Sterile Spaces, Synthetic Humans, and Disentanglement: High Modernism and Our Alienation From Nature

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Figure 1: Shigeru Ban's "House Without Walls." Image via: arquitecturaviva.com. Photograph by: Shinkenchiku Sha.

[High modernism] is best conceived as a strong, one might even say muscle-bound, version of the self-confidence about scientific and technical progress, the expansion of production, the growing satisfaction of human needs, the mastery of nature (including human nature), and, above all, the rational design of social order commensurate with the scientific understanding of natural laws. (Scott, 1998: p. 4)

1. Introduction

In 1997, a striking building designed by the Japanese architect Shigeru Ban was completed in Nagano, Japan: *The House Without Walls*. Partially dug into a mountain slope, the house sported a horizontal roof and an equally horizontal floor plane, but its walls were made almost entirely of glass. The space in-between the two planes formed the interior, looking out over the surrounding forest in all directions. The floor protruded like an extended platform from the mountainous environment. The whole was sterile white. If anything, this building took the core tenets of architectural high modernism to an extreme. The much-praised modernist transparency and emphasis on simplicity expanded to a whole new level of artificiality that even Le Corbusier could have scarcely imagined.



Figure 2: The interior of Ban's House Without Walls. Image via archeyes.com. Photograph copyright Hiroyuki Hirai.

In its clean, sterile and almost surgical whiteness, this building could have been the backdrop for a science-fiction movie. As we'll see in section 3, it's not surprising then that Ridley Scott's 2018 movie *Alien: Covenant* contains an opening scene that feels eerily like Ban's *House Without Walls*.

There is a deep and elective affinity between Ban's architectural gesture and high modernity's (see, e.g., Scott, 1998) relation to nature. Moreover, I maintain that contemporary high modernist culture (also acccurately labeled "supermodernity" or "hypermodernity") of this sort fosters a truly anti-ecological and anti-organicist attitude, and that its relation to nature is therefore dangerously schizophrenic—characterized by a deep insecurity about its own limits—even despite its ubiquitous presence (Augé, 1992).

By examining this type of high modernist representation of "nature", we can trace the fault lines of the modern mind, but we can also indicate a possible direction for a reconciliation with nature, one that may begin with an aesthetics of entanglement rather than distance; with engagement rather than technocratic control. This essay aims to diagnose the problematic character of high modernism's attitude towards nature and provide the outlines for such a reconciliation.

Section 2 describes the tensions between high modernity's two core tenets: (i) continuous change geared towards progress and (ii) the simultaneous static ideal of the "generic eternal" (Paans, 2019). Section 3 traces the similarities between the CIAM-inspired strand of modernist architecture of the late 20th century and the

corresponding aesthetics of Ridley Scott's *Prometheus* and *Alien: Covenant* movies. Based on this philosophical analysis, section 4 provides a concise characterization of high modernist space, its aesthetic underpinnings, and its relation to nature. Section 5 then describes an "aesthetics of entanglement," based on *the neo-organicist worldview* (Hanna and Paans, 2020; Paans, 2022) and process philosophy, and proposes how such an aesthetics could form a viable antidote to the anti-ecological tendencies operative in high modernity, without falling into the trap of wishing to return to a pristine Eden.

2. The Center Does Not Hold

One of the paradigmatic figures of high modernity is perhaps not a historical individual, but the lonesome wanderer overlooking the clouds in Caspar David Friedrich's 1818 painting *Wanderer Above the Sea of Fog*:



Figure 3: "Wanderer Above the Sea of Fog," by Caspar David Friedrich (1818).

In his silent presence, this figure represents a relation towards nature that would generate some of the most tension-laden currents of thought in the 19th century: the human individual in all its fragility and finitude set in opposition to the imposing

forces of the cosmos. Not coincidentally, the raw power of nature is in Romanticism imbued with an emotional, almost demonic force:

The following environment can cause [awe] in an even higher degree. Nature in turbulent and tempestuous motion; semi-darkness through threatening black thunder-clouds; immense, bare, overhanging cliffs shutting out the view by their interlacing; rushing, foaming masses of water; complete desert; the wail of the wind sweeping through the ravines. Our dependence, our struggle with hostile nature, our will that is broken in this, now appear clearly before our eyes. (Schopenhauer, 1969: p. 204)

Humanity is confronted with his limits in an endless universe. Yet, humanity is simultaneously also lord and master over nature. Friedrich's *Wanderer* is the archetypical individual who contemplates nature in its overwhelming power, but at the same time harnesses its forces to keep it subdued—and thus at a safe distance.

The tension between nature as untamed power and as a controllable stock of resources took shape during the 19th century, and we are still experiencing the after-effects of this deeply schizophrenic attitude. During the Industrial Revolution, nature was believed to be a conglomerate of resources that could be transformed at will. We can find a striking illustration of this thought in Marx's and Engels' *Communist Manifesto*, in which they proclaim that the final realization of communism is "abundance" for humanity. However, what they envisioned has little to do with ecology, but with material abundance. Clearly the worries and pressures of ecological degradation were not yet an issue during the 19th century, despite the fact that the detrimental effects of industrialization were clearly visible, even prompting a "return to the land" movement in Britain (Marsh, 2010: pp. 16-17). Despite being ideological opposites, both the communist and the capitalist dreams of material abundance were premised upon the dream of endless natural resources.

In a similar optimistic vein, the urban theorist John Claudius Loudon wrote in 1829 that oil and coal would be the prime fuel sources for the future city of London that would emerge:

Under every street we would have a sewer sufficiently large, and so contrived as to serve at the same time as a subway for the mains of water and gas, and we would keep it in view that hot water, hot oil, steam, or hot air, may in time be circulated by public companies for heating houses; and gas supplied not only for the purposes of lighting, but for those of cookery, and some for manufactures. The matters conveyed by the sewer we would not allow to be all wasted in a river; but here and there, in what we would call sewer works, to be placed in the country zones, we would strain the water by means of machinery, so as to gain from it almost every particle of manure held in mixture. (Louden, 1829)

The *mechanistic worldview*—which says that everything in the natural universe, including us, is essentially either a formal automaton or a natural automaton (Hanna

and Paans, 2020)—was implemented by relying on the twin doctrines of processing and efficiency, sweeping entire nations before it, involving them in the grand operation of transforming natural resources into products by means of steam, mechanization, and engineering. As Marx and Engels did in their *Communist Manifesto*, Loudon premised his reasoning and his steadfast belief in progress on the endless and unproblematic availability of natural resources.

There is a deep paradox in the conception of nature as it emerged during the Romantic era: on one hand, its vastness and its power confront one with one's finitude; and on the other hand, it exists as a mute collection of raw materials that modern production processes transform into commodities, products, and ultimately the symbols of high modernity itself. But those two opposites cannot be reconciled within one single frame of mind. They give rise to tensions that tear the modern subject apart from the inside. Seen this way, the Wanderer in Friedrich's same-named painting is a tragic figure who involuntarily unites those forces in himself: his urbane, calm and collected appearance is a fragile ideality, the schizophrenia and tension of modernity personified in a single individual.

Marx's and Engels's dictum that "all that is solid melts into air" may therefore be regarded as *the* epitome that captures the cultural experience of high modernity (Berman, 2013). It is not just that the existing world seems to dissipate, but that it congeals into a new world beyond recognition. Old certainties disappear, only to be replaced by new structures and possibilities, often at a maddening speed. This process of change gives rise to inner tensions that characterize the modern subject, and that stamp modernity as an edifice with deeply unstable foundations, a palace about to turn into a ruin.

Yet, in attempt to counteract the speed of its own development, modernity erected a new world on the speedily disappearing remnants of the past: a generic eternal, universal in its functionality, and eternal in its objectivity and therefore of timeless artistic value (Paans, 2019).

But what is this space of high modernism? It is—as postmodern thinkers pointed out—the space of Man, or better, of Humankind, a relentlessly anthropocentric space. It is the space in which nature is not present in its threatening form, but as a supplement, or harmless spectacle or a controlled representation (Paans and Pasel, 2022: ch. 1).

In the high modernist conception, natural forces are mere things to play around with, ranging all the way from combustion engines to atomic fusion. And yet, their inherent dynamism is juxtaposed to the immutable character of the created, architectural, and pure order. The white houses, white museums, white art galleries, and white schools of high modernity all represent an eternal order of functionality that is justified by its

application of functionalist thought and instrumental, engineering rationality. These buildings represent a distance and sterile environment in which the sublimity of nature is on display like a commodity or a caged animal. In a very real sense, high modernity is a "society of the spectacle," but it is not just the spectacle of consumerism that captivates the modern attention. High modernity fosters an attitude that attempts to reduce nature to a controlled representation, regarding it as a malign and fickle entity that must be watched closely, and—if possible—be disciplined and curtailed.

3. The Deadly Danger of Playing God: Prometheus and Covenant

The latest movies in Ridley Scott's *Alien* series (the 2012 *Prometheus* and 2017 *Covenant*) explore the problem of humankind's ambition to play God. This theme is cinematically approached by posing the question of humanity's origins. The central issue is that we do not know who or what made us. Are we mere cosmic coincidences, flukes that emerged from the swirling chaos of nature? This question and the accompanying story of alien species and sci-fi action is set off by an aesthetic that is worth analyzing, because it tells us much about one aspect of high modernity, albeit in an exaggerated, dramatized form: it concerns the price of technological control and its diametric opposite, namely the vulnerability of that this progress harbors. Seen from this angle, Scott performs a psychoanalytic reading of the high modernist mindset, and what emerges again is the tension that we encountered in Friedrich's *Wanderer*, but this time supercharged and lethal.

Both movies start with an expedition from Earth into space: *Prometheus* starts from the premise that mankind has found the origin-planet of its creators; *Covenant* starts with a space vessel that is on route to the distant and promising colony Origae-6. The choice itself is already interesting: the spacecrafts present the hypermodernist answer to hostile outer space. The architecture of the vessels confirms this: inside, we see an ultra-high-tech, sterile, tightly-structured, and functional world, governed by routines, an artificial climate, checks-and-controls, and full-scale high modernist functionality; outside this cocoon looms an uninhabitable, hostile, unpredictable void that is undoubtedly deadly.

Yet, apart from the voyage-centered main theme, *Covenant* also features a prologue that represents hypermodernity at its very best: the inventor of an artificial human breed ("synthetics"), Peter Weyland, is depicted in his villa, overlooking a desert environment. Together with his most advanced creation, he ponders the future. The architectural space itself is eerily reminiscent of Ban's *House Without Walls*. Its spatial orientation is utterly horizontal, offering an unimpeded view of the landscape outside. Yet, its glass curtain wall prevents the outside from physically coming in. It is a mere visual spectacle. No breeze is felt here, nor is rain. Even the light of the space is eerie: it is indirect, yet clearly artificial. It pretends not to be there, but nevertheless, it influences everything.



Figure 4: The high-modernist space in which the movie's prologue on human finitude takes place. Still from *Alien: Covenant* (20th Century Fox, 2017), directed by Ridley Scott.

More than anything, this space is spotless. It is uniformly white—the anti-color of purity. Its whiteness reduces everything within it to a self-contained object, and almost to a disturbance of the generically eternal order. It is a touch of genius that Scott has a selection of artworks included in the scene: two exemplars of Carlo Bugatti's *Throne Chair*; a 1470 painting titled *The Nativity* by Piero della Francesca; the *David* by Michelangelo; and a Steinway grand piano. When the Synthetic in the scene is asked by his creator what his name is, he walks up to the *David* statue and answers "David." Just as Michelangelo's *David* physically represents and celebrates the perfect proportions of the human body, so too is the Synthetic perfect in all the ways that humans are not. This point is painfully hammered home in the following dialogue:

Synthetic: "You created me. Who created you?"

Weyland: "The question of the ages. Which I hope you and I will answer one day. All this...all these wonders of art, design, human ingenuity...all utterly meaningless in the face of the only question that matters."

Synthetic: "You seek your creator. I am looking at mine. I will serve you. Yet you are human. You will die. I will not."

Weyland: (curt) "Bring me the tea, David."

Perfection is but a small comfort in the face of finitude. Tellingly, philosophers like Alain Badiou equate ontology with mathematics, and apply this formula: it is mathematically describable, so it must be fulfilling (Badiou, 1988, 2006). But the Synthetic painfully reminds Weyland that he, the Synthetic, is perfect in the unachievable manner that Michelangelo's *David* is: such perfection cannot be endured for long, as it not a representation of actual life, but of a static order.

In the background of this tense conversation, this philosophical issue lurks as an unspoken curse: humanity cannot come to terms with what *is*, in all its suchness. In a fine critique of Badiou's treatment of mathematics (notably, set theory) as ontology, Roger Scruton remarks that:

[Badiou] sees set theory as ontology, the science that tells us what ultimately exists. But ... set theory does not presuppose the existence of anything. It deals only in sets, and all the sets required by arithmetic—all the numbers—can be constructed from φ , the empty set, the set of all things that are not identical with themselves.

Since we can construct mathematics from no ontological assumptions, it would be natural to conclude that it is not mathematics but physics, say, which tells us what ultimately exists. But no, that is not Badiou's conclusion. Since mathematics is ontology, he argues, we can conclude that the world consists in multiplicity and the void. (Scruton, 2019: pp. 245–246)

No matter how perfect and ideal mathematical representations are, they are only instruments for describing a reality that fundamentally exists outside them. Glorifying them as the basis of reality amounts to preferring abstraction over reality; ideality over corporality; and calculation over materiality. But when the inherently corporeal and material questions of origin and real existence present themselves, then abstractions provide no comfort and no answer. Even worse, every attempt to answer an existential question with a recourse to formal logic and mathematics only further aggravates the feeling that we are merely scratching the surface of Being.

The artworks in the scene, the unapproachable, mute nature outside, the Synthetic, and the grand ideas: they all outlive the individual human being. Nature has not gifted humans with immortality. The tension between finitude and eternal potential to create gives the entire scene—indeed, the entire architectural space—a strangely awkward atmosphere. Michelangelo's *David* almost comes across as threatening. In its massive materiality, its perfect proportions and its anthropomorphic presence, it functions as an anchor-point for human understanding. At the same time, it functions as a reminder: long after its creator had died, it still endures. More than anything, its durability and timeless quality form a static and imposing background for the individual human, whose flame flickers out and whose name is heard no more.

Apart from the similarities between the *Covenant* prologue and the spatial layout of Ban's building, there is also a difference. Ban's *House* was premised on the ideal of the "universal floor" – that is, the multipurpose horizontal architectural plane on which a variety of functions can take place. Or, in Ban's own words:

2/5 House and Wall-less House were responses to Mies' "universal space"—the idea of a fluid space beneath a large continuous roof supported by furniture-like cores and shaped by partitions. "Universal space" may seem quite amorphous or uncontrolled at first glance, but

in fact it is composed with carefully positioned cores, partitions and perfectly arranged furniture to create precise yet invisible spatial domains.

By contrast, the size, continuity and quality of traditional Japanese space can be changed by means of the fusuma, shoji, or reed blinds depending on the season or occasion. With or without a roof, the interior and exterior spaces are continuous and the intermediate domain shifts. I call this arrangement the "universal floor," and the 2/5 House, Wall-less House, and 9 Square Grid House were attempts to realise this arrangement with contemporary materials and methods for everyday life. (Ban, 2003: p. 149)

This is a recurrent theme in high modernist architecture: the emptiness of the space is supposed to invite a certain openness of action.¹ Nevertheless, the ideal of a connection with nature is tangible in Ban's work, even if it is framed in a modernist conceptual framework. However, in the staging depicted in *Covenant*, the distance between the "space of Man" and nature has increased tenfold. In hypermodernity, nature exists as a mute background, in a visual format or otherwise.

Likewise, Ban's description in the quotation above closely resembles the positioning of art objects in the otherwise amorphous space in *Covenant's* prologue scene. The "cores" that create precise spatial domains are cues or invitations to interaction. However, one could question how open such invitations actually are. The invitation is maybe not so much an encouragement as an instruction to use (or leave) the space. After all, the modern, white museum instructs the visitor to enjoy art, but carefully sets the terms for doing so. Correspondingly, the spaces of high modernity are *instructivist*—they command with an almost military certainty and demand. This principle applies when they do so in a self-conscious manner (as the ostentatiously white art museums do), or they may operate more discreetly, nudging and directing a multitude of everyday patterns of behavior with breathtaking precision and efficacy.

Like *Prometheus, Covenant* features the story of a spaceship that is lured to a planet that could be a potential colony. However, the local life forms attack the exploring crew members, jeopardizing the entire expedition. The few crew members that survive encounter another Synthetic named "Walter" who is stranded on the planet's surface. Walter turns out to be the Synthetic that was aboard the *Prometheus*. And here, the very agency of intelligence is the source of cosmic horror. Walter detests the fact that he may serve but is not allowed to create. He is relegated to a subservient role for humans that he regards as inferior. Another way of putting this point is that Walter realizes that is being used as mere instrument by those who claim the liberty to create exclusively for themselves.

¹ I've discussed the similar case of Plein, 1953, in the neighborhood of Pendrecht, Rotterdam, NL, in (Paans, 2019).

In *Covenant*, the depiction of nature again captures the attention: not unlike the Scandinavian landscape, the planet on which the crew finds themselves is lush, yet raw and dangerous. Nature is present as a continuous threat, a goddess that may erupt in fury at any moment. The hypermodern spaceship used for descending to the planet's surface provides the only barrier between the comforts and semblance of control offered by civilization, and the raw, overwhelming power of nature. When, during an expedition, alien life forms begin to attack the crew members, and indirectly cause the destruction of the spacecraft, we experience W. B. Yeats's dictum that "the center does not hold" in its full, traumatic force. All of a sudden, the expedition members are without a center that anchors them to their high modernist achievements. The raw force of nature cannot be stopped by sequences of definite functions and advanced technology, it seems.

Even prior to the scenes in which the crew members are stranded on the planet, we encounter the idea of nature as a representation in another version, in a sub-theme of the storyline. By means of a tragic accident on the spacecraft, one of the high-ranking crew members loses her husband. While mourning him, she opens the tablet on which he sketched out a future dream for them both: to grow old together in a self-made wooden cabin on the side of lake. In an accompanying movie shot with a handheld device, he exclaims that he loves her while he is mountaineering.

The camera sweeps over the rough landscape, revealing jagged peaks and the play of the howling wind. Nature in full force—but again caught on a screen, as a harmless digital representation. Throughout the movie, nature-as-such emerges in a number of guises: as the lurking, unpredictable alien life forms nearby; as an idyllic, faraway dream; and as a digital spectacle on a screen. In all these cases, the undercurrent is broadly Romantic. Nature is depicted as a source of equal fascination and dread; and at the same time—in its idyllic form—as an ideal. Even though the alien life forms are a futuristic element, they nevertheless fulfil the role of the demonic that the Romantics played with: the water nymphs, the goblins, and the unsettling figures of the vampire and the undead. All these represent aspects of nature that cannot be controlled, understood, or tampered with. And if the hapless human encounters such entities, the results are often fatal.

In the traumatic figure of the Synthetic, however, the neat distinction between high modernist spaces and raw nature is blurred. The resulting fusion is not a solution, but instead it brings only more trouble. Not coincidentally the appearance of Walter is bound up with a fourth appearance of nature: the ruin of civilization and its associated material culture. In the scene in which Walter rescues the crew members, he guides them to a ruined city. We learn that Walter found out that humanity's creators, the Engineers, lived here. In a grandiose gesture, Walter destroys the entire city using a biological weapon that the Engineers left behind.

The Engineer's creation turned itself against them in an act of willful defiance, or — as Walter might have thought—creation. Amidst the ruins, the crew members slowly realize that Walters intentions are questionable to say the least, since he turns out to have little love for humanity. The depiction of the ruined city is chilling and highly reminiscent of Caspar David Friedrich's 1818 painting, *Monastery Graveyard Under Snow*. Like Friedrich's monastery, the ruined city shows us how nature gradually but inevitably eats away at civilization if it is not continuously maintained. The former grandeur of the city can be grasped dimly, but it is clear that it will succumb to nature in the course of time. This insecurity marks high modernity through and through. If humanity is not there to sustain civilization, then.... So, nature in its threatening guise is re-invoked.

Again, it is a Romantic literary masterpiece that drives the plot, but this time, it is a section of Percy Shelley's poem *Ozymandias*, approvingly quoted by Walter:

My name is Ozymandias, King of Kings; Look on my Works, ye Mighty, and despair! Nothing beside remains. Round the decay Of that colossal Wreck, boundless and bare The lone and level sands stretch far away. (Shelley, 1818)²

The ruined city is indeed a "colossal Wreck," but above all it is a Friedrich-style ruin: it expresses the relentless work of the forces of nature on civilization. If anything, the ruined city hammers the point home that humanity is finite and insignificant in the greater scheme of things. When all is said and done, human civilization is as mortal as we are individually.

In a gesture that is as grandiose as it is futile, high modernity conceived of alternative spaces—*heterotopias* in Foucault's sense of the word—that would negate the encroaching and intimidating power of nature in a bid to circumvent mortality and finitude. In that sense, the opening scene of *Covenant* captures the dilemma perfectly: humanity cannot cope with its limited existence and is prepared to do anything to avoid death. Modernity's heterotopias promise another form of being. Technology serves to cheat death, to cheat our finitude by means of mechanical tricks. The figure of the "posthuman" or "transhuman" is the most recent incarnation of this fantasy: a quasi-human creature that's released from human mortality and from the pressing burden of its impending end. The Synthetics represent just this technological solution. But instead of being a success, they turn out to be a disaster: in the mirror image of the Synthetic—no matter how anthropomorphic—finitude and mortality do not disappear. On the contrary, they are re-emphasized and hammered even more painfully home for the human onlooker.

² Shelley's Ozymandias was published in 1818, the same year as the creation of Friedrich's Monastery.

The very perfection of technology highlights the shortcomings of the organic human body with its propensity to inevitable degeneration and decay. In the face of this predicament, the very spaces constructed by high modernity serve as an ideological counterweight to our finitude, a pure environment cleansed of the traces of real nature, in which we live, and move, and have our being — and then die.

So the high modernist grudge is once again that nature has forsaken us, and that our own, organic bodies are testimonies to her treacherous ways. The remedy is technology, and if that technology can be derived from nature itself, that is even better. For example, recent developments in organoid technology and the program of "organoid intelligence" (OI) are driven by an essentially high modernist impetus: the control and mastery of nature by means of technology, and in this case, digital technology (Smirnova et al., 2023). The trouble here, however, is the brute dual fact (i) that "intelligence" in the sense in which we're intelligent, is necessarily organismic, not mechanical, and (ii) that the history of human cruelty, oppression, violence, murder, torture, and warfare amply demonstrates that, by and large, we are spectacularly unable to use our intelligence successfully for the benefit of humankind. A perfect example is the invention of the atomic bomb. Therefore—unless of course we simply refuse to pursue the OI program—in all likelihood, it will be no exception to the all-too-human propensity for using our intelligence to snatch defeat from the jaws of victory (Hanna, 2023; Kinderlerler, 2023).

4. High Modernist Space: Four Aesthetic Themes

Given the elective affinities between Ban's architectural gesture and the visual aesthetics of the *Alien* series' latest installments, how can we characterize the aesthetics of high modernist space? And given the high-modern fixation of overcoming the unpredictability of nature by means of technological control, how can we characterize the aesthetic of the resulting spaces?

Before delving into the details, it is worth pointing out that my reading of the high modernist spatial aesthetic has little to do with beauty-as-such. Instead, it deals with the normative framework that forms the background for what the high modernist mind considers beautiful, valuable, pure, harmonious, and desirable in the face of the untamable power of nature. Correspondingly, I'll discuss four core themes: objectivity, immutability, distancing, and asceticism.

Objectivity

There are significant doctrinal links between early 20th-century high modernism in architecture and developments in the natural sciences during the same period. The key word of this historical period is, perhaps, "objectivity." Just as the engineering sciences and natural sciences promised to usher in a new period of universal progress

by means of probing and manipulating the deep structure of the natural universe, so too was architecture destined to realize universal well-being for the human race by means of technology grounded on the engineering sciences and natural sciences. A glorious future, built for success, and all of it flowing from the "imagination of cold reason" and the "use of the slide rule" (Le Corbusier, 1929/1987: p. 147). The new architectural space was made for Man, and it expressed one thing: control and mastery of nature through technology. In turn, technology demanded objectivity. The Vienna Circle declared confidently that philosophy had to describe the "neutral system of formulae" that represented the deep structure of the universe. By doing so "neatness and clarity are striven for, and dark distances and unfathomable depths rejected" (Vienna Circle, 1929/1996: p. 5). Here, we encounter again the pathological fear of "unfathomable depths" yet combined with a strange confidence that the light of the human intellect would tame and survey these dark recesses.

In turn, the arts would emulate this sanitary gesture in a different register and represent through purposive experimentation just how perfect and eternal the modern world view was. To illustrate this attitude, we can cite Theo Van Doesburg (1923) and Le Corbusier (1929/1987):

Our epoch is hostile to every subjective speculation in art, science, technique, etc. The new spirit, which already governs almost all modern life, is opposed to animal spontaneity, to nature's domination, to artistic flummery and cookery. In order to construct a new object we need a method, that is to say, an objective system. (Van Doesberg, 1923/1981: p. 195)

The use of the house consists of a regular sequence of definite functions. The regular sequence of these functions is a traffic phenomenon. To render that traffic exact, economical and rapid, is the key effort of modern architectural science. (Le Corbusier, 1929/1981: p. 195)

In Van Doesburg's remark, subjective speculation is portrayed as animalistic, and an objective system is proposed to break away from this oppressing hold of subjectivity.³ In addition, Van Doesburg equates method (in this case: a systematic approach) with objectivity. It seems that he regards subjectivity and systematic approaches as mutually exclusive. Le Corbusier shares Van Doesburg's emphasis on objectivity, when he speaks of usage as a regular sequence of *definite* functions. The conviction that the usage of a house (or city) can be fully determined in advance is directly mirrors the idea that no problem is outside the reach of science or engineering—again, no dark recesses and unfathomable depths here! Thus, Le Corbusier treats architectural design as a practice that manipulates fully determinate and exact

³ Van Doesburg's ideological predecessor, Adolf Loos, had already argued in his 1904 book *Ornament and Crime* that only thugs and criminals were tattooed; and he didn't shy away from characterizing people who decorate their body as "animals" or "degenerates." Again, the image of "animality" is invoked to do away with spontaneous or personal expressions. Contrariwise, the image of "purity" is invoked to represent objectivity.

symbols in configurations that are themselves fully determinate and exact. And in turn, the resulting "living machines", "healing machines," or "production machines" represent the triumph of reason and efficiency. Optimization becomes the core value for design, and the justification for any measures taken. In turn, objectively measured values and strategies serve to ground the entire creative enterprise in the technological foundation that promises the overcoming of nature and finitude.

Not surprisingly, at its core, high modernism was a sanitary movement: it promised to rid society of the unhealthy evils of the 19th-century metropolis. Cholera epidemics, industrial pollution, cramped living quarters, traffic congestion: high modernism aimed to overcome it by large-scale sanitary operations. Not coincidentally, the emphasis was on clean spaces, clean surfaces, clear electrical light, clean air and water, and a form of nature that was domesticated and servile to the sanitary aims of high modernity.

Objectivity in everything—including predefined daily routines, the presence of tamed nature and fully mechanized processes—would create a new civilization. Indeed, it was order, the segmentation of daily life and the factory-like logic of routine that was promised as the new remedy that would rid civilization from the specter of unpredictability. But to get rid of unpredictability, one must get rid of spontaneity first.

Distancing

One strategy for getting rid of spontaneity is to keep nature at arms' length, to distance oneself from it. In high modernist architecture, this strategy is on full display: Le Corbusier's *Villa Savoie* was placed on columns in order to enjoy the treetops—it was literally set apart from the earth. And, for him as for many high modernists, sterile white or neutral grey colors would cover the walls. Geometric shapes would replace the "jagged and anxious" forms of previous architectural styles with the purity of form and absence of ornament. Purity was the aesthetic *leitmotif*.

And so enters the second pole of the dialectic: high modernist spaces not only distanced themselves physically from the unpredictability and unfathomable depths of nature: they simultaneously created spaces where one could look out over nature, and convince oneself that one is "lord and master" of it by sticking to self-imposed routines and forcibly shutting nature out. Indeed, the routine is regarded as the overcoming of nature by means of its rational purpose, its reliability, and the possibilities for planning and control it invites. If nature is present, it is as a play of

"definite functions" that can be controlled and anticipated.⁴ A clear visual example can be found in Ludwig Hilberseimer's treatment of settlement form, wind direction and avoiding building in areas where the smoke of heavy industires passes. The diagram seems to harness natural forces, but in reality, we deal with an almost machine-like approach to natural phenomena.

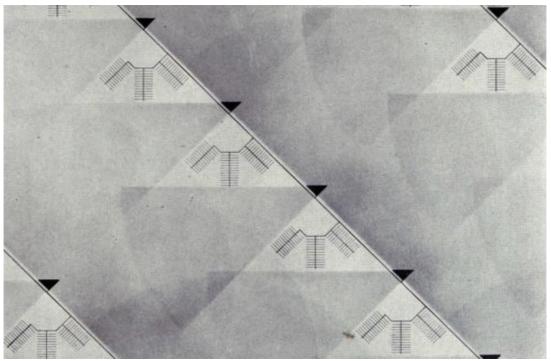


Figure 5: Wind diagram by Ludwig Hilberseimer. The wind is treated as a purely mechanical, directional phenomenon that demands a standardized response. Source: (Hilberseimer, 1994: p. 117).

Unpredictability is banished from the white spaces of high modernity, and only the core tenets of functionality, regularity and exactitude reigned supreme. High modernist space is ordered to maximize predictability through exact functional descriptions. These assignments are again based on categories that formally constitute human life, its "neutral set of formulae" as dutifully deciphered by the sciences. Nowadays, these spaces are more and more relegated to facilities and the hyperspace infrastructure that envelopes the planet. The routines that reign in these spaces allow indeed for predictability and functionality. Yet, they feed reality back to the user. Like the entirety of the modern project, it becomes self-referential and reflexive, and thereby self-enclosed. But it is life itself that is kept at bay, in its open-endedness and its capacity to morph, adapt, and subvert.

To be truly a lord and master, one needs to be able overlook one's kingdom and "see like a State" (Scott, 1998). And here, as in Friedrich's *Wanderer*, we can introduce

⁴ Interestingly, Laszlo Moholy-Nagy claimed that his architecture was searching to accommodate the "biological needs" of humanity. See (Banham, 1970: p. 318). Similar themes can be seen in the work of Ludwig Hilberseimer on city planning. See (Hilberseimer, 1944).

another figure who can teach us something about the pitfalls of distance and control. This time, however, it is the Babylonian King Nebuchadnezzar on his tower, proudly looking out over his kingdom, not unlike Ozymandias. High up in his tower, the surrounding nature is perceived from out of an aesthetic space. It is reduced and framed as a spectacle that is at a distance, safe to look at, and above all defanged. By consciously creating a distance towards nature, the high modernist human can look down on it, satisfied with the fact that the uncontrollable is put in its place by means of technology, power, planning, and control.

This distancing creates a feeling of power and cements the legitimacy of a ruler as controller of nature. But should we not read the madness of Nebuchadnezzar as his moment of profound—yet involuntary—realization, instead of interpreting it as a divine punishment for his pride?

Suddenly, Nebuchadnezzar realizes that his distancing solves nothing, and the fact that even while playing King, he could never be up to the task: he is simply too small and too fragile in the face of nature itself. This would have been the moment to turn towards an ecological (i.e. fully engaged and entangled) attitude towards nature, but instead, the very animality of nature is projected back into Nebuchadnezzar's psyche. The very displacement that he sought to create backfires and erupts into himself: he experiences the traumatic split of the anthropocentric attitude in its full force.⁵ It's no mere coincidence, then, that Percy Shelley's chilling poem *Ozymandias* could very well refer to Nebuchadnezzar or kings like him; and no coincidence that it plays such an important role in the narrative of *Alien: Covenant*. *Calculated Asceticism*

Those white high modernist spaces are ascetic spaces, away from the concreteness of life towards the aestheticized, carefully calculated pleasure of routine, order, and a materiality of total control. In those spaces, order is glorified. In *Alien: Covenant*, the opening scene features the high modernist white spaces, in which artworks play the role of uprooted, decontextualized, and alienated objects, almost as if they are remnants of a historical world long gone and superseded by the universal and unstoppable aesthetic of high modernity.

The presence of these artworks serves only to accentuate the universality and totalitarian, overwhelming, minimalist aesthetic of high modernity (Aureli 2013). We can cite as cases in point the design aesthetics of Apple, UNStudio, Santiago Calatrava and Zaha Hadid Architects here. Purity, whiteness, sleekness and above all a kind of

⁵ Nebuchadnezzar was by no means the first human being to experience this distancing. Adam can be credited as the archetypical human being: in the Fall, Adam suddenly realizes that he does not belong in Paradise any longer. The moment of being expelled is the beginning of human agency divorced from an Arcadian unity with nature as such.

cleanness invoke a world of total order – and one without algae, specks of dust, scratches and impurities. This clean, sleek and pure style did not fall from the heavens ready-made. As Reyner Banham contends:

In picking on Phileban solids and mathematics, the creators of the International Style took a convenient short-cut to creating an ad hoc language of symbolic forms, but it was a language that could only communicate under the special condition of the Twenties, when automobiles were visibly comparable to the Parthenon, when aircraft structure really did resemble Elementarist space cages, when ships' superstructures really did appear to follow the Beaux Arts rules of symmetry, and the additive method of design explored in many branches of machine technology was surprisingly like Gaudet's elementary composition. (Banham, 1970: p. 328).

In fact, Banham goes so far as to say that the "universal" or "organic" rules that the modernists claimed dictated their design method did not exist at all. The modern visual aesthetic developed in a time when a confluence between technological advancements, cultural values, and aesthetic sensibility combined with a dose of Utopian rhetoric gave indeed rise to a new world—one, that is, with a curious absence of the detailing that made classical architecture so rich. In fact, it seems as though the visual aesthetic developed extremely quick and with a soaring vision in mind, while the entire tactile aesthetic lagged behind or disappeared altogether behind glass, steel, white stucco or smooth concrete.

In today's parametric architecture, we witness the same impoverishing effect. The swooping gestures are dynamic, the finishing sleek, the aesthetic seemingly rational, the construction machine-like and proudly presented as the spatial backbone of rationality. Yet, a curious and often awkward absence of tactile detail conveys the strong suggestion that this world is not meant for human habitation, but for habitation by a race of Synthetics.

Likewise, the artworks and objects in *Covenant* are completely engulfed by this sterile white aesthetic of space, whereby that space is not intended to interact with them. Like the alien lifeforms that are parasitic on their host, everything is absorbed into the sterile grip of high modernism. Everything serves as a source material or as a raw resource to be converted, just as Loudon, Marx, and Engels envisioned it. Nevertheless, nature as such is beyond the reach of the high modernist aesthetic, and that is exactly why it is distrusted.

The concreteness and inherent unpredictability of natural life itself is ordered, tamed and through functional division segmented and streamlined. Engagement with the world takes the form of following or instantiating a protocol. This feature was already noticed by Max Horkheimer, when he wrote in 1947 that driving a motorcar amounted to being subjected to an endless number of imperatives (Horkheimer, 2013, p. 69). The same diagnosis was repeated by Zygmunt Bauman, when he wrote that modern society filled the lives of individuals with "oughts" (Bauman, 2007: p. 9). You *ought* to get up at 6.30 AM, you *ought* to have a steady job; you *ought* to be successful; you ought to *obey* instructions, etc. Every day is just "a regular sequence of definite functions" (Bauman, 2007: p. 9).

In high modernist space, the last isolated piece of nature (the human body) is regimented and displayed, like the *David* of Michelangelo. On the one hand, the perfection of the human body shaped by the laws of nature is admired. Yet, this admiration takes the form of an object: a block of marble chiseled into a sculpture. High modernity acts on an utterly materialist "object logic" — everything is viewed as a material to be transformed. But transformed into what? Well, into objects that are frozen in time, that are "definite" and "objective." High modernity conceived of the world as a place to be frozen. Only the "play of light" makes architecture, according to Le Corbusier. We merely provide the shapes, while the laws of nature determine the objectivity and eternal qualities to which the essentially mechanical universe is subject. Of course, there is a nuance here: the play of light indeed works magical effects and the skilled designer utilizes this. But the very self-conscious gesture of only engaging with nature on rationalized terms betrays a deep insecurity towards its very presence.

Thus, in its very focus on a timeless asceticism, high modernity is under the spell of a *generic eternal*: an ideal world that functions like clockwork, like a steam engine, or like a digital computer (pick your favorite mechanical metaphor), in perfect harmony with the mechanistic worldview. The most extreme example in this category may be Bruno Taut's 1917 *Alpine Architecture*, and its proposal to chisel the Alps into giant gemstones.⁶

There is a deep and elective affinity between Taut's proposal and Michelangelo's *David*: the Alps and the marble in their natural state are simply not good enough, so the high modernist ideal world has to be chiseled out of it. Just as the capitalist leaders of the Industrial Revolution regarded nature as a conglomerate of raw resources, so too must the high modernist mind fail to cope with nature as it is. Nature must compulsively be transformed into commodities, products, and utilities. Nature as an autonomous, spontaneous, non-mechanical or organic domain simply does not figure in high modernist thinking, for nature in this sense is *not* a giant set of recusrive functions.

⁶ Interestingly, Taut was in search of a deeply spiritual connection to the world, and as such, he's not the archetypical rationalist modernist. However, the very means with which he sought to realize this ideal display much of high modernity's ideological program. Moreover—and this is a recurring theme—modernity and spirituality in some form or the other had a long and fraught relationship. We can see this in the artworks of Malevich, Klee, and Kandinsky, as well hear it as in Scriabin's music.

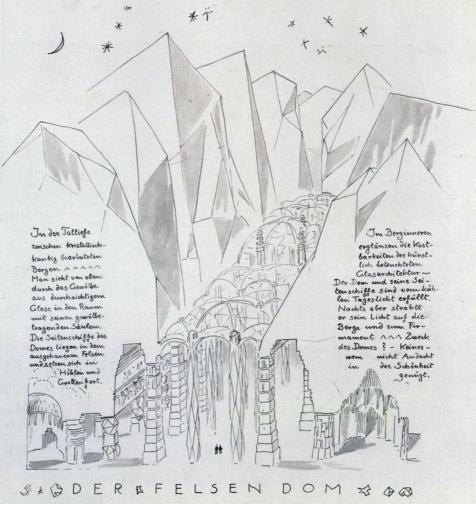


Figure 6: A sketch from Bruno Taut's 1917 Alpine Architecture.

Immutability

High modernist spaces are frozen: they are symbols of a spatialized generic eternal. This seems very strange in view of the obvious facts that materials weather, that white painted surfaces gets dirty, that concrete surfaces become rough and greenish, and that how even the neatest pavement is slowly displaced by roots and weeds finding their way into its interstices. Correspondingly, architectural theorist Lars Spuybroek aptly referred to high modernist spaces as existing in a "frozen condition":

The classic Greek lattice grid is a system that separates the infrastructural movement from material structure.... We must consider the orthogonal grid as a frozen condition. (Spuybroek, 2008: p. 137)

Indeed, the high-modernist archetype for planning is the grid: a neat order imposed from above, segmenting and regulating flows, movement, and distribution. It serves as an ideal projected on the reality of life itself. This is not to say that grids are in themselves bad, or that the structural continuity they provide is necessarily bad. Instead, the badness arises from the fact that the high modern mindset made the grid into an *imperative*, an order that requires obedience, instead of an ecological order that consists in a process of interaction with the environment. High modernist space is one in which everything is detached or at least detachable from everything else and exists as a sequence of inputs and outputs. It is meant to be untarnished, running like a computer, and controlling all that moves within it.

The projected high-modernist future was made to be eternal, so that any possible fundamental change was discounted from the get-go. If we follow the high modernist's reasoning, and are indeed dealing with an eternal, unchanging mathematical order that has been transcribed into space, there is no point in considering reality in its processual flow, creative spontaneity, and ceaseless self-organization and self-transformation.

In a gesture of ideological defiance, high modernist space aims to keep nature out, to disentangle itself from it, and to represent it as a domesticated, framed phenomenon. Anyone who glances at planting plans of modernist gardens cannot help but be struck by the strange fact that the plants exist simply as planes of color or as formalist compositional elements. They are fine as architectural elements, but the deeper fact that they are alive and changing is regarded as a nuisance, an unfortunate state of affairs that cannot be avoided, but that necessitates regular maintenance and pruning.

The same point can be made with regard to the layout and intended functioning of the high modernist city: it exists as a functional grid that endures and technologically adapts. But it exists in a deeply schizophrenic way, embedded in a reality that encroaches and undermines it daily. It is a frozen space in a flowing world. This applies not only to the modern cities of the 1960s and 1970s, but equally also to the large metropolitan areas around the world today. They are punctuated and engulfed by slums, informal settlements, and various makeshift constructions with which they must interact but actually can't.

The scene at the beginning of *Covenant* takes place in a paradigmatic frozen space: in fact, the Synthetic is more at home in it than the human being. The sterile materials, the utter functionality, the extreme minimalism, and the nature that is kept behind a glass plane all convey the wish-for-eternity. But eternity comes at a double price: first, the continual fear of change; and second, the need to keep things the same by sheer force of will.

While the subjectivity of Caspar David Friedrich's *Wanderer* is the site of a deeply conflicted view of nature, the 21st century human being is torn between two different poles than its 19th-century counterpart: to accept the flow of Nature and its inherent organic processuality, or the choice to combat it in a bid to stay aloof and immutable.

5. Epilogue

There are no empty spaces in nature. There is barren ground; there are rocks and deserts. But even these places teem with life. Each piece of barren land is quickly colonized. A layer of organic material forms itself in the undergrowth, and bacteria, lichens, and fungi provide an entire system from which insects and plants profit.

One day in the future, someone might sit outside his house, looking up at the starry night sky. He might even be part of a civilization that has rethought its relation to nature and life. In short, it is a civilization in which creative piety is at the center of all values and beliefs. It might be a civilization that has learned the true nature of co-existence, the importance of adaptability, the futility of control in a universe that grows, changes, and remembers.

Somewhere high up in the mountains, a ruin has been repurposed. The engineering ingenuity and geometric simplicity it offers has been put to a new use. Instead of creating a distance between itself and the surrounding world, the new building invites the environment in and sometimes keeps it out.

It plays with it, entangles with it, and interacts with it. Its materiality is of a disarming directness and purposiveness. This is not a purposiveness that seeks to optimize a high modern view of control, an anthropocentric fantasy cast in concrete. Instead, if there is a search for efficacy at work here, it is a processual exploration of the interaction between the built and the growing; the artifice and the organism; the flow and the static.

There is an element of interweaving and reciprocity at work here: natural processes are utilized, as they set the boundary conditions for matter and form. Instead of keeping them out, can we surf on them? Can we float on the breeze? Does the trickle of the water gurgling from the mountainside float into a carefully designed pattern that keeps an entire ecosystem alive along the slope? Is the play of the sun utilized in how the house is inhabited; is there shelter for the storm, but space for a breeze?

Such an architecture is a gesture of reconciliation by natural entanglement. Instead of either controlling the forces of nature or subduing them in a controlled representation, there are countless possibilities of co-existing with them, of familiarizing ourselves with them, and of accepting them as indispensable part of an interconnected, organicist universe. As such, the new architecture will be a non-anthropocentric one, in the double sense, first, that it is home to many organisms, but also second, that is can be no longer an image of humankind that is one-dimensionally projected out into the world. To interweave with the world is our imperative; not to control it. Fully to engage with it is to appreciate life as such, without having to distance, distort, or control it.

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