Architecture, Technology and the Uncanny: Infiltrating Space in "The Veldt" and in "The Digital House Project"

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Abstract

The original term for the uncanny—das Unheimliche—is inevitably linked to the home. Uncanny is that which is both homey and unhomey, and this ambiguity is precisely what causes it to be disorienting and frightening. This article addresses the inherent link of the uncanny to the home by comparing a literary text, "The Veldt" (1950) by Ray Bradbury, to architectural texts, mainly "The Digital House Project" (1998) by Hariri and Hariri. Bradbury's prophetic text, first published in 1950, presents an unnerving picture of domesticity, technology and modernity, a picture that is early recreated in these technological homes. In order to illustrate the mediation of the uncanny through architectural space, this study will address two issues which contribute to this sense of unease within the architectural and literary home: first, the dehumanization of humans and the consequent humanization of the house, and second, the worrisome recurrence and proliferation of data within these homes. I argue that architectural space has always mediated the uncanny, and that today, this mediation is strengthened by the overpowering presence of technology in the home.

Key words: home, house, architecture, technology, Ray Bradbury, uncanny

Resumen

El término original para el concepto de lo siniestro — das Unheimliche— está inevitablemente enlazado a la noción de hogar. Lo siniestro remite a la vez a lo hogareño y reconfortante como a lo antihogareño o lo desconcertante, y es precisamente esta ambigüedad la que genera desorientación

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y terror. Este artículo se enfoca en la conexión intrínseca entre lo siniestro y el hogar, al comparar un texto literario, "The Veldt" (1950) de Ray Bradbury, con textos arquitectónicos, principalmente "The Digital House Project" (1998) por Hariri y Hariri. El texto profético de Bradbury, publicado en 1950, presenta una imagen desconcertante de la domesticidad, de la tecnología y de la modernidad, una imagen que es recreada en estas casas tecnológicas. Con el fin de ilustrar la mediación de lo siniestro a través del espacio arquitectónico, este análisis se enfocará en dos aspectos que contribuyen a esta sensación de turbación dentro del hogar en el plano arquitectónico y literario: primero, la deshumanización de los individuos y la consecuente humanización de la casa, y segundo, la recurrencia preocupante y la proliferación de información dentro de estas casas. Insisto en que el espacio arquitectónico siempre ha mediado lo siniestro y que, actualmente, esta mediación se fortalece por la presencia abrumadora de la tecnología en el hogar.

Palabras claves: hogar, casa, arquitectura, tecnología, Ray Bradbury, lo siniestro

 \P he original term for the uncanny—das Unheimliche—is inevitably linked to the home. Uncanny is that which is both homey and unhomey, and this ambiguity is precisely what causes it to be disorienting and frightening. This article addresses the inherent link of the uncanny to the home by comparing a literary text, "The Veldt" (1953) by Ray Bradbury, to architectural texts, mainly "The Digital House Project" (1998) by Hariri and Hariri. Bradbury's prophetic text, first published in 1950, presents an unnerving picture of domesticity, technology and modernity, a picture that is earily recreated in these technological homes. In order to illustrate the mediation of the uncanny through architectural space, this study will address two issues which contribute to this sense of unease within the architectural and literary home: first, the dehumanization of humans and the consequent humanization of the house, and second, the worrisome recurrence and proliferation of data within these homes. I argue that architectural space

has always mediated the uncanny, and that today, this mediation is strengthened by the overpowering presence of technology in the home.

The 1950s as Historical Backdrop

The 1950s, the decade in which Bradury's text emerged, undoubtedly shaped this tale: New Historicism and numerous criticies have proven that historical contexts are one of various discourses that need to be considered while analyzing a text, and in this case, this approach becomes imperative because of particular socio-cultural aspects of American culture at the time, which surface very clearly in the story. "The Veldt" (1953) discusses the events in the "Happylife Home," a house of the future, which today would be called an "intelligent" or "smart" home. At first glance, the world of the 1950s seems to clash enormously with the futuristic and ominous reality that is showcased in "The Veldt." Nevertheless, during this historical period, the United States experienced socio-economic changes that inaugurated a new era in American history, characterized in large part by technological innovation and consumeristic excess: "The economy as a whole underwent sweeping transformations. Under the growing dominance of large industrial conglomerates, the postwar era was very prosperous, with average annual earnings for all workers more than doubling while inflation remained low. This pushed most Americans towards a pattern of intensive consumption" (Carosso 9). The same author notes the intimate link between this insatiable consumerism and the unprecendented amount of new appliances that were now available: "This was America under the reassuring spell of the television sitcom, enjoying the purported glamour of the suburban home and its endless array of never-before-seen appliances, where consumption was understood as a close synonym of happiness" (8). "The Veldt" clearly reflects the deep transformations that American culture was undoubtedly suffering in this decade because of innovation, but also because of its dark twin, consumerism.

Heightened consumerism was not the only significant social change experienced by Americans during the 1950s. The family unit also underwent, if not a drastic transformation, certainly an intense reaffirmation of fixed gender roles of its leading members: "It was the America in which dad was the breadwinner and mom the homemaker, and home and car-ownership appeared to be natural facts of life" (Carosso 8). Moreover, this idealized two-parent family had a particular flavor because of the suburban lifestyle that reigned at the time:

"The expansion of industrial production of small consumer durables required, in the USA as in the UK, an investment in the home, and the drive towards homogeneity resulted in these homes being increasingly located in new suburban developments accessed by new automobiles, fuelled in America by home-produced and cheap gasoline" (Thumim 7).

According to Janet Thumim, the Fifties were defined by this suburban existence, by the emergence of the television industry, and by the convergence of these two phenomena—watching television as an essential part of family life and routine. Thumim also affirms that the notion of the Fifties that emerges is shaped by images of "not so much the Fifties as they were, rather the Fifties as contemporary programmes proposed them to be" (5). But, as with any era, these images formed fundamental myths that painted a positive picture of the 1950s, as well as other myths that revealed the darker underbelly of the times:

From such material unifying myths emerge, myths suggesting a goldenage explosion of consumer goods and employment opportunities, of the establishment of harmonious two-parent families in leafy suburbs, of the promise and excitement of new technologies ... And then there are the opposite myths of repressed, anxious citizens struggling to live decent lives in postwar wastelands, of the restricting double standard reapplied to women following their wartime emancipation of the rise in crime amongst juveniles, of the misery of unwelcome immigrants, of racism, poverty, mental ill-health. Neither of these extremes does justice to the provisional, contradictory and experimental realities. (Thumim 5,6)

Carosso confirms this dual depiction of the era in the "real" world, while pointing out some of the bleaker elements that marked this decade: "The 1950s was the era of the Cold War and the constant threat of nuclear annihilation, when nuclear fallout shelters were constructed in public buildings and schools: it was the America of Mc-Carthy's crusade against 'unAmerican activities' and of the Hollywood blacklists, a country in which racial segregation was largely legal" (8). In other words, critics coincide in the idea that, as with any era, idealized portravals are only one side of the coin; the 1950s was a decade in which happy-family portrayals, so prevalent on the TV of the time, acted like a glossy picture that covered up darker social and cultural realities that lurked beneath.

"The Veldt" and "Real" Intelligent Homes

Ray Bradbury's story tunes in to this dual portrayal of this decade; the beginning of the story paints a seemingly happy family existence but this setting soon turns nightmarish when the children rebel against parental authority and when the house itself no longer serves the family, but acquires a dangerous autonomy and power over the parents and even the children. Initially, the parents and the two children don't have to perform any chores such as cooking or brushing their teeth, since the house does it for them. Furthermore, the children become obsessive about playing in their virtual-reality nursery, which they insist on turning into an African veldt. Sinister elements emerge as the story progresses, such as a sense that the reality of the nursery is "all-too-real." Moreover, the traditional family structure is undermined, since the children consistently challenge and threaten parental authority. Near the end of the tale, the parents decide to shut off the entire house in order to regain authority. Nevertheless, this decision seems to come late, since the children lock their parents in the nursery and the latter disappear when the not-so-virtual lions apparently eat them.

The issue of the animate room and house transmits Bradbury's anxieties about the overwhelming influence of television on everyday family life. Media critics often point out a famous quote by the author, in which his views about the pernicious effects of television are revealed: "The television, that insiduous beast, that Medusa which freezes a billion people to stone every night, staring fixedly. That siren which called and sang, and promised so much and gave, after all, so little" (Wasko 8). In the story, the wall in the children's nursery, which depicts virtual realities, clearly portrays the author's apprehension concerning the invasion of the television set into American homes at the time of the publication of the story (the tale first appeared in *The Sat*urday Evening Post, on September 23, 1950). "The Veldt," then, reveals anxieties facing 1950s American culture, specifically fears connected to family life and its voracious appetite for the newer technologies that, as Bradbury pointed out, seemed to promise so much but gave so little, or rather, gave new social and family problems in return.

In this article I also argue that Bradbury's prophetic literary text announced a reality that was not far to come, that of "smart homes" which boast advanced technology that is marketed as improving family life. "The Digital House Project." the architectural project that Bradbury's story will be compared to, was developed by Iranian architects, Gisue and Moigan Hariri for House Beautiful magazine in 1998, in order to illustrate the central role of new technologies in modern and future homes. The architects strived to create an entirely digitalized environment. with walls made from liquid-crystals and factory-made rooms, "plugged" into a main core. The fact that this is a project and not a built structure, adds to the sense of the uncanny, since it exists on a digital plane, competing with and guestioning the reality of our own immediate existence. Bradbury's story presents a scenario that was interpreted as science fiction in its day, but in our context, the internet, artificial intelligence, and virtual reality are no longer fantasy. The result, of course, is a blurring of the frontier between the Virtual and the Real. The newest advances in artificial intelligence are what really shape this new house: "As a receiver and transmitter of information, the house also becomes an extension of the mind" (Riley 56). At this point, it is necessary to consider the definition for an intelligent home. While Programmable and Intelligent homes are alike, the word intelligent (vs. programmable) automatically implies that the house has thinking capacity, a mind and an "intelligence" of sorts:

In case of Programmable House Technologies, it was a human that needed to program or reprogram the house. In case of Intelligent Houses, it would be done automatically by the house itself. This is achieved by the capability of the house to observe the inhabitants in the search

for patterns. <www2.imm.dtu.dk/~cdj/rtHouseWebSite/scenarios.html>

At a first glance, it might appear that the advent of this type of "thinking" home is an isolated and revolutionary occurrence. However, as Phillip Sauter argues in "Vr2Gotm a New Method for Virtual Reality Development," the concept of virtual reality may be traced as far back as classical sources. According to this author. this concept can be traced to a written source dating from 370 B.C., specifically to Plato's Book VII of the Republic, in which the philosopher discusses the "Allegory of the Cave," centering on "ideas of perception, reality and illusion" (Sauter 1). In addition to pointing to this ancient preoccupation with reality and virtuality, Sauter provides a much more recent genealogy of the notion, identifying the main researchers behind virtual-reality advances:

In early 1963, Ivan Sutherland developed his legendary Sketchpad system. In 1965 he wrote "The Ultimate Display" that influenced a generation of scientists, computer artists, and media theorists. In 1966, he invented the headmounted display. In 1992, the "CAVE" (Cave Automatic Virtual Environment) was presented at the Electronic Visualization Laboratory at the University of Illinois in Chicago, USA. (Sauter 2)

Additionally, in "Female Roller-coasters (And Other Virtual Vortices)," Joseph Lanza describes the widespread presence of virtual reality in our world, as well as its implications on the way that virtual-reality participants sense their surroundings:

Virtual Reality—an amalgam of cybernetics, aeronautics, new age hooliganism and applied science-fiction—uses personal computers, fiber-optics, and full-motion 3D to produce a "computerized clothing" that we can drape over our sense organs. This allows us to participate in simulated or "virtual" worlds that interface slick, on-line graphics with our over-active imaginations. Special effects usually confined to the stage, cinema, or theme park can be transplanted into a stereovideo sensorium. Our central nervous system is tricked into perceiving the synaptic thaumatorgy as "real." (51)

Finally, the aforementioned expert Phillip Sauter provides a very clear definition for what virtual reality is: "A computer-synthesized, three dimensional environment in which a plurality of human participants, appropriately interfaced, may engage and manipulate simulated physical elements in the environment and, in some forms, may engage and interact, or with invented creatures" (Nugent qtd. in Sauter 2). We will see how this project and others disturbingly mirror some of the issues that "The Veldt" had anticipated decades ago.

The first element that may shed light on these sinister homes is that of the dehumanization of the inhabitants of the home and the ensuing humanization of the dwelling. As psychoanalists and other critics have noted, E.T.A. Hoffmann's story "Der Sandmann" (1816) plays a central role in E. Jentsch's and Freud's formulation of the concept of the uncanny. Jentsch refers to a key character in the story, Olimpia the doll, "brought to life" by her progenitor, a sort of evil or mad scientist. Olimpia is uncanny not because

she is dead or alive, but because she is both. In the same way, Bradbury's story talks about the uncanny home in terms of a vacillation between its dehumanization and humanization: the Happylife Home is inanimate as a conventional building should be, but shows worrying signs of animation. Its residents, on the other hand, seem to show signs of dehumanization. In "The Veldt," chores that had been traditionally performed by people are now carried out by the home itself. Bradbury's story begins in the family kitchen, the heart of the traditional home, but instead of encountering a wife that follows a traditional role, we find a wife who "paused in the middle of the kitchen and watched the stove busy humming to itself, making supper for four" (1). Not only has the stove taken on the domestic chore intended by an inhabitant of the home--predictably the wife and mother-it has also assumed gestures and behaviors that disturbingly remind us of a person performing these domestic chores, such as humming.

As noted previously, in the 1950's socio-historical context when this story was published, appliances that facilitated the homemaker's job were flooding the market. Still, society was not ready for the total substitution of the nurturing mother for an appliance that hummed. The "Digital House Project" takes place almost fifty years later in a different social context. In this case, cooking is done not by an appliance, but by a virtual substitute for a human being, which is actually more uncanny: "In the kitchen [...] a virtual chef from a favorite restaurant could aid in the preparation of meals, and the residents could entertain friends who live thousands of miles away" (Riley 56). Both the Happylife Home and the "Digital House Project" are uncanny because they promise to carry out tasks that human beings have traditionally performed. Tools and later in time, appliances, have always aided people in their work; digital homes, however, are not mere appliances, they threaten to become organisms which fulfil "human" functions by posing as a human being. In "The Veldt," the stove hums to itself, as a person would, and in the DHP, the cooking is not even done by a stove but by a virtual chef.

This last point is related to the concept of the dwelling as an extension of the human body or as a body in itself. "The Veldt" explores this idea under a very negative light. When the mother complains about their dehumanization, the father replies "'But I thought that's why we bought this house, so we wouldn't have to do anything' "(2). The mother then says, "'That's just it. I feel like I don't belong here. The house is wife and mother now, and nursemaid. Can I compete with an African veldt? Can I give a bath and scrub the children as efficiently or quickly as the automatic scrub bath can? I cannot "(2). The house clearly begins by being an extension of the people's bodies but it eventually takes over, by acquiring a body of its own. This last point insinuates a terrifying possibility—once the home has adopted a body of its own, why would it continue needing or depending upon its human dwellers? In the best of cases, even if the fatal stage of discarding and disregarding its human dwellers is not reached, the people in these houses undoubtedly become crippled by their dependence on this corporeal and empowered home.

In architecture, the idea that the house is an extension of the human body is an ancient one, and it has shaped important notions, including Le Corbusier's Modulor, directly influenced by Da Vinci's Vitruvian Man (1487), which in turn reflects and is named after the Roman architect's (Vitruvius) notion. All of these models are systems of proportion, in which the human body and its scale serve as the vantage points for proposing ideal or "perfect" architectural proportions. The creators of the DHP are said to "investigate a conception of the house as an extension of the body, a 'smart' environment that is not so much characterized by the presence of discrete computers but by surfaces and devices that are interactive" (Riley 56). Furthermore, the interior and exterior surfaces are not envisioned as mere walls, but as "smart skins." Like the dwelling described in Bradbury's story, the digital house draws on the universal concept of the home being shaped by the human body. These literary and architectural structures are uncanny because they seem to be alive and to have a body which offers to envelop and protect, but which in "The Veldt," actually swallows and kills its inhabitants. Technological homes in fiction and in real life awaken a similar fear—that people, their bodies, and their roles will become subordinate or secondary within the greater body and authority of the uncanny digital home.

If acquiring a body is a key part of the humanization of the home, the process would not be complete without the home's acquisition of a "mind" both in Bradbury's story and in the DHP. In "The Veldt," George Hadley, the father, considers disconnecting the nursery because his children seem to be spending too much time in it: while pondering about the "all-too-real" quality of the veldt. George says: "Remarkable how the nursery caught the telepathic emanations of the children's minds and created life to fill their every desire. The children thought lions, and there were lions. The children thought zebras, and there were zebras. Sun—sun. Giraffes-giraffes. Death and death"(3). Parental authority is challenged and subverted, generating a feeling of unease within the story because rooms. like children, are not supposed to disobey the masters of the household, the parents. The home in Bradbury's story and the digital homes are uncanny because of their capacity for "thinking," a characteristic previously reserved for animate beings. The dehumanization of people results from their extreme reliance on the home to perform not only physical tasks, but mental and rational ones as well.

The last point related to the topic of dehumanization/humanization is that of death. In "The Veldt" it is present in the children's obsession with replaying the nursery scene, of lions feeding on an unrecognisable prey. When Dr. Mclean, the psychologist of the family sees the effect the nursery is having on the children, he recommends that the parents shut off the room and go on a holiday, far from their automatized home. When the father declares: "I don't imagine the room will like being turned off," the doctor replies: "Nothing ever likes to die—even a room"(7). When the house is shut off temporarily, the narrator points out: "The house was full of dead bodies, it seemed. It felt like a mechanical cemetery. So silent. None of the humming hidden energy of machines waiting to function

at the top of a button" (7). We've discussed the portraval of the house as having a body and a mind. As an entity with animate qualities, the house is also capable of dving. On the other hand, the dehumanization of the inhabitants is accompanied by the issue of death but in a very different way. The more the humans loose their ability to use their bodies and their mind. the greater the home's ability to acquire a body and to overpower them. When the parents are locked into the nursery, they meet a particular kind of death—they are swallowed by a virtual scenario and this is where their death takes place, not on an external plane. Their death is consistent with and is the climax of their dehumanization. While the home's potential death is announced as organic or biologic, the parents' death is played out on a reflective, two-dimensional surface, mimicking reality.

The second point which contributes to the uncanny in these architectural and literary homes is that of recurrence. Freud claims that situations where there is an "unintentional return" to a place, for instance, to the same piazza after a stroll through an unfamiliar neighborhood, produce a feeling of the uncanny. In Bradbury's story, the veldt is that place of unintentional return for the parents, but not for the children, who long to return and relive it time and again. The issue of recurrence is also central to the story, because the children have what Freud would call the "compulsion to repeat." This repetition (which in itself is uncanny) is a virtual ritual, where the same elements—a scorching sun, descending vultures, menacing lions—contribute to the reenactment of the killing of the parents. Like primitive rituals, this virtual or not-so-virtual reiteration includes elements of blood, sacrifice, and death, linking the ancient and archetypal to the futuristic and digital. This is not merely a repetition; rather it is a premonition, a projection into the future and the upcoming tragic events. George and Lisa Hadley are unsuspecting victims but only initially because as the story progresses, the tragic foreshadowing increases in intensity.

Other recurrent elements which announce the parents' death are the roars from the lions and mysterious human screams that can be heard at a distance within the nursery and home in general. For instance, on the first page, the mother asks: "Did vou hear that scream?" a question that is answered affirmatively when the father also hears a scream in the distance, before entering the nursery: "Just before he stepped inside, he heard a faraway scream... It seemed that, at a distance, for the past month, he had heard lions roaring" (3). The following quotes highlight the repetition of these sounds, as well as their increasing impetus and force: "A movement later they heard the screams. Two screams. Two people screaming from downstairs. And then a roar of lions" (5); "Those screams—they sound familiar' 'Do they?' 'Yes, awfully' " (5); "Mr. And Mrs. Hadley screamed. And suddenly they realized why those other screams had sounded familiar" (8). The words "familiar" and "awfully" clearly emphasize the notion that that which is uncanny can be awful precisely because of its familiarity. Initially, the screams announce, but towards the end of the story, they confirm. The reeenactment of the killing scene in the veldt and the screams illustrate how the uncanny is generated through the element of reiteration.

In the DHP, recurrence is also present because of the technological nature of the home and its endless reception and transmission of data: "Today, the private house has become a permeable structure, receiving and transmitting images, sounds, texts, and data" (Riley 56). The DHP illustrates the endless capacity of the new home to handle information. The liquid-crystal walls promise to reflect and recreate realities without regard for their reality or virtuality. The uncanny is a direct result of the inexhaustible flow of information. The rooms used also emphasize the issue of uncanny recurrences, since they are described as "factory-made "plug-in" volumes to serve various programmatic requirements" (56). Because they are factory-made and linked to mass-production, the idea of repetition is present. The notion that the rooms would be serving "programmatic requirements" inserts them into a system or pattern, based on recurrence and predictability. This programmatic recurrence also contributes to the sense of the uncanny in these intelligent homes.

The objective of this analysis has been to show how the architectural space in the digital homes that were discussed isuncanny. analysis has centered on the issue of dehumanization/humanization as well as on the recurrence and proliferation of data. I would like to conclude with a brief tour of current websites that promote the design and building of smart homes, in order to illustrate the prophetic nature of Bradbury's text, as well as its warning capacity.

The introductory page of the Neohome website (www.neohome.co.uk) reads as following: "Welcome to your perfect home. A place to relax and enjoy. A haven that offers you more than you could ever imagine." Here, the home is portraved as a comfortable and safe place, a "haven" or refuge; in other words, it is heimisch or heimlich. After offering this conventional definition of home, however, the element of CONTROL is introduced: "Let Neo show vou how state-of-the-art technology can put you in control of sound, vision, security, lightning, environment and communications." A different website reinforces this issue: www.intelligenthouse-and-home.com. The first page asks "why is your car smarter than your home?" and claims that in one's home, one should have CONTROL: With an intelligent home solution [...] you are always in command. Whether from any room of the house with simple to operate and discreet wall panels, you can contact the house and tell it what to do at your convenience." Intelligenthome websites, then, highlight that the one in charge in a digital home is still the human being, not the "intelligent" home. The fact that this is repeateadly addressed highlights a common fear of technological malfunction or worst yet, uprising by appliances, computers and the house itself. The unheimlich results from the mixture between heimlich elements of the house (as a place of comfort) and unheimlich elements brought about by the technological nature of these new homes. The last example which I will address offers an opportunity to consider just how extreme and uncanny intelligent homes can be. The Neohome website offers a solution for elderly patients suffering from dementia to be able to stay (or be coerced) into staying inside their intelligent homes: (in paragraphs 4 &5) "The flat uses smart technology to monitor the occupant's activity and sounds a warning when it thinks there might be a problem [...] motion detectors, speakers and a voice messaging system have been installed. Coercive messages pre-recorded the occupants family are then played when appropriate."Even though smart technology might enhance and not just dictate people's lives, it is impossible not to associate this particular scenario to the terrible one presented in Bradbury's story. Intelligent-home companies offer a home that still retains elements of a traditional one. However, the uncanny is inevitably present through issues of control and surveillance, which surface in fear that technology might overpower the inhabitants. All the publicity for these new types of homes acknowledges the same thing--people do not want their smart homes to outsmart them. Despite this fundamental desire, contemporary society does not seem to be shving away from the promise of a "better" lifestyle in a smart home, a promise that might soon turn sour, as in Bradbury's "The Veldt."

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NOTE: a couple of these pages are currently under construction or no longer operating. I had printed images of the pages that I employed, but unfortunately, I never had all of the information about them (authors or dates of publication...)

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