meridian* desert is an active space that exerts itself; an open terrain that can not only host weather, but encourages it to breed, multiply, diversify, and disseminate. Indeed, weather is everywhere in *Blood Meridian* – it is the most weathered book imaginable. In Chapter XV the character of “the kid” escapes a snowdrift to witness not one storm, but “[t]andem storms ... blowing downcountry”, and while they ride, the scalphunters “count five separate storms spaced out upon the shores of the round earth” (McCarthy, 1985, p.214, 175). Earlier in the novel, when filibusters cross the del Norte river into Mexico, they encounter a “pulsing and malevolent sun” that recedes only to be replaced by another divergent meteorology:

That night they rode through a region electric and wild where strange shapes of soft blue fire ran over the metal of the horses’ trappings ... All night sheetlightning quaked sourceless to the west beyond the midnight thunderheads, making a bluish day of the distant, the mountains on the sudden skyline stark and black and livid like a land of some other order out there whose true geology was not stone but fear (McCarthy, 1985, p.47-8).

As it is understood here, the desert climate is hostile, but it also has an intensely atmospheric quality that is at once charged with the paranoid feeling of immanent violence while also exerting itself as a sublime physical force. As such, McCarthy's logic of climate and weather has a distinctive psycho-spatial quality as it always threatens to encroach and envelop its occupants. For the traditional trope of the desert as an empty and voided space, the implications of this are significant: *Blood Meridian* renders its landscape with an almost ontological claustrophobia where the desert overflows with climatological, meteorological, geological and animal phenomena. This kind of terranean effervescence is understood here through Gernot Böhme's concept of "the ecstasies of things". In his book *Atmospheric Architectures*, Böhme introduces this ecstatic condition where atmosphere is seen as an auratic excitation produced by an object stepping outside its physically delimited body. He writes that atmospheres are "'tinged' by the presence of things, of people or environmental constellations, that is through their ecstasies, they are spaces. They are themselves spheres of presence of a something, its actuality in space" (Böhme, 2017, p.23).

Blood Meridian revels in the ecstatic *thing*-ness of desert and it is saturated with these kinds of atmospheric latencies. There is always a feeling of violence lurking within its landscape, of what McCarthy calls "the awful darkness inside the world" (McCarthy, 1985, p.111), and there is a clear sense that this violence is transmitted or given-off into the air. How?— McCarthy attaches this vision of radical immanence to the way in which weather and ground collaborate through a particular agent of this atmospheric contamination: *dust*.

Far out on the desert to the north dustspouts rose wobbling and augured the earth and some said they'd heard of pilgrims borne aloft like dervishes in those mindless coils to be dropped broken and bleeding upon the desert again and there perhaps to watch the thing that had destroyed them lurch onward like some drunken djinn to resolve itself once more into the elements from which it sprang (McCarthy, 1985, p.111).

At this moment, the scalphunters are riding across "a lake of gypsum so fine the ponies left no track upon it." In the world of *Blood Meridian*, dust is not some benign entity – it swallows everything. As John Beck writes in *Dirty Wars*, the novel's desert wind is a force of complete erasure "that produces accelerated ruins" and while Beck argues that the wind conspires to keep the desert empty, it would seem more accurate to state that it conspires to fill the desert with dust (Beck, 2009, p.73). For McCarthy, it is the ultimate contaminant. Like Paul Thomas Anderson's unruly cloud of smoke, the desert's material capacity to produce formations of aerosolised matter that can pervade and disrupt is a keenly observed quality of life in the desert. Such dusty entities colour almost every passage of the novel. The tendency of McCarthy in these scenes is to coat the scalphunters with the ground matter through which they ride, where their features are continually hidden beneath masks of dust that turn them "anonymous in the crenellated heat. Above all else they [appear] wholly at venture, primal, provisional, devoid of order" (McCarthy, 1985, p.167). What plays out on the dunes and flats, and in the clouds and storms is a type of atmospherically-driven violence that is levelled against those who occupy the landscape, not only against their inhabitation of or progress through the desert, but also against their corporeal integrity and individual identity.



Figure 1. *Lost Samples*. Soil and dust samples collected during fieldwork in the American deserts in 2021. It was impossible to transport the samples back to Scotland due to their contaminated nature. Author, 2022

Through a period of fieldwork, the design research developed on these conceptual underpinnings by positioning itself – quite literally – close to the ground by tracking sites from *Blood Meridian* across the American borderlands. During this time, samples of soil, mud, rock, and dust were collected from the desert terrain, and catalogued alongside material from McCarthy's archive from the Wittliff Collections in Texas. These gathered pieces are not merely exploited for their informational content within the design work, instead they communicate directly with the ideas of contamination through their presence as indexical particles within the matter-drawings, paper castings, and other design research artefacts produced in pursuit of the Bath House project.



Figure 2. *Desert Slice*. Matter-drawing of the Chihuahua desert. Here latex, ash, and paint combine in a material exploration where scoring, marking, and tearing of the material palimpsest attempt to make physical the atmospheric violence of the desert landscape. Author, 2022.

[CUT TO: WHITE]

Blinding white light illuminates the desert.

It's July 16th 1945. The first atomic bomb detonates in the Jornada del Muerto desert basin of New Mexico, producing a pyrocumulus cloud over seven-miles in height. Billowing in the blinding artificial light of the inferno, the mushroom cloud strains against the smoke trail registers standing jagged like lightning, pressing skyward, wearing the thin clouds like a crown. Conditions are favourable. The wind blows the vaporous remnants of this "top secret" test to the north-west, teasing the cloud apart, turning it into a vast, invisible milieu.

Months later, Julian H. Webb, a civilian employee of the Eastman Kodak Company in upstate New York, examines strange "fogging" on new x-ray film. While Harold Edgerton's rapatronic images most readily stand as the primary visual record of the Trinity bomb test, what Webb discovers is perhaps the first photographic effect of nuclear fallout. The fogging is the indexical marking from Cerium 141, a windborne radioactive fission isotope pressed into the cardboard boxes that Kodak used to store x-ray film (Webb, 1949, p.375-380). The source of this contamination is water from the Wabash river used in a cardboard pulping mill in Vincennes, Indiana, more than a thousand miles away from the Alamogordo test site. The space in-between: home to an unwitting civilian population, "Downwinders," who would become silent casualties in an atomic plague. (Davis, 1999, p.339).

2. Desert Fogging

McCarthy's sensitivity to desert nephology seems rooted within an awareness of these open spaces as theatres of dispersal, the history of which is written in clouds of dangerous matter. From the rolling storms of the Dust Bowl to the ecocide of Utah and Nevada, the landscape has a kind of pneumatic presence, where its liveliness and animation is made manifest in clouds. Throughout his work, McCarthy presents this aerosolisation as a psycho-spatial leitmotif that is specifically tethered to the dawn of the nuclear age. For instance, there is the conclusion of *The Crossing*, which takes place in the wake of the Trinity bomb's light – it is literally a waking moment: Billy Parham rises from his slumber as witness to an augury, a false dawn of grey light that fades rapidly into an "alien dark" (McCarthy, 1994, p.153-4). Or there is his most recent novel *The Passenger* which is underpinned by the intergenerational guilt of the Manhattan Project – a psychological fallout so profound as to be seemingly written into genetics. Or there is *Blood Meridian*, where the violent after-history of the Trinity test is prophetically coded onto the terrain by the scalphunters' blood-soaked action across the landscape (Cremin, 2020). It is very clear that McCarthy sees the detonation of the first nuclear bomb as a sort of epochal moment in the way contamination and desert become fastened together, and as an inflection point for the compromising of atmosphere.

The fragility of air as a kind of pristine standing reserve concerns German philosopher Peter Sloterdijk as well. He uses the term *explication* (or *explicitation*) which he sees as a defining characteristic or attribute common to all of modernity, and by which humanity has become involved in an ever-accelerating process of technological progression. For Sloterdijk, explication is the act of cracking open, unfolding, or bringing forcibly into view something that had previously existed as a given or assumed condition, and he argues that the most significant of these latencies to undergo explication is the air.

As presented in the final volume of his *Spheres* trilogy: *Foams*, Sloterdijk's argument is that the cracking open of air delimits an entirely new era of technological progression, and is the content of his essay "Airquakes" which locates this moment of epochal change on a particular date, April 22, 1915; a date marked by the first notable use of gas in combat in an attack conducted by German forces on the Ypres front during World War I (Sloterdijk, 2004, p.89-126). The significance of the deployment of this lethal cloud of chlorine gas lay in the fact that, for the first time, the goal of warfare was no longer the destruction of an enemy's body by direct strikes, but rather to make unliveable their environment. For Sloterdijk, this act saw the forsaking of the "masculinity" and "honesty" coded within direct close-quarter combat, in favour of exploiting the possibility of compromising a person's life-supporting atmosphere by forcibly immersing them in a lethal cloud of gas. "The discovery of the 'environment,'" Sloterdijk claims, "took place in the trenches of World War I" where quite suddenly, the air, the integrity of which humans had subconsciously depended upon for survival, became an unstable substance vibrating at the edges of conscious anxiety (Sloterdijk, 2009, p.18). With this said, it seems to me that McCarthy might disagree with Sloterdijk about this claim insofar as he appears to locate a precursor to this paranoid sense of "environment" in the western deserts and the clouds of violent dust that occur there, where these arid settings existed as an almost naturalised condition of contamination ready for the era of nuclear testing that would follow.

[CUT TO: GREY]

The air is filled with dust.

It's July 6th 1962. Eleven million tons of the Nevada desert are vaporised and violently vented into the air in an instant. The ground of the Nevada Test Site explodes upwards in a rapidly expanding grey cloud, casting its pyroclastic matter and radioactive debris upwards and outwards in erratic, emetic action.

This is the Storax Sedan test.

Conducted to trial the use of thermonuclear devices in mining operations, it is predicted to emit just four-percent of its payload as radioactive fallout, but Sedan would end up exposing more Americans to radionuclides than any other test, accounting for seven-percent of the total fallout which rained down across the United States during the nuclear testing era at the Nevada Test Site. In the aftermath, high-levels of radioactivity are detected as far away as Illinois.

3. The Architect, The Cloud and The Bath House

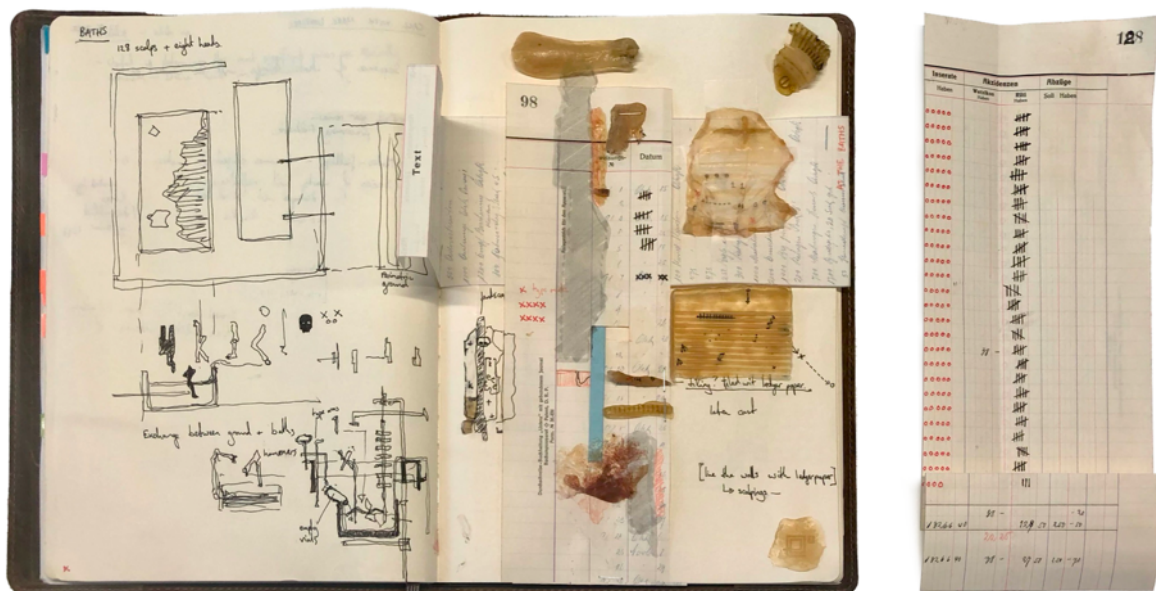


Figure 3. Sketch exploration of the Bath House with speculative latex casts and collage material. Author, 2022.

In his essay “Clouds of Architecture”, Mark Dorrian details the contemporary architect’s fascination with atmospheric formations and their ensuing pursuit of a transcendent “cloud architecture”, tracing this history from Coop Himmelb(l)au’s inflatable Villa Rosa, to Diller + Scofidio’s Blur pavilion, and back as far as reports of Filippo Brunelleschi’s efforts to represent an elusive sky through optical manipulation of a silvered material surface (Dorrian, 2015, p.108-119). What emerges from these

instances is a clear sense of the cloud embodying an extreme limit condition for architecture's material and representational capacities, and it is noteworthy that in its distinctive lightness, the cloud gives form to a kind of nothingness, coming to approximate a benign and "propertyless 'thing'". As if in counterpoint to Sloterdijk's narration of a lethal milieu, Dorrian writes:

Despite my comments on dust clouds at the start, it seems that architects are not so much interested in historicizing their clouds, and certainly not clouds that are part of the modern history of desolation – whether Ruskin's 'storm cloud of the nineteenth-century', the mushroom cloud of the atom bomb, or others (Dorrian, 2015, p.118).

Dorrian points out that the architectural fascination with cloud-making is tethered to an emblematic humidity, a quality that causes things which come into contact with clouds to lose their visual definition – "they seep, blot and blur." It might even be said that the making of such humid clouds is thought of as a benevolent exercise where the designer aims to anchor the cloud's inherent lightness and detachment from ground as "a little piece of heaven brought down to earth" (Dorrian, 2015, p.115, 118). It strikes me that it may also be *easier* to engage the issue of making or representing clouds in this way, especially since such benign entities seem to exist in opposition to the atmospheric bodies one might encounter in the desert.

As described in Dorrian's essay, humid clouds are unburdened by material loading and resist the gravitational pull of ground. There is something of a radical opposition to this idea in *Blood Meridian*, where the composition and material construction of cloud conditions seems to be nothing but ground, and where the atmosphere always has the distinct impression of being weighed-down, heavy, and problematically thick with stuff. Dorrian identifies the dust cloud as a distinctive wake condition, describing its content as "matter after form" whereby it is fixed to the destruction from which it has arisen. In other words, such clouds carry the "history of desolation" that is so notably absent from the humid variety. Like Peele's cloud-creature, these are entities with an inimical quality; even at their most benign, their dust is entropy's violence made present. Such residue is something that begs to be shrugged off. It is a characteristic that forms a critical bodily context for the speculative design of the Bath House, the symbolic character of which locates the dust cloud within the extreme weathering and violence of the novel, while simultaneously holding the aridity of these clouds in opposition to humid atmosphere of the bath.

Chapter XII of *Blood Meridian* culminates with the scalphunter's arrival in Chihuahua City on July 21st 1849. There, they are described as being registers of contamination: "... the victors in their gory rags smiled through the filth and the dust and the caked blood as they bore on poles the desiccated heads of the enemy through a fantasy of music and flowers" (McCarthy, 1985, p.165). What follows is a striking scene, a macabre carnival of commerce, bodily purgation, and celebration. The scalps and heads of victims are counted out and exchanged for a bounty of gold before being mounted onto the walls of the governor's palace as "trophies of war", all while the bloody bandits disrobe and cleanse themselves, turning the water "into a thin gruel of blood and filth" (McCarthy, 1985, p. 167). There is a sense that the scalphunters are recalibrated as vessels of dirt, and through them the western desert seems to spill into the city. In this way, the bath functions as a spatial host for the re-materialisation of the desert's airborne milieu, a place where nebulae of atmospheric contamination can be apprehended through a set of material conditions, where dust is solidified within the intermingling of bodies, contaminants, blood, and desert stains.

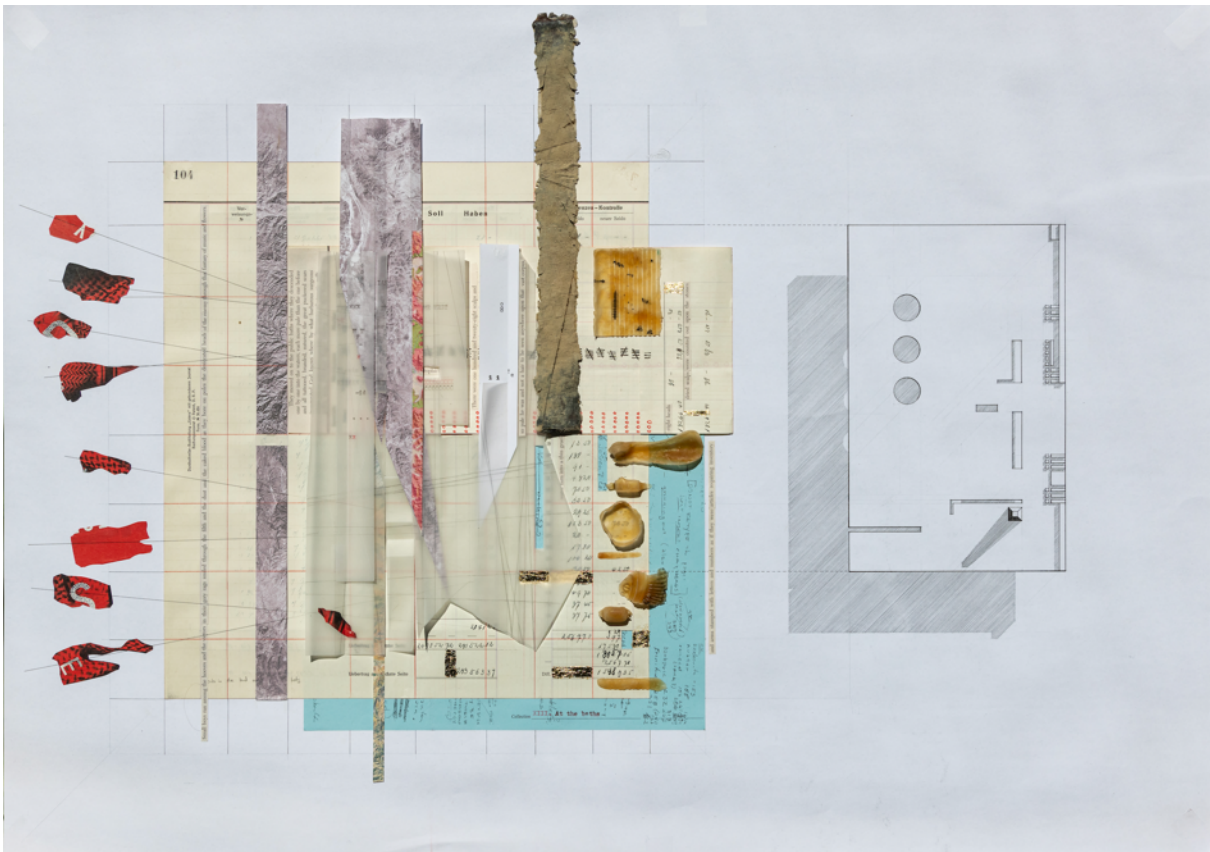


Figure 4. At the baths of Chihuahua City. Matter-drawing of the arrival of the Glanton gang at the public baths of Chihuahua City on July 21st 1849. This collage of paper, latex, ash, paint, and gold leaf explores the complex material exchanges that play out between the desert landscape and the bodies of the scalphunters. Author, 2022.

It is this conceptual underpinning that the Bath House design project aims to exploit as an opportunity to explore the making of an extreme condition: violent desert atmospheres. While the Bath House is imagined, at least initially, to develop the symbolic value of violent clouds of dust, the design work utilises matter-drawings to experiment with the difficult atmospheric and material exchanges and transmutations that occur there. Here, drawing is simultaneously thought of as a kind of collection device for the storied particles and fragments of dust clouds, and as an instrument for the mixing together and entropic agitation of that material. Paper, paint, latex, ash, glue, and gold leaf combine to stage complex exchanges: the physical contact and intermingling of these material deposits play out the remaking of the desert landscape and the marked bodies of the scalphunters.

These processes are further translated through a series of experimental design “shrouds”. Considered as developments of the matter-drawings, they are graphical and material collections, produced from the stains of grease, dirt, and dust from the same model of typewriter that McCarthy used for his entire career: an original Olivetti Lettera 32. Here, the act of cleaning, of removing and displacing contaminating dirt, guides the design research. Through the act of disrobing and washing, these dirty markings are in material and symbolic communication with the Bath House – each component of the typewriter is disassembled and removed from its housing and saturated with soap, degreaser, and water before being placed on a paper shroud to deposit its residue and dry. What remains is documented as a series of shrouds, moving between a wet veil of material to a stained, dried-out skin.



Figure 5. Olivetti Shroud, wet. Stain-drawing of grease, dirt, and dust formed by the dismantling and cleaning of an original Olivetti Lettera 32 typewriter. Author, 2023.

Early attempts at the design of the bathhouse struggled to incorporate these kinds of material contingencies, of staining, spillage, seepage, and atmospheric contamination. More conventional and orthogonal in their geometry and spatial arrangement, and did not hold together this issues of dust and atmosphere at play in the thesis. Addressing these issues, the current work-in-progress develops the project through a process of “live” making that embraces contingency. The Bath House is reconsidered as an assembly of instrumental architectural elements that are designed to interact with and apprehend desert atmospheres, and foregrounds the mixing together of the clean and the contaminated through a floating, subverted hydrological landscape of clean and dirty water sluiceways. Figured here are two of these elements in development: the Sail, an invaginated structure of canvas that passively gathers moisture and dirt particles from the air; and the Crater Bath, a cast rimmed structure for the intermingling of water and dirt, blood and oil, bodies and the desert.

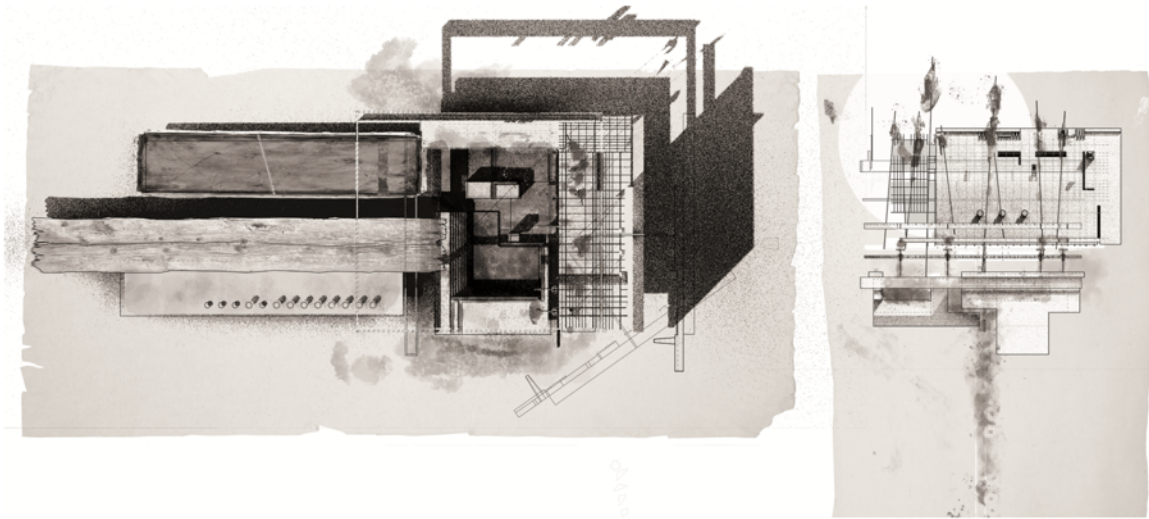


Figure 6. Early developmental plan and elevation of the Bath House. Author, 2023.



Figure 7. Left: The Sail and the Crater Bath components of the Bath House in progress. Right: The underside of the Crater Bath, supported by components from the disassembled Olivetti typewriter. Note the waste sluiceway to the fore. Author, 2023.

4. Closing Remarks

There is an obvious difficulty in this kind of design research and making. On the one hand there is the unruly gaseous state of cloud, on the other there is the practical issue of working with dangerously contaminated dust – an issue that was exemplified by the legal obstruction of transporting internationally the ground samples taken during desert fieldwork. Nevertheless, this research tries to read within the contingent field of troublesome clouds and contamination to engage a distinctly non-linear and messy kind of design exploration. This approach informs the use of scenographic interludes deployed in this paper as much as the design research. The initial matter-drawings, dirty shrouds, and atmospheric architectural components of the Bath House projects that are considered as forms of “desert testing” – experiments (and failures) in the making physical of atmospheric bodies that might be considered to register the kinds of violence that exist in the landscapes of Cormac McCarthy’s *Blood Meridian*. What makes this “extreme making” is not just the idea of these pieces as material explorations, or the interdisciplinary approach to architectural research and production, but that the Bath House project must necessarily negotiate the difficult histories of radical violence: genocide, nuclear exploitation, the colonisation of landscape and the natural ground, and the historicised dust that pervades the desert space of the American West.

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