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Research article

The Time House: between cybernetics and phenomenology

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Abstract

Martin Pawley's 'The Time House' (1968) is a study on how to use multimedia technologies to provide a continuous record of individual experience within the domestic interior. The project's underlying argument is that there is no authentic experience to be had in the public realm. As an antidote, Pawley proposes a retreat into a private world, where individuals, with the use of technology, can retain a continuous and repayable record of time. Thus, The Time House would enable its inhabitants to relive – phenomenologically, with all the senses – past experiences. Pawley believed that this repeated, unembellished re-creation of the past would reveal to its inhabitants a truer version of both the past and themselves, thus offering opportunities for introspection and self-knowledge. The Time House tries to bring together all the key concerns of architecture in the late 1960s: cybernetics, phenomenology, environmental behaviour studies, the use of cutting-edge technology, Cold War politics and fears, and the countercultural aim to expand human consciousness. Yet, Pawley's proposition to use technology to simulate lived experiences with the aim of altering human behaviour still stimulates heated arguments today. These

arguments stem from current fears about the effects of digital technologies on individuals and society: the disconnection with the here-and-now, the prioritisation of the individual over the collective, the disintegration of reality and the neglect of social public space. The Time House, which could be dismissed as a project of its time and place, is embedded in a web of ideas still resonant in our present.

Keywords phenomenology; cybernetics; multimedia technologies; 1960s architecture; Martin Pawley; domestic interior

Introduction

In the second half of the twentieth century, the modernist house was considered a main culprit for the increasing feeling of 'homelessness'. Among other failings, it did not offer its inhabitants the opportunity to construct personal meaning within the domestic interior. Part of the postmodernist architecture movement attempted to address these concerns. Projects such as Martin Pawley's The Time House which is the focus of this article - tried to enrich the experience of the home by reinstating the possibilities of inscribing time and identity within the domestic interior. I came across Pawley's The Time House in a 1968 issue of Architectural Design. In the Architectural Association Archives (AA), I discovered that this project was Pawley's diploma thesis and was part of a deeper and wider exploration on how to use the latest technologies to enhance the human experience. The project was first presented in July 1967 to a AA jury that included Peter Cook and George Baird. The submission consisted of a 10,000-word thesis with diagrams and drawings, accompanied by a portfolio of large format drawings that illustrated how the ideas in the thesis could be translated into a design proposition. Cook and Baird agreed that the thesis was well-researched, but the design component did not live up to its promise, and so they gave Pawley an extension. A revised, shortened and more heavily illustrated version of the thesis was submitted the following year, in 1968. This time it was successful. After that, The Time House had a short afterlife in the architectural limelight: it was published in Architectural Design and, later in 1969, in Meaning in Architecture, co-edited by Baird and Charles Jencks; and it was included, among other projects, in an anthology of writings in the catalogue of the seminal exhibition Italy: A New Domestic Landscape at the MOMA in 1972.²

The Time House

The Time House is a study on how to use multimedia technologies to provide a continuous record of individual experience within the domestic interior. The project's underlying argument is that there is no authentic experience to be had in the public realm. Blighted by bureaucracy, rapid change and commercialisation, produced by experts with no understanding of the individual's needs and desires, the built environment becomes an abstraction of the process of living, while the true evidence of being is erased. As an antidote, Pawley proposes 'a retreat into a private world' where individuals, with the use of technology, 'can retain an organized, accessible record of their own behaviour and the behaviour of their forbears – a continuous and replayable record of time'.³

Pawley's design proposition for The Time House takes the form of a heavy circular structure with a base and fin-like radial vertical supports made of pre-cast concrete covered with a geodesic dome resting on a pre-cast circular beam (see Figures 1, 2, and 3). Internally, the structure has three levels. The living quarters on the ground floor are equipped with a small, prefabricated bathroom and galley kitchen, arranged around a vertical strut forming the core of the interior, which is divided by slender curved walls into areas communicating with sliding doors. These areas are annotated as 'living', without furniture or any other indication about their potential use. It is incongruous that, although the house is to record the everyday life of its inhabitants, it does not seem to provide facilities for everyday living. The only element of the interior described in detail in the plan and section is the replay unit, an oblong pod containing a TV projection unit, a one-piece rigid polyethylene perforated screen and electrostatic speakers within which the inhabitant of The Time House can recline comfortably to recall and relive recorded past experiences. The air-conditioned living quarters are protected externally by adjustable louvres that control light, temperature and noise levels. The ground floor is sandwiched

between a domed roof, which accommodates the recording machines, and the basement, which houses memory storage mechanisms with a capacity of centuries. The focus is clearly on the specification and arrangement of the recording and playback technologies rather than the domestic interior design as an environment that facilitates everyday living. The various devices construct a complex piece of hardware 'intended to work automatically, unobtrusively, and comprehensibly'4 to provide a complete record of the everyday life of its inhabitants. Pawley presents two design options: one could move into The Time House as designed by Pawley, or the mechanisms could be inserted into an existing house. Pawley is aware of the apparent absurdities of these choices; he states that the options are 'between living in a film studio and bugging one's own house'.⁵

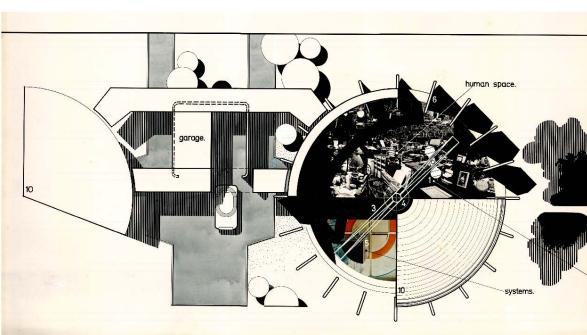
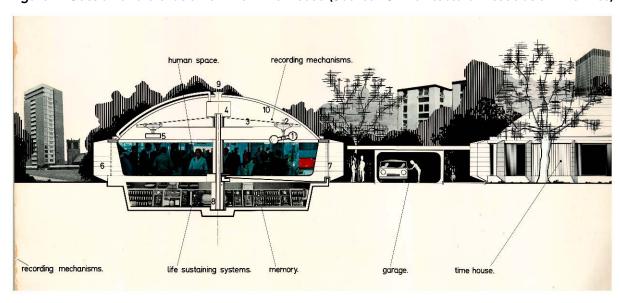


Figure 1. Plan of The Time House (Source: © Architectural Association Archives)





Territory

The Time House is a reaction to an environment that changes rapidly. Pawley belongs to a generation of architects and urban planners who experienced 'the obsolescence of the city'.6 Many of them witnessed the destruction of the city through constant and calculated aerial bombardment, culminating in the flattening out of Hiroshima and Nagasaki by the atomic bomb, a traumatic event that stayed inscribed in the minds of post-war generations. Speedy post-war reconstruction and urbanisation produced urban environments without apparent coherence or limits. Cities seemed to have acquired a seemingly infinite possibility for growth. This questioning of the finality and territoriality of the city became more acute with the expansion of networks such as highways, television transmissions and flight paths that formed systems of mobility and connectivity independent of city and state borders. These developments produced an environment unrecognisable to its pre-war inhabitants. Pawley observes two opposite reactions to these conditions: a concern with the infra-structural-domain - the man/object interface - represented by projects such as Archigram's Cushicle (Michael Webb, 1966-67), and an interest in the super-structural-domain – what Yona Friedman called the 'second, organized surface on earth',⁷ an artificial topography illustrated in his famous drawings of Ville Spatiale (1959-60). These reactions seemed to have the same concerns: how do you create an environment that protects its inhabitants from change while accommodating change itself? Pawley places his work in the former camp - the man/object interface⁸ – and simultaneously rejects the nomadism and miniaturisation of domestic space represented by the capsule. Somewhat pessimistically, Pawley recognises that this wave of drastic change is inevitable in Western societies. His reaction is to propose a domestic environment within which the individual establishes a sense of permanence 'in order to mitigate the horror of change itself'. 10

Pawley argues that the disappearance of the familiar built environment greatly impacts on the individual. Influenced by his readings in anthropology, psychology and animal behaviour, Pawley focuses his argument on the notion of territoriality – a term coming from environmental behaviour studies that denotes the private territory as a source of identity, stimulation and security. A particular influence in Pawley's reasoning is that of animal psychologist and physiologist Frederik J.J. Buytendijk, who investigated the thesis of an 'animal-environment unit' and claimed that the animal was 'born with and in its environment'. ¹¹ Another key reference is Robert Ardrey's *The Territorial Imperative* (1966), a successful work of popular science which claims that acquiring and defending territory is an inherited instinct that still defines human behaviour in modern societies. Drawing on these sources, Pawley writes, 'behavior can only be understood in the context of the environment in which it takes place. This is because the environment confers its own movements, contortions, and vistas onto those who use it, becoming in the process effectively a part of the personality.'12 In an increasingly unfamiliar context, The Time House recognises 'the importance of identification with place' 13 and aims to establish continuity and permanence 'in the private realm' by facilitating 'the concretisation of the evidence of human association with place within the dwelling itself'. 14

Indeterminacy and phenomenology

Recording activities in the domestic interior was not a new idea in the 1960s. In his thesis Pawley mentions Eadweard Muybridge's photographic studies of motion using multiple cameras, a technique that made it possible to capture precise sequences of movement that were too fast for the naked eye to observe. 15 In the late nineteenth to the early twentieth centuries, 'domestic engineers', followed by modernist architects, driven by the same obsession to decode and define everyday actions scientifically, used techniques similar to Muybridge's to track women's activities within the domestic interior. But these attempts to record everyday life aimed to abstract and objectify human needs; their purpose was to define an optimum way of using the domestic interior - a definition frozen in time given by the designer. Fascinated with the possibility of capturing everyday life in all its detail, Pawley is against this functionalist approach to design. He states, 'it is impossible to functionally define the act of dwelling, which is a continuously evolving drama, not a pattern established once and retained forever'. 16

In the late 1960s, Pawley was far from alone in expressing this sentiment against functionalist determinism. His statement reflects discussions in the architectural community that started in the early 1950s, when, as Adrian Forty notes, 'flexibility offered hope of redeeming functionalism from deterministic excess by introducing time and the unknown'. 17 In the 1960s, this discussion produced

a variety of often contradictive approaches to how flexibility could be achieved. Architects such as John Weeks advocated for 'an indeterminate architecture, in which certain elements were left unfinished', 18 whereas Herman Herzberger proposed 'polyvalent' forms that 'can be used for every purpose'. ¹⁹ For architects such as Yona Friedman, Constant and Cedric Price, flexibility through technology – in particular, lightweight structures equipped with mechanical services carried in the roof space – offered 'not merely flexibility within the building, but releasing buildings from their fixity'. 20 At the same time, groups such as Archigram, as Timothy Hyde notes, 'catalyzed a wider attentiveness to change and flexibility'²¹ by highlighting the challenges faced by architecture 'from systems of electronic communication, from the fast-paced production and obsolescence cycles of consumer capitalism, and from the increasing nomadism of urban populations'.²²

Pawley was in the midst of these debates. He briefly worked as a news editor for the Architects' Journal in the 1960s. He published his project 'Anti-Met? Living/Working Enclosure' (1962) in Archigram 5, in which he illustrated the 'city as building', a structure 'that houses all living-working-resting-playing functions in one place'. 23 He also attended the International Dialogue of Experimental Architecture (IDEA) Symposium in Folkstone (10-11 June 1966), which included contributions from Hans Hollein, Joe Weber, Yona Friedman, Cedric Price, Arthur Quarmsby, Anthony G. William and Rayner Banham. Although Pawley embraced technology, his focus when designing The Time House was not 'flexibility', which he rejected as 'an ill-fitting suit of clothes'24, but a phenomenological approach to design to reinstate the possibilities to inscribe time and identity within the domestic interior that the functionalist housing unit negated.

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Figure 3. Mechanisms of The Time House (Source: © Architectural Association Archives)

Interestingly, Pawley suggested that the effort of functionalist designers to erase subjective factors from design products was bound to fail. He writes, 'No sooner is function crowned than myth, image and fantasy usurp the throne.'25 This is due to two factors: an intimate identification between the individual and one's possessions, and a tendency of human beings to appropriate and personalise objects. In his Architectural Design article, Pawley illustrates his argument with images of an aeroplane swathed in flowers and a customised mini car. Extending this argument to the house, Pawley points out that the

individual does not think of his home 'as a wholly objective, finite thing'. ²⁶ The inhabitant authenticates his domestic interior in the process of dwelling and 'understands his home ... as a complete world'. ²⁷ He writes, 'His furniture, dog or cat, cigarette burned carpet, broken door handle, constitute a world within a world.'²⁸ Pawley refers to Hannah Arendt's argument in *The Human Condition* (1958) – objects have a stabilising role in human life. Due to their durability, objects construct an artifice of stability and solidity, which is important to human beings as they are 'unstable and mortal creatures'.²⁹ If his description brings to mind Michel de Certeau's portrayal of the domestic interior in The Practice of Everyday Life (1974) -'the game of exclusions and preferences, the arrangement of furniture ... the light sources, the reflection of a mirror, an open book, a newspaper lying down, a racquet, ashtrays, order and disorder visible and invisible'³⁰ – the similarity is not coincidental. Influenced by his readings of Arendt, Martin Heidegger and Jean-Paul Sartre, Pawley adopts and aspires to facilitate a phenomenological recording of everyday life. To this end, the recording technologies in The Time House are designed to capture the totality of the experience of being: 'The Time House itself is intended ... to listen, see, smell, touch, and remember.'31

Hardware, software and feedback loops

The Time House is equipped with an array of devices to capture, store and replay these multi-sensory recordings. Pawley's long list of required equipment includes motion analysis projectors, cameras, TV receivers, video monitors, data analysers, motion analysers, auto-readout analysers and measuring and scanning machines. The project drawings add to this equipment computer input and recall control systems, all kinds of sensors and object processing mechanisms. The ideal kit includes equipment that hadn't been invented, such as devices that capture and release smells associated with

The Time House was designed within a context in which electronic multimedia technologies were becoming readily available as consumer products and were considered for their potential as 'technologies of consciousness'. 32 This discourse was informed by thinkers such as Marshall McLuhan, Norbert Wiener, Buckminster Fuller and Gregory Bateson, among others. Informed by these works,³³ to harness the potentially mind-altering effects of technology, Pawley imagines a domestic interior equipped with the latest technologies, where its inhabitants form a cybernetic system in which the recording and recalling of information and objects create feedback loops of inputs and outputs. The workings of this system are explained in the material produced in the project's development stage, which consists mainly of time schedules and movement diagrams that illustrate how the recordings of everyday life will be processed, stored and recalled³⁴ (see Figure 4).

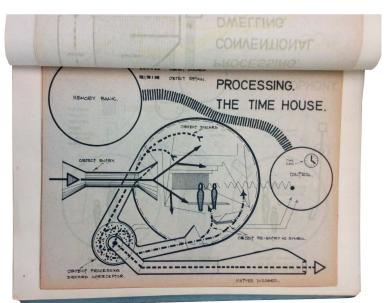


Figure 4. Processing of The Time House (Source: © Architectural Association Archives)

In The Time House, the inhabitants can retrieve and replay any piece of information from any point in the past. According to Pawley, this process of revisiting the past can have an educational effect: the inhabitants can see how they use objects, how they move within the domestic interior and how they react in all kinds of situations. This is a total exposure to an uninhibited recording of the self. This process will put the individual in a peculiar position - between subjective recollection and objective recording - that Pawley calls 'a kind of existential stereophony'. 35 The effects that Pawley hopes his house will have on its inhabitants are vividly described by Marco Vassi in Radical Software (1970), a publication that presented alternative uses of electronic technologies: 'When the image on the tube turns out to be you, seen through the eyes of someone who knows you well, or who knows how to look, catching you in an unquarded moment, when you see all the intimations you have had about yourself in electronically impacted reality, objectified, then your mind expands.'36

Pawley's use of technology in The Time House refers to the practice of watching oneself on film and its use in psychology and psychiatry. In 1952, psychoanalyst Lawrence Kubie proclaimed the importance of investigating 'the effects of facing an auditory and visual image of one's own psychological activities'. 37 These ideas had their precedents in the practices of ethnographic filmmaking and in beliefs that 'electromagnetism could provide a material basis for the otherwise ethereal phenomenon of consciousness'38 that fed into the field of cybernetics. Kubie – along with Gregory Bateson, Margaret Mead, Warren McCulloch, Arturo Rosenblueth, Norbert Wiener, Julian Bigelow, John von Neumann, G. Evelyn Hutchinson and several others from various disciplines - participated in the Macy conferences (1946–1953) at which cybernetics came into being from the intersections of mathematics, engineering, psychiatry and anthropology.³⁹ In the following decades, cybernetics centred around the study of circular causal feedback mechanisms and extended its impact on all spheres of knowledge and human activity, including art and architecture.

Philosophically, Pawley's understanding of the notion of feedback and the related concept of circular causal systems is largely based on George Kubler's The Shape of Time: Remarks on the History of Things (1962). Although Kubler was a scholar of Latin American culture and an architectural historian, his book resonated 'strongly within the most progressive circles of the sixties art', 40 such as Robert Smithson, Ad Reinhardt and Robert Morris. John Baltesari even created a Painting for Kubler (1969). In Chronophobia (2004), Pamela M. Lee argues that the influence The Shape of Time exerted on 1960s artists was related to 'a consideration of time that illuminates theories of information technology just emerging within the popular consciousness of the two decades following the war'. 41 Lee explains that 'The Shape of Time - a book ostensibly devoted to the historicity of things - reads like a manifesto of information theory. It resonates with two of the central tenets of cybernetics in particular: the notion of feedback and the related concept of circular causal systems. '42 Pawley includes' The Shape of Time in his bibliography and states why it is important for his work: 'Kubler's theory about replication is also of vital importance; he demonstrates that behaviour can only be understood as experience when it is repeated and that only varies in repetitions that can create a consciousness of time and change. '43 Furthermore, Pawley tries to illustrate Kubler's theory in his project report in a drawing accompanied by the quote: 'The whole human experience consists of replicas, gradually changing by minute alterations more than by abrupt leaps of invention.'44 Based on Kubler's ideas, the workings of The Time House aim to adjust the future conduct of its inhabitants by enabling them to relive their past experiences and performances repeatedly.

In practical terms, Pawley's key influences on how multimedia technologies and cybernetics can be applied in creating potentially mind-altering environments come from art and architecture. In art, a proliferation of intermedia environments aim to create emotionally real experiences which, in Gene Youngblood's words, 'turn the participant inward upon himself, providing a matrix for psychic exploration, perceptual, sensorial, and intellectual awareness'. 45 Youngblood states, 'only through technology is the individual free enough to know himself and thus to know his own reality'. 46 In Pawley's immediate British context, key figures in the application of cybernetics to art and architecture are Roy Ascott and Gordon Pask. Ascott's understanding of cybernetics is influenced by his readings of F.H. George, Norbert Wiener and W. Ross Ashby, ⁴⁷ as well as his friendship with Pask. Ascott envisioned an application of cybernetics in art through the tool of information technologies that would enable 'a two[-]way exchange between the artwork and its audience'. 48 Pask, an inventor, educational theorist, cybernetician and psychologist, is also interested in implementing cybernetic principles in art and, later, in architecture. In 1953, his MusiColour Machine enabled an interactive performance involving sound and light in which musicians and machines were equal participants. In the following decades, driven by his belief that 'architects are first and foremost system designers', 49 Pask worked on several projects alongside Price

and John Frazer, implementing cybernetic thinking into architecture to create environments that respond to their inhabitants through change and interactivity. One of these projects was Fun Palace (1961-65), conceptualised as 'a cybernetic learning machine', ⁵⁰ in which both Pask and Ascott were involved.

Pask and Price's work directly influenced Pawley's. Not only do Pawley's drawings and diagrams bear an obvious similarity to those produced by Price and Pask, but The Time House also resembles the Fun Palace's workings. As Mary Louise Lobsinger writes, 'To facilitate learning and to help people live in a scientific culture, the Fun Palace would be equipped with cutting edge calculating apparatuses ... There would be close-circuit TVs and surveillance systems by which participants could "experience the emotional thrill and power" of watching themselves participate.'51 In The Time House, Pawley takes on board Price's idea of architecture as 'life-conditioning' 52 and enthuses about the effects this feedback process would have on the individual:

Suddenly there will be perspective, depth, a kind of self-recognition ... His image of himself will change from the fragmented, distorting mirror of the attitudes of other persons, the reflections in shop windows, the statistical evidence of his presence on the files of bureaucracy - to a comprehensive, perhaps frightening, for the first time communicable image. A named, identified record of his being, character, and personality.⁵³

Thus, 'The Time House ... will create an expanded consciousness of time and change.'54

Bunker

If the technology deployed in The Time House seems benevolent, we shouldn't be fooled. The Time House is not a product of confidence and optimism towards a technology-driven future. The Time House is a product of crises. Like many Cold War schemes of introspection, The Time House is a retreat into a private world in the face of the violent and unstable world outside. Its exterior, with its circular geometry, vertical fins and adjustable louvres, repeals the outside and protects the interior. In Pawley's words, 'The heavy concrete installation is built for ... defence like a bunker'. 55

Overpopulation, resource exhaustion, pollution and nuclear war were common fears at the time. More broadly, a sense of instability and transformation suffuses the era. Expressing this anxiety, in his book, The Private Future (1974), Pawley writes: 'All over the world a morning newspaper, an evening television, a weekend magazine – all convey images of intolerable impermanence and ever-present danger.'56 He continues to voice doubts regarding the 'reality' of these threats: 'This, it is widely believed, is the real thing. One of three "real things" standing in the newspaper offices of the world, each ready to seize the headlines should the occasion serve. Moral doomsday ... Nuclear holocaust ... Ecological catastrophe.'57 Pawley's statement conveys a double crisis, a temporal crisis and a crisis of reality.

Pawley's project was driven by a wish to relieve the feeling of intolerable impermanence created by the disappearance of the past, not only in the built environment but also in all social, political and economic structures that were being challenged in the 1960s; the instability of the present suffused by the 'ever-present danger' of nuclear annihilation; and the possibility of a 'futureless future'. 58 This feeling of intolerable impermanence was heightened by the emergence of new information and communication technologies and their introduction into everyday life. The multiplicity of temporalities and spatialities presented by the mass media rendered the conception of 'continuous progressive time' and a 'single reality' difficult, if not impossible. The 'realities' broadcast by the media were volatile, ephemeral and instantaneous to the point where their 'realness' came into question.⁵⁹ Pawley connects these phenomena into a vicious circle, 'To face a futureless future [the individual] relies on self-deception, and that self-deception is itself fed and developed by recording and simulating technologies which have formalized it and given it the appearance of truth.'60

As a protective mechanism against this acute sense of impermanence and unknowing, The Time House proposes a continuous, comprehensive recording of everyday life. Its inhabitants are drawn into reliving past experiences via these recordings and, through this process, they re-establish not only continuity between past and present but also what reality is. The Time House invites its inhabitants to pause, observe and evaluate the past in order to gain agency towards the future. This proposition is underlaid by the belief that the domestic interior is the only place where that authentic experience can be had. Pawley writes, 'Public buildings, the wreckage of outworn institutions for the most of nineteenth-century origin, will evaporate leaving only media networks behind ... The transcendental home, linked to the collective subconscious and the individual memory, will preserve the chain of evolution unbroken. The rest is nowhere. '61 In The Time House, Pawley creates an intensely interiorised environment 'totally under the control of the individual'.62 Within it, the latest technologies are used to establish a sense of security by creating a series of prophylactic layers that distance and protect the inhabitant from the outside world. Information becomes almost a substance⁶³ which, through an accumulative and circular process of production and consumption, builds 'an all-interior space'64 to keep the outside at bay (see Figure 5).

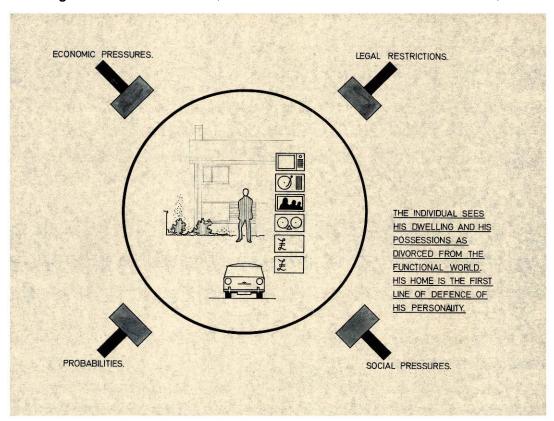


Figure 5. Diagram of The Time House (Source: © Architectural Association Archives)

However, for Pawley, The Time House was first and foremost a reaction to a personal crisis. The completion of his thesis came at the end of twelve tumultuous years. Pawley first registered at the Oxford School of Architecture in September 1956 and only received his diploma from the Architectural Association in July 1968. In the intervening period, he spent one year as an exchange student in Paris, which ended in La Santé prison; he was employed in various architects' offices but on average for no more than six months at a time; and he pursued his studies in an erratic manner with numerous breaks and false restarts. By the time he re-registered at the Architectural Association to complete his diploma in September 1966, he had a young son, and his wife had died in a car crash. On the final page of 'My lovely student life' (1975), a text narrating this period in detail, Pawley writes,

What I did was to embark on a project for a dwelling where 'the individual' (me) could hide - away from planners, architects, bank managers, other journalists, local authorities, codes of practice, and social utopians: all the disjointed horrors of the world I had inhabited for the last decade. 'The Time House' was to be a means of escape ... I worked on this apotheosis of private life, this machine to shelter my own madness, for the whole year. I wrote it, designed it, and lived it.⁶⁵

Conclusion

In The Time House, multimedia technologies are used to put forward a phenomenological basis for the future of inhabitation. The house becomes an electro-mechanical self-writing document with entries stored in material and immaterial form; a house-cybernetic machine constructed to record, visualise, support and amplify the inscription of personal order and identity within the domestic interior. Thus, the domestic interior becomes a cybernetic autobiographical machine. Pawley's aims are threefold: to awaken the awareness of the inhabitant about the use of objects, movement and information – as a whole arrangement, a gestalt - and the role it plays in the formation of one's identity; to provide stability and permanence as a bulwark against change – especially changes in the public realm which the individual has no power to control; and, although this is not clearly stated in the published version, but is clear in the thesis presentation, to provide the designer with a means to understand everyday life in its complexity. The house not only presents the inhabitants with a phenomenological recording of their life, but also allows the designer to obtain a phenomenological understanding of everyday life. In this way, the fine grain of everyday life is revealed, and life stops being an abstraction.

In many respects, The Time House is a wilful student project that tries to bring together all key concerns of architecture in the late 1960s: cybernetics, phenomenology, environmental-behaviour studies, the use of cutting-edge technology, Cold War politics and fears, and the countercultural aim to expand human consciousness. Baird's assessment rings true: 'I find it difficult to know how to reach a conclusive judgement about such a piece of work. It is speculative and sketchy, but on the other hand, is ambitious and original.'66

Created in the conjunction of cybernetics and phenomenology, the value of looking back to this project today is how it aims to construct identity within the domestic interior through technology. In 1968, it would have been difficult to test the real effects of The Time House on its inhabitants. Pawley intended to construct a small-scale installation for this purpose, but financial and time constraints prevented him from realising it. In the intervening decades, electronic and later digital information and communication technologies have been increasingly applied in domestic environments, raising new possibilities and fears with each iteration. The television, CCTV camera, personal computer and, later, smartphones and other smart devices have become part of everyday life - and culture. In 1987, in 'The Ecstasy of Communication', Jean Baudrillard recognised that, while the domestic space is largely experienced in 'a traditional way', another way of living is virtually in place. He writes:

Today, the very space of habitation ... is conceived as both receiver and distributor, as the space of both reception and operations, the control screen and terminal which as such may be endowed with telematic power - that is, with the capability of regulating everything from distance, including work in the home and, of course, consumption, play, social relations, and leisure. Here we are far from the living room and close to science fiction.⁶⁷

In popular culture, the Big Brother reality show, ongoing since 1997, and films such as The Truman Show⁶⁸ illustrate what it is to be constantly monitored, with or without consent, expressing our unease with surveillance while tapping into our voyeuristic tendencies. However, in these instances, together with the plethora of 'reality shows' that have been produced since the late 1990s, the recordings of everyday life are intended for broadcasting and consumption, and present a highly edited and controlled version of everyday life. This was not what Pawley was proposing. The Time House recordings were not for transmission to the outside world; they were intended to provide an unfiltered version of reality. Closer to Pawley's vision, Jeff Taylor, speaking at the second Doors of Perception Conference in 1994, imagines the possibilities multimedia technologies could offer when transferred from the commercial sphere to the home: 'With cheap digital recording media for home use, huge growth in domestic documentation is predictable ... Now it seems we have the opportunity to draw on all these largely unused and inaccessible treasures trove of domestic observation to make heritage once again a central focus of our home lives.' However, when meditating on 'the implications of this opportunity ... that encourages individual reconstructions of the past', he predicts 'the possible fabrication of a domestic heritage patchwork of only the most glittering fragments stitched together without coherence or empathy'. 69 While initially enthused by the use of technologies in the domestic interior, Taylor still recognises that 'there can be no substitute for the role of smell in helping recall and represent the past, or the physical textuality of leafing through old photographs in a shoebox, locating by accident those which unleash a flood of memories in a way perhaps the precisely accessed virtual artefact never can'.70

Pawley opens his thesis with a quotation by Marcel Proust:

For me the voluntary memory, which is especially a memory exercised by intelligence and sight, gives us only false shadows of the past; but an odour or a scent recurring in completely different circumstances awakens the past in us in spite of ourselves, and we realise how different this past was from what we imagined we recalled, and that our voluntary memory painted like bad painters, with colours that have no truth.⁷¹

In this quote, it is clear how a material object in the present – famously, Proust's madeleine – triggers a vivid experience from the past. Pawley does not explain why he heads his thesis with this quote, but it is almost certain he hoped that The Time House would create a similar process to enable its inhabitants to relive - phenomenologically, with all the senses - past experiences that would reveal a truer, more authentic version of both the past and themselves. Pawley imagines the inhabitant of The Time House enveloped in a pod within which one relives past experiences through a multi-sensory simulation of events – visual, acoustic, olfactory and tactile. This repeated, unembellished re-creation of the past offers opportunities for introspection and self-knowledge. In 1968, Pawley recognised this as an alternative use of media and cybernetic technologies.

It is doubtful if the technologies of The Time House would have ever managed to simulate a truly phenomenological experience, and it is hard to guess what effects this experience would have had on the inhabitant. Yet, its proposition to use technology to simulate lived experiences with the aim of altering human behaviour still raises heated debates today. These debates have their roots in the conflict between phenomenology and cybernetics, which, as Sana Murrani notes, 'comes in the form of dispute over the meaning and the extent of the involvement of technology in our daily lives, existence, and consciousness'.⁷² The pioneer cybernetician, Norbert Wiener, believed that information technologies are 'bound to devalue the human brain',73 however, as Martin Heidegger points out, Wiener's critique of information technologies is underlaid by the belief that 'Man [is] an information [device].'⁷⁴ According to Heidegger, the threat of technology to human beings is more fundamental, precisely illustrated by Wiener's understanding of human beings as devices: technology has the potential to construct a system within which humans become mechanical parts assigned a function.⁷⁵ Thus, technology 'enframes' human beings. Heidegger's warning resonates with current fears about the effects of digital technologies and the simulated experiences they create for individuals and society. These fears create a feeling of uneasiness towards the proposition of The Time House: disconnection with the here-and-now, prioritisation of the individual over the collective, disintegration of reality and neglect of the social public space. The Time House, which could be dismissed as a project of its time and place, is embedded in a web of ideas still resonant in our present. The technologies of The Time House have the capability to extend, clarify and amplify reality as well as distort and reduce it; these dual potentialities lead to questions such as: could a machine provide a truly phenomenological experience? And, if yes, what would its effects be? Could virtual phenomenological experiences infuse a space with a sense of identity and history as Pawley hoped? Or would these virtually fabricated experiences eventually lead its inhabitants to withdraw from most things real?

Notes

- ¹ Final Jury Report on the Time House dated June 1967, signed by George Baird, and marked as 'Extension'. AA/02/02/01/03/77/03/01, research notes on the Time House, 1966-70. Martin Pawley SubSeries. Architectural Association Archives, London, United Kingdom.
- ² Scott, Architecture or Techno-utopia, 127.
- ³ The Time House, Synopsis, November 1968, 2. AA/02/02/01/03/77/03/01, research notes on the Time House, 1966–70. Martin Pawley SubSeries. Architectural Association Archives, London, United Kingdom.
- ⁴ Pawley, 'The Time House', 402.
- ⁵ Pawley, 'Time House', 27.
- ⁶ McDonough, 'Metastructure', 91.
- ⁷ Pawley, 'Time House', 1. Pawley writes: 'the evocative phrase used by Yona Friedman at the Folkestone conference of Experimental Architecture. June 1966'.
- ⁸ Pawley, 'Time House', 1.
- ⁹ Pawley, 'The Time House: Or argument', 127.

- ¹⁰ Pawley, 'The Time House', 402.
- ¹¹ Gruevska, 'Mit und in seiner Umwelt geboren'; Pawley's bibliography for The Time House includes Frederik Buytendijk's An Approach to Animal Physiology (UAP, 1948).
- ¹² Pawley, 'The Time House', 401.
- ¹³ Pawley, 'The Time House: Or argument', 135.
- ¹⁴ Pawley, 'The Time House: Or argument', 138.
- ¹⁵ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 55. Martin Pawley SubSeries, 2008. Architectural Association Archives, London, United Kingdom.
- ¹⁶ Pawley, 'The Time House: Or argument', 129.
- ¹⁷ Forty, Words and Buildings, 142.
- ¹⁸ Forty, Words and Buildings, 142.
- ¹⁹ Forty, Words and Buildings, 143.
- ²⁰ Forty, Words and Buildings, 147.
- ²¹ Hyde, 'Architecture', 100.
- ²² Hyde, 'Architecture', 100.
- ²³ (new note) Pawley, 'Anti-Met.?', unpaginated.
- ²⁴ Pawley, 'The Time House', 400.
- ²⁵ Pawley, 'Time House', 2 and 399.
- ²⁶ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 11.
- ²⁷ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 12.
- ²⁸ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 12.
- ²⁹ Arendt, The Human Condition, 119.
- ³⁰ Certeau, The Practice of Everyday Life, 145.
- ³¹ Pawley, 'The Time House', 24 and 402.
- ³² Turner, From Counterculture to Cyberculture, 234 and 258.
- ³³ Pawley's bibliography for The Time House includes Marshall McLuhan's *Understanding the Media* (London: Routledge & Kegan Paul, 1966) and Buckminster Fuller, Utopia or Oblivion (pamphlet, 1965).
- ³⁴ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover).
- ³⁵ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 61.
- ³⁶ Vassi, 'Zen tubes', 18.
- ³⁷ Kubie, quoted in Collopy, 'The revolution will be videotaped', 178.
- ³⁸ Collopy, 'The revolution will be videotaped', 33.
- ³⁹ For a detailed description of these developments, see Collopy, 'The revolution will be videotaped', 6–47.
- ⁴⁰ Lee, Chronophobia, 221.
- ⁴¹ Lee, Chronophobia, 223.
- ⁴² Lee, Chronophobia, 243.
- ⁴³ Pawley, 'The Time House', 402.
- ⁴⁴ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 55.
- ⁴⁵ Youngblood, Expanded Cinema, 348.
- ⁴⁶ Youngblood, Expanded Cinema, 419.
- ⁴⁷ Shanken, 'From cybernetics to telematics', 10.
- ⁴⁸ Packer and Jordan (eds), Multimedia, 104.
- ⁴⁹ Pask, 'Architectural relevance of cybernetics', 69.
- ⁵⁰ Lobsinger, 'cybernetic theory', 132.
- ⁵¹ Lobsinger, 'cybernetic theory', 132.
- ⁵² Price, 'Life-conditioning', 438–97.
- ⁵³ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 61.
- ⁵⁴ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 3.
- ⁵⁵ Pawley, 'The Time House', 402.
- ⁵⁶ Pawley, The Private Future, 98.
- ⁵⁷ Pawley, The Private Future, 98.
- ⁵⁸ Pawley, The Private Future, 180.

- ⁵⁹ The construction of reality by the media is questioned in publications such as Daniel Boorstin's *The Image: A* Guide to Pseudo-Events in America (New York: Harper & Row, 1962) in Pawley's bibliography for The Time House.
- ⁶⁰ Pawley, The Private Future, 179.
- ⁶¹ The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 24.
- ⁶² The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 60.
- ⁶³ Steiner, 'Bathrooms, bubbles and systems', 25.
- ⁶⁴ In this 'hyper-interiorisation', The Time House recalls Smithson's House of Future (1956) in the Cold War project. Beatriz Colomina writes about Smithson's project, 'It was an escape both from the threats of the present and from the fresh memories of World War II ... the H.O.F. was itself a mechanism for escape, an all interior space that overly happy inhabitants would never need to leave. A bunker.' Colomina, Domesticity at War, 227.
- ⁶⁵ Pawley, 'My lovely student life', 58.
- ⁶⁶ Final Jury Report on the Time House dated June 1967, signed by George Baird, and marked as 'Extension'.
- ⁶⁷ Baudrillard, 'The ecstasy of communication', 128.
- ⁶⁸ Peter Weir, *The Truman Show* (Paramount Pictures, 1998)
- ⁶⁹ Taylor, 'Towards domestic heritage multimedia'.
- ⁷⁰ Taylor, 'Towards domestic heritage multimedia'.
- ⁷¹ Proust, guoted in Pawley. The 10,000-word version of the thesis with diagrams and drawings, dated June 1967 (blue card cover), 1.
- ⁷² Murrani, 'Third way architecture', 270.
- ⁷³ Wiener, Cybernetics, 27.
- ⁷⁴ Heidegger, quoted in Nugent, 'Rethinking Heidegger', 2.
- ⁷⁵ Nugent, 'Rethinking Heidegger'.

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Research ethics

Not applicable to the article.

Consent for publication

Not applicable to the article.

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The author declares no conflict of interests with this work. All efforts to sufficiently anonymise the author during peer review of this article have been made. The author declares no further conflicts with this article.

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