GOLD

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APOCALYPSE AND PSYCHEDELIA: ENVIRONMENT, SENSE AND THE UNCOVERING OF THE UNCONSCIOUS WITHIN ARCHITECTURAL DISCOURSE

The 11ᵗʰ issue of the Yale student-edited architectural journal Perspecta*, published in 1967, curated a number of articles that explored how media technology would change our sensory relationship with the environment. Chief among these were articles by media theorist Marshall McLuhan and architect-turned-filmmaker Stan VanDerBeek.*

McLuhan's article was a prophecy on how communications networks would aggregate into a complete membrane around the Earth, making the natural environment a subset of the cultural environment. As each satellite was launched into space, their orbits drew the proscenium arches that defined a new electronic stage, making Earth the performance piece. For many artists, this was a fulfilment of a long-standing vision to create a total work of art, an immersive environment where people would be submerged in fields of complete stimulation and information. McLuhan's message is a warning that these over-saturated sensory experiences would force a change in humankind's perception and consciousness.

VanDerBeek's article was a proposal for a project called the 'Movie-Drome', which was to be a literal manifestation of McLuhan's metaphor. It would combine film and architecture, bleeding the former to wash across the latter, so that a dome of shifting sights and sounds enveloped the audience. This medium VanDerBeek called "Expanded Cinema", a name that would be reassigned to a movement by the publication of Gene Youngblood's Expanded Cinema in 1970. The aim of the Movie-Drome and other Expand Cinema projects was to evoke new modes of perception and consciousness, essentially taking McLuhan's warnings as their objectives.

The purpose of this paper is to demonstrate that McLuhan and VanDerBeek share a deterministic thesis that media-saturated environments cause psychological effects, which are early examples of post-phenomenological theory that foreshadows the rapidly expanding collusions between architecture and media systems today.

The 11th issue of *Perspecta*, silver-clad and published in 1967, curated a number of articles that explored architecture as systems environments: the sites for the movement and manipulation of matter, energy and information. Among these were contributions by media theorist Marshall McLuhan titled "The Invisible Environment: The Future of an Erosion" and architect-turned-filmmaker Stan VanDerBeek simply called "Re:Vision".[1] Both articles asserted that new media technologies would create new sensual environments that would recalibrate modes of perception and cognition, ultimately leading to the revelation of the collective unconscious of all humankind. This is a message that is increasingly relevant today, where the proliferation of media technologies includes its physical integration into architectural environments. In order explore the nuances of their message, this paper seeks to explore how McLuhan and VanDerBeek understand the concepts of environment, sense and consciousness. In doing so it will demonstrate that their articles can be read as two parts of the same manifesto, whose overall consistency is disrupted by two important differences. Firstly, McLuhan tells a prophecy, describing the ways a changed world would affect people; whilst VanDerBeek creates a proposal, prescribing a way that one can affect the world. Secondly, there is a point where their mutual lines of thought are split by a divergent tone, where McLuhan's prophecy warns of the cataclysmic upheaval of an apocalypse; and VanDerBeek's proposal aims for the exalted bliss of psychedelia. Initially their differences indicate that their theories are complementary, but their second difference marks a point of contrast. To validate these contentions, this paper will conduct a comparative analysis on the key themes shared between "The Invisible Environment" and "Re:Vision". Whilst the focus will be anchored to these two texts, it will be supported by associated theories found in the rest of McLuhan and VanDerBeek's written oeuvre.

In order to locate these articles within a larger context, it is essential to explain the ideological difference between *Perspecta 11* and the preceding issue. *Perspecta 9/10* is accurately described as an inciting declaration of a Post-modernist position at the Yale School of Architecture.[2] Its contributors represent the pantheon of Post-modern champions such as Robert Venturi, Charles Moore, Philip Johnson and was edited by the graduate student Robert A.M. Stern. In total, theirs was a simultaneous call for architecture to rediscover history and to engage with popular culture. *Perspecta 11* might not have refuted these ambitions, but it did relegate them to a lesser importance. The editors of *Perspecta 11*, Peter de Bretteville and Arthur Golding, framed the change of attention in terms of a generational shift.[3] The critique de Bretteville and Golding hurled at their predecessors was that they were overly concerned with the "elaboration of personal idioms rather than innovation"; style over substance.[4]

Perspecta 11 called for a return to the merger of scientific systems and architectural design as the only means to address the environmental degradation, social inequalities and international tensions that racked the post-war period: "Children rebelling against their fathers often find themselves close in spirit with their grandfathers".[5] However, the spirit was updated. Industrial-era machines were replaced by Space-age engineering. Static utopias that relied on central political authorities were substituted by Plug-in cities that followed consumer demand. Amongst this list of revised interests was a new fascination with media technology; evidenced by the fact that both "The Invisible Environment" and "Re:Vision" were reiterations of addresses given at a communications conference called 'Vision'65', held at the Southern Illinios University in October 1965.[6]

All these agendas came under the umbrella of Buckminster Fuller's "Design-Science Revolution".[7] In another contribution from 'Vision'65' to *Perspecta 11*, Fuller asserts that humanity's unique ability to understand and redesign their environment makes it a metaphysical force that could balance the physical universe's drive towards entropy.[8] In short, science and design were the antithesis of death; and it was a view that Fuller took to all of Earth's problems. In doing so, architecture was reduced to the creation of technical solutions to material needs. Homes were discussed in terms of "dwellings".[9] Labour was to be made redundant by environmental "energy slaves".[10] Fuller finished his article with the choice "Utopia or Oblivion".[11] To reject the Design-Science Revolution was to select the latter.

This brutal binary was matched by de Bretteville and Golding's foreword with their claim that the global situation was filled with "possibility and risk".[12] To the task of explaining these opposing conditions "some of the articles were chosen

to define issues, other as responses".[13] This admission of dual tactics, of prophecy and proposal, sets out the rubric by which McLuhan and VanDerBeek's contributions to *Perspecta 11* should be gauged.

The prophetic tone of Marshall McLuhan's article is evident in the first line of the unabridged paper presented at 'Vision'65'; "I bring you greetings from the country of the D.E.W. line".[14] By referencing the Distance Early Warning Line, a chain of radar stations dotting Northern Canada that were tasked with surveying Arctic skies for Soviet nuclear missiles, McLuhan colours his message as an early warning of an apocalypse. The span and direction of McLuhan's prophecy is condensed within the title of "The Invisible Environment: the Future of an Erosion". The first portion of the title foreshadows a discussion on how media technologies act as a deterministic force that controls the distribution of communication and culture, thus assembling into the environment for humanity's psychosocial evolution. Since the forces are so ubiquitous and mundane, their effects melt away and become invisible. The subtitle prefigures an elaboration as to how electronic media would affect psychology by 'eroding' the thin film of conscious thought, revealing the unconscious, instinctual Id. The themes are consistent with the concerns of Sigmund Freud, and even if McLuhan does not mention him in the article, the subtitle is an obvious reference to Freud's 1927 book *The Future of an Illusion*.[15]

Stan VanDerBeek's article shared McLuhan's conviction that media-saturated environment would promote new forms of consciousness, but it possessed a radically different tone. "Re:Vision" was a proposal that accompanied the creation of VanDerBeek's Movie-Drome, a dome whose interior was to be enveloped by a plethora of fast and dissonant multimedia projections. The Movie-Drome was an inciting example of a new medium that VanDerBeek called 'Expanded Cinema'. The film theorist Gene Youngblood would later appropriate the term in his seminal text *Expanded Cinema* (1970) as a broad description of many installations that combined architecture, multimedia and live performance; consolidating VanDerBeek and others (such as U.S.C.O., Jackie Cassen and Rudi Stern, John Cage and Ronald Nameth) in a single movement defined by their interests in the Happenings of Fluxus, media theories of McLuhan and psychedelic mysticism of the counterculture.[16] The aim of the Movie-Drome, and other Expanded Cinema projects, was to use the synesthetic qualities of multimedia performance to trigger psychedelic modes of perception and reveal the unconscious; essentially taking McLuhan's warnings as their objectives.

Present in each synopsis is a preoccupation with the three themes of environment, sense and the uncovering of the unconscious. The following sections of this paper describe how McLuhan and VanDerBeek approached these themes, and aims to demonstrate that their core concepts are arranged in consistent trajectories of environmental causes and psychological effects, whilst being ultimately loaded with contrasting attitudes to these processes.

The Invisible Environment and Expanded Cinema

McLuhan begins with an observation that the electronic media technologies of the post-WWII period (namely the radio, television and the nascent computer technologies) had the effect of simplifying and amplifying the process of relaying people's thoughts to a global audience, thus effectively acting as raw extensions of the body's central nervous system.[17] With the proliferation of communication networks, McLuhan argued that a membrane of human intelligence now cages the Earth, making the natural environment a subset of the world's cultural environment. Culture is now the principle arena of human existence. McLuhan heightens the consequences of the metaphor by pointing to a book by French philosopher Jacque Ellul called *Propaganda* (1962).[18] With this reference McLuhan draws an equivalency between 'Media-Environments' and 'Propaganda', because both are expressions of a hegemonic force that will restructure our relations to external existence. Furthermore, like 'Propaganda', 'Media-Environments' are ambient, familiar and aim to be internalised by their victims, becoming invisible to them. In order to protect people from these hegemonic forces, McLuhan urges that the 'Invisible Environment' be made visible, and that this was the special mission of the artist.[19]

According to McLuhan, as the Earth became a subset of the cultural, it became a human artefact, a work of art. As each satellite is launched into space, their orbits draw the proscenium arches that define a new electronic stage, making Earth a performance piece and involving everyone in a "total electric drama".[20] McLuhan surmises the point, "We will caress and shape and pattern every facet, every contour of this planet as if it were a work of art, just as surely as we have put a new environment around it".[21] Only the artist could be trusted with the task of sculpting the Earth with a degree of social responsibility because they were experts in the effects, which the 'Invisible Environment' would

have on the human sensorium. To this task, McLuhan called on artists to create "Anti-Environments", multimedia installations that would recreate and demonstrate the insidious effects of media technologies to audiences so that they would be educated and inoculated against the 'Invisible Environment'.[22]

The proclamations that the world had become a single artistic object and that it was the artist's duty to control it, reawakened a long-standing vision in art history to create the total-work-of-art; the *Gesamtkunstwerk*. This enthusiasm can be seen when VanDerBeek reproduces McLuhan's call to arms with a stunning degree of concision:

> "We are on the verge of a new world – a new sense of art, life and technology – when artists deal with the 'world' as a work of art, and art and life shall again become the same process. When man's [sic] senses shall expand, reach out, and in so doing shall touch all men [sic] in the world."[23]

As a means of building a prototype of an Earth Art, VanDerBeek's plan was to combine the "full force of art and media" to create a new iteration of the *Gesamtkunstwerk* for the electronic age.[24] It was to be called 'Expanded Cinema', and the first public declaration of this term was heard at Vision'65.[25]

'Expanded Cinema' had two objectives. The first objective was to expand the scope of film projection beyond a singular screen, so that it would wash across the entirety of an architectural interior. This would create environments that completely surrounded the sensory field of a person and project a wide variety of stimuli to that person from multiple artistic and communicative mediums. The second objective was that this over-saturated sensory experience would approach the "image-grammar" of our mind's eye, creating effective reproductions of "private dreams, visions, hallucinations".[26] On a personal level, these "mental-movies" were aimed at triggering psychedelic revelations.[27] On a social level, these "ethos-cinema" could act as the site for mutual understanding between cultures: in either case, it was all geared to expanding human consciousness.[28]

VanDerBeek's manifestos were accompanying documents to a real project called the 'Movie-Drome'. The Movie-Drome was multimedia installation built in the forests of an artist cooperative at Stony Point, fifty-five kilometres north of Manhattan (the cooperative was initiated by former teachers of VanDerBeek's alma mater, Black Mountain College, Vera and Paul Williams). Work began in 1962, and it was unveiled in 1966 at the New York Film Festival.[29]

The Movie-Drome was a dome, 9.5 metres in height, made from the top of an aluminium grain silo.[30] It was elevated on a timber platform so that audiences could crawl through a hole in the dome's floor. Inside the theatre, the audience would lay on their backs, heads toward the perimeter, feet in the centre, facing up at the dome ceiling. An array of film and slide projectors, operated by the VanDerBeek family, would plaster the dome with moving images. Here the traditional archetype of a theatre with a singular rectangle screen distinct from racked rows of audience members was subverted. The singularity and distance was replaced with multiplicity and immersion. Performances could last up to three hours.

However, this was only a prototype. VanDerBeek's plan was to build similar domes around the world and connect them by satellite. With this entire infrastructure in place, artists from around the world could use them as a means of cross-cultural communication: a "Culture: Intercom".[31] Here, McLuhan and VanDerBeek independently evoke a similar vision of networked domes; however, whereas McLuhan wants the artist to warn against the 'Invisible Environment''s effects on the human sensorium, VanDerBeek seeks to concentrate the 'Invisible Environment' to change our modes of perception.

Acoustic Space and Visual Velocity

Evident in both articles was a recurring insistence that media technologies are not merely conduits for the transfer of information, but are forces that will engage and change the ratios of one's sensual relation to the world. As radio and television challenged the dominance of print media in the 1960s, the greatest change that these new media technologies incited was not in the type of content being shared, but in the sensual form it came in. Ideas were not just read, but heard and seen with the magic of intonation and gestural stimulation. This saturation of audio-visual stimuli would bring a recalibration of perception and cognition, fundamentally altering the epistemological relation to reality.

To explain the drastic consequences of this sensual transformation, McLuhan ranks the senses according to epistemological value. For example, the characteristics of 'Acoustic Space' and 'Visual Space' are the focus of an article McLuhan wrote for *The Canadian Architect* in 1961 called "Inside the Five Sense Sensorium".[32]

'Acoustic Space' is a conceptual model of phenomena and space, based on how one experiences sound, but not limited to acoustic stimuli. It can be imagined as an unbounded sphere anchored to one's ears. It considers all the situations around one. Turning one's head does not control the stimuli experienced, thus one has no choice to ignore particular events. Events are not framed within a perspective, thus details of cause and effect can easily escape people. Everyone shares 'Acoustic Space' with everyone else. As one is immersed in 'Acoustic Space' one is inescapably involved; promoting a disposition of excited action by emotional collectives. Therefore, 'Acoustic Space' represents the modes of perception and cognition found in oral/aural based tribal societies.[33]

Alternatively, 'Visual Space' is based on how one experiences sight, but not limited to visual stimuli. It can be imagined as a bounded cone stemming from the eyes. It focuses on what happens in front of people. Turning one's head controls the stimuli experienced, thus one has the choice to intentionally focus on particular events. These events are contained with a frame of people's perspective, and all the clues of cause and effect are evident. Perspective is individual. As one is behind the cone of 'Visual Space' one is detached; promoting a disposition of neutral observation by rational individuals. Therefore, 'Visual Space' represents the modes of perception and cognition found in literate Post-Renaissance societies.[34]

McLuhan piles on a set of binaries that construct a damning indictment of 'Acoustic Space' and cultures that primarily communicate orally. On the other hand, the achievements of Western civilisation were the bounties of print, literacy and 'Visual Space'. On top of this historical trajectory of Western civilisation McLuhan predicts that when an environment is suffused with electronic stimuli; abundant, fast, striking from every angle and piercing every being; it would pull societies out of 'Visual Space' and submerge them back into the emotional collectivism of 'Acoustic Space'.

VanDerBeek has an equivalent concept to 'Acoustic Space' called 'Visual Velocity'.[35] It describes the condition of surrounding the Movie-Drome audience in a deluge of fast-paced audio-visual stimulation. The content of the imagery was discordant and the sounds dissociated, which was further abstracted by obtuse edits and by spinning their projections around the drome - a reference to the running tracks of Ancient Greece.[36] The montage of sequential cuts was rejected for the morphing of simultaneous fields of stimuli. All of this was designed to disrupt any semblance of narrative exposition, in order to encourage psychedelic evocation. VanDerBeek believed that cinema needed to break away from its origins in literature and staged drama, in order to better match the image grammar of the unconscious.[37]

By their names, 'Acoustic Space' and 'Visual Velocity' would appear as opposing concepts, but by their descriptions and definitions they are shown to be equivalent. This makes the Movie-Drome a near perfect realisation of 'Acoustic Space'. They both describe collectives sharing a spherical space, immersion in abundant stimuli that cannot be contained by a single perspective, and the eschewing of cause-and-effect for raw emotional impact; all of which would instigate the revelation of the unconscious.

Further links can be drawn by the dialogue between the two articles. In "The Invisible Environment", McLuhan singles out VanDerBeek's work by comparing it to a newspaper: "The newspaper is very much like the delightful films of Stan VanDerBeek; the world of the multiscreen projection is the world of the newspaper where umpteen news stories come at you without any connection."[38] The reference to newspapers might seem antiquated, but it is a loaded analogy as another McLuhan article "The Agenbite of Outwit" demonstrates; "It is very confusing to learn that the mosaic of a newspaper page is 'auditory' in basic structure."[39]

In an article VanDerBeek wrote after 'Vision'65' called "Culture: Intercom and Expanded Cinema: A Proposal and Manifesto", he reappropriated McLuhan's praise to describe his own work; "The Movie-Drome flow could be compared to the 'collage' form of the newspaper… which suffuse the audience with an abundance of facts and data. The audience take what it can or wants from the presentation and makes its own conclusions."[40]

Despite the similarities between their concepts, there was a marked difference in the attitudes McLuhan and VanDerBeek had about the media technologies' effect on the senses. For McLuhan's was a warning of a situation that one had to ease into or avoid; whilst VanDerBeek's was a technique to rush to and embrace.

Global Village and Culture Intercom

The ultimate impact of the 'Invisible Environment' and 'Acoustic Space' was that it would reveal one's unconscious mind and submerge one back into the emotional collectivism of tribal societies. This case is introduced in "The Invisible Environment" with a reference to the Canadian classicist Eric Havelock's book *The Preface to Plato* (1963).[41] The book describes the transformation of ancient Greece from an oral to a literate culture, but in doing so ranks the two in terms of being vehicles for Truth. Before literacy, poets were the "tribal encyclopaedias" of an oral society, containing and communicating the stories that carried the accumulated wisdom of their cultures.[42] But for the literate Plato, poetry was a form of "mental poison" made pretty with acoustic effects to "conceal the poverty of the statements behind them".[43] Poetry was the antithesis of Philosophy, to Episteme (knowledge). For McLuhan, this transition from oral poison to written antidote is a description of our own time but in reverse; "we are playing back the tape".[44]

This necessitates a clarification on one of the most famous McLuhanisms, "The Global Village".[45] Concurrent to McLuhan's description of electronic media as extending the central nervous system into a global network is the implicit consequence that everyone else's nervous system had unlimited access to invade one's body. Externalisation insinuates the internalisation of others. With electronic media one had almost recreated the sensual and embodied intimacy of tribal societies; where everyone is inescapably involved in the affairs of everyone else ('Acoustic Space') and there would be no vantage point to develop an individual perspective, identity or conscience ('Visual Space'). The individual would be lost, there would only be the collective. The battle of individualism and collectivism is demonstrated in *Perspecta 11* by the graphics that introduced the article, which juxtaposed a full page with a solitary man against another with a bustling crowd.

McLuhan's entire line of thought explains the title of the article; the 'Invisible Environment' promotes the erosion of conscious selves; revealing the instinctual indiscipline of the collective unconscious. On two counts McLuhan's warning can be called an apocalypse. Firstly, because it references the act of 'revelation' that lie at the etymological roots of the word; secondly, because it follows the popular definition of the destruction of civilisation.

Despite the severity of these warnings, they remain obscured in "The Invisible Environment" as disparate and neutral observation of complicated happenings, never consolidating into a clear condemnation of environmental cause and psychological effects. This vague tone is not found in his 1961 contribution to *The Canadian Architect*, which concludes with explicit pessimism:

> Psychologists explain that when a field of attention has a centre without a margin [a description of the unbounded sphere of Acoustic Space] we are hypnotized. Such is the condition of the tribal man, past or present. The problem of design is to understand the media forces so that we never sink into the zombie tribal state where we can meet that Africa within which Conrad immortalised in his 'Heart of Darkness'.[46]

Alternatively, VanDerBeek wanted to use the collective unconscious as a means of binding people by a common humanity. This is most evident in his insistence in using audio-visual forms as the means by which the Movie-Drome would communicate. VanDerBeek argued that multiple verbal languages were barriers to the understanding between cultures, and that its shortcomings could escalate Cold-War tensions. To trust words was to risk oblivion; "The world is hanging by a thread of verbs and nouns."[47]

By this diagnosis it was imperative that artists develop a "Non-Verbal International Language".[48] The new language was to use the techniques of 'Visual Velocity' and 'Image-Grammar' to "penetrate to unconscious levels, to reach for the emotional denominator of all men, the non-verbal basis of human life, thought and understanding, and to inspire all men to goodwill and 'inter-and-intro-realization.'"[49]

The emphasis on the 'emotional denominator' reiterates that this language was not to be tasked with the exposition of meaning to be decoded by the conscious intellect, but the evocation of raw psychological effects by unconscious instinct. These priorities are consistent with McLuhan's instruction that "concern with effect rather than meaning is the basic change of our electric time."[50]

The inclusion of 'inter' and 'intro' realisation demonstrates VanDerBeek's belief that the individual and collective could be merged in mutual harmony. His aspirations for the Movie-Drome were not just to create personal psychedelic experiences. Instead he planned to connect a global network of Movie-Dromes into a "Culture Intercom"[51] were artists

could condense their entire cultures into a single audio-visual performance for the internalisation by global audiences. Since the unconscious was common to all humans, a 'Culture Intercom' could use it as a bridge to marry individual epiphany to collective ethos.

Conclusion

The reasons that qualify *Perspecta 11* as a golden issue are not limited to its stance alone against the longstanding Post-modernist position of the journal, as established in *Perspecta 9/10* and consolidated in subsequent issues, but because its articles explored topics that were beyond the immediate domain of architecture and invited the reader to discern their architectural relevance. To the point about interdisciplinary dialogue, Alan Plattus described *Perspecta 11* as the most ecumenical issue of the journal's first fifty years, whilst Reinhold Martin contends that it challenged the notion of architecture as an autonomous discipline (contrasting it against Peter Eisenman's insistence of the "interiority" of architecture).[52] In regards to *Perspecta 11* inviting interpretation, this is captured in the reflective Mylar cover that reminded every reader that they were the authority in constructing the meaning between these diverse articles. Combined, the scope and subjectivity of *Perspecta 11* were not geared towards defining a new architectural movement, but were used to explore the context in which a new architecture would arise; much of which came from a conceptual shift from architecture to environment.

Marshall McLuhan and Stan VanDerBeek's contributions are some of the clearer examples of this shift. In exploring the key themes of "The Invisible Environment" and "Re:Vision", this paper not only demonstrates that McLuhan and VanDerBeek's terms were equivalent, but also that they were arranged in a consistent deterministic trajectory of environment cause and psychological effect. Whilst the rhetoric they used was steeped in the fantastical paranoia and ambitions of the 1960s, their core message that media-saturated environments might subvert and supersede one's embodied experience with physical existence is increasingly becoming more relevant. Today one lives in a world where the collusion between media and architecture is rapidly expanding as computation processes and media displays are incorporated into pavilions, buildings and urban settings. Recent developments in augmented and virtual reality threaten to exacerbate the media-saturated environment until experience with it is absolute and inescapable. McLuhan is instructive because he prepares people for the possibility that the quest of the phenomenologist to live authentic lives is a quixotic denial; and that the phenomenological architectural style is a case of looking at the "rear-view mirror", just as the Romantics did with medievalism in the times of the Industrial Revolution.[53] As the satellites capture the earth, culture supersedes nature, ultimately making the base condition of one's environment artificial. VanDerBeek aggravates the issue by turning McLuhan's metaphors into real prototypes, making him an early pioneer of the multimedia architecture that is increasingly prevalent within architectural practice and education. Combined, their post-phenomenological prophecies and proposals are two parts of the same manifesto, as if they were relay runners passing a baton. The difference is whilst McLuhan is running to observe the transition of one media environment to another, VanDerBeek runs because he wants to be involved in that transition. From detached observation to immersed involvement; the attitudes of these articles to the destination of uncovering of the unconscious directly parallels the differences in social dispositions predicted by a transition from 'Visual Space' to 'Acoustic Space'. Just as *Perspecta 11* represented a generational shift in architecture, the difference between McLuhan and VanDerBeek reflected a generational shift in attitudes to consciousness.

Endnotes

1   Marshall McLuhan, "The Invisible Environment: The Future of an Illusion," *Perspecta*, 11 (1967): 161-7; Stan VanDerBeek, "Re:Vision," *Perspecta*, 11 (1967): 113-19.

2   Robert Stern, Peggy Deamer, and Alan Plattus, *Re:Reading Perspecta: the First Fifty Years of the Yale Architectural Journal* (Cambridge: MIT Press, 2004): 158.

3   Peter de Bretteville and Arthur Golding, "Foreword," *Perspecta*, 11 (1967): 7.

4   de Bretteville and Golding, "Foreword": 7.

5   de Bretteville and Golding, "Foreword": 7.

6   "Contents," *Perspecta*, 11 (1967): 5.

7   John McHale, "World Dwelling," *Perspecta*, 11 (1967): 124.

8   Richard Fuller, "Vision 65 Summary Lecture," *Perspecta*, 11 (1967): 62.

9   Hale, "World Dwelling": 121-9.

10   Fuller, "Vision 65 Summary Lecture": 63.

11   Fuller, "Vision 65 Summary Lecture": 63.

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18   McLuhan, "The Invisible Environment": 164.

19   McLuhan, "The Invisible Environment": 165.

20   McLuhan, "The Invisible Environment": 167.

21   McLuhan, "The Invisible Environment": 165.

22   McLuhan, "The Invisible Environment": 165.

23   VanDerBeek, "Re:Vision": 119.

24   VanDerBeek, "Re:Vision": 116.

25   VanDerBeek, "Re:Vision": 116.

26   VanDerBeek, "Re:Vision": 116.

27   VanDerBeek, "Re:Vision": 116.

28   VanDerBeek, "Re:Vision": 119.

29   Gloria Sutton, *The Experience Machine: Stan VanDerBeek's Movie-Drome and Expanded Cinema* (Cambridge: M.I.T. Press, 2015), 1, 29.

30   Sutton, *The Experience Machine*, 11.

31   VanDerBeek, "Re:Vision": 119.

32   Marshall McLuhan, "Inside the Five Sense Sensorium," *The Canadian Architect*, 6, No.6, (1961): 49-54.

33   McLuhan, "Inside the Five Sense Sensorium": 50, 52.

34   McLuhan, "Inside the Five Sense Sensorium": 50, 52.

35   VanDerBeek, "Re:Vision": 115.

36   Sutton, *The Experience Machine*, 29.

37   VanDerBeek, "Re:Vision": 115.

38   McLuhan, "The Invisible Environment": 166.

39   McLuhan, Marshall. "The Agenbite of Outwit," *Location 1*, No. 1 (1963): 41.

40   Stan VanDerBeek, "Culture: Intercom and Expanded Cinema: A Proposal and Manifesto," *The Tulane Drama Review*, 11 No. 1 (1966): 43-45.

41   McLuhan, "The Invisible Environment": 164.

42   Eric Havelock, *Preface to Plato* (Oxford: Blackwell, 1963), 70.

43   Havelock, *Preface to Plato*, 4-5.

44   McLuhan, "The Invisible Environment": 164.

45   McLuhan, "Inside the Five Sense Sensorium": 52.

46   McLuhan, "Inside the Five Sense Sensorium": 54.

47   VanDerBeek, "Re:Vision": 119.

48   VanDerBeek, "Re:Vision": 119.

49   VanDerBeek, "Culture: Intercom and Expanded Cinema": 47.

50   McLuhan, *Understanding Media,* 28.

51   VanderBeek, "Culture: Intercom and Expanded Cinema": 47-8.

52   Stern, Deamer, and Plattus, *Re:Reading Perspecta*: 238; Martin Reinhold, *Utopia's Ghost: Architecture and Postmodernism, Again*, (Minneapolis: The University of Minnesota Press, 2010), 60.

53   McLuhan, "The Invisible Environment": 164.