

THE MECHANICAL BRIDE AND THE AMBIVALENT PLEASURES OF THE UNCANNY

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The theory of the “uncanny valley” or *bukimi no tani* (the valley of eeriness) has, over the last decade, shifted from the margins to mainstream culture. Coined by robotics professor Masahiro Mori (1970) in a paper in an obscure Japanese journal called *Energy*, the theory suggests that as anthropomorphic creations, such as robots, start to approximate humanness in both appearance and movement—raising expectations of humanness, but not quite meeting them—they will begin to seem creepy, plunging those who experience them into the Uncanny Valley. Although Mori’s theory received little attention when it was published, it has attracted ongoing interest as the lines between the human and non-human humanoid have started to blur, and it has made appearances in both the media and the academy in relation to everything from CGI (computer generated imagery) bodies in animation to game avatars to plastic surgery. In the process, as often happens with the popularization of ideas, longer histories of the uncanny have been sidelined, especially those in which its effects have been used to evoke ambivalent pleasures. This historical legacy includes automata builders, Victorian magicians and showmen, gothic writers, surrealists, and even the earliest filmmakers, whose uncanny creations limned the border zones of pleasure and displeasure, desire and fear, identification and abjection. Especially now, as rapidly advancing technologies increasingly enable our anthropomorphic creations to sidestep the Uncanny Valley through heightened levels of realism, it is helpful to review how and why the uncanny has been actively courted.

My own interest in the ambivalent pleasures of the uncanny was cultivated during a ten-year period exploring the world of artificial companionship while making a feature-length documentary, entitled *The Mechanical Bride* (2012).¹ Inspired by the Marshall McLuhan book (1951) of the same name, it examined the science fiction fantasy of creating the perfect artificial woman and the developing reality of artificial companions within the sex and robotics industries. Included in the documentary were interviews with men who build and buy sex dolls, those who repair them, and those attempting to enhance them with robotics and AI technologies. I also interviewed a number of artists and writers as fascinated by human/nonhuman relationships as I was, including fine arts photographer Elena Dorfman

¹ <https://vimeo.com/ondemand/themechanicalbride>



FIG. 1
HONDA'S ASIMO

(*Still Lovers*, 2005); author Gaby Wood (*Edison's Eve: A Magical History of the Quest for Mechanical Life*, 2003); author Victoria Nelson (*The Secret Life of Puppets*, 2001); and Robert Parigi, the first director to use a life-sized silicone sex doll in a film (*Love Object*, 2003).

The seeds of the documentary were first planted in my former life as an interactive media designer during the late 1990s, while working at a future technology research and development company in Palo Alto, California, the heart of Silicon Valley. While there, I befriended a number of roboticists—all male—who first introduced me to the theory of the Uncanny Valley. At the time, Mori's theory held sway over the creation of robots worldwide, including those being developed by my colleagues, all of which were non-realistic. (The humanoid robotics industry in Japan would shortly thereafter receive worldwide attention for Honda's ASIMO and the Sony Dream Robot, both of which eschewed realism and were reminiscent of 1950/60s science fiction film robots and/or life-sized toy robots.)

My co-workers also introduced me to the Realdoll, a life-sized silicone sex doll manufactured in Southern California, which achieves a remarkable degree of verisimilitude. The company that makes and sells *RealDoll*, Abyss Creations, had just launched, and my colleagues were considering buying a doll, opening it up, and installing robotics technologies as a way of testing out a more human-looking robot (Abyss, of course, had the same idea and now, 20 years later, it is offering robotic/AI dolls). Although the plans of my robot colleagues never came to fruition, the desire to install robotics technologies into a human-looking doll became a kind of thought experiment about the Uncanny Valley. Did Realdolls, considered by many as the most desirable sexdolls in the world, escape the Uncanny Valley because they were inert? If so, what would happen when they became roboticized? Would their attempts at acting human make them less desirable and/or interfere with the kinds of fantasies projected onto them by the men who bought them? Indeed, to what extent was fantasy and projection integral to the purpose of owning a Realdoll and to what extent was the doll but an intermediary step in a longed-for reality for robot companions that were indistinguishable from humans? These were some of the questions that eventually inspired *The Mechanical Bride*.

While I was shooting the documentary, I was also working on a PhD in critical film/media theory and had just begun research for a doctoral dissertation on representations of artificial bodies in film, literature, and art.² My intention was to bring the two projects together in some form, especially in relation to ideas around the uncanny, but they remained inexorably and frustratingly delinked. Although the first cut of the documentary featured twenty minutes of footage explaining the importance of the Uncanny Valley for understanding the robotics industry at the time, that section was eventually cut after viewers in a number of test screenings said they found it less clarifying than confusing (the Uncanny Valley had not yet filtered into popular culture). I also found it difficult to discuss the subjects of my documentary in my dissertation and to relate them to the filmic and literary representations of female robots I was analyzing. This was, in part, because the scholarship around film/media *representations* of robots, at the time, had little explanatory power for what I was experiencing out “in the field.”

The two projects did, however, inform one another: the documentary provided real-world experiences against which to test the assertions of the dissertation, and the dissertation provided a means of articulating some of the unspoken theoretical underpinnings of the documentary. Moreover, the difficulties that I had at their integration gave rise to one of the most significant takeaways of my various endeavors around artificial companionship: the importance of parsing the distinctions between artificial bodies in theory, in practice, and in visual culture. I came to understand that an artificial companion is one thing in private relation to her/his owner, another when represented in the media—whether in my documentary or a film like *Love Object*—and still another as a literary or theoretical subject. It is only by thinking through these various experiential registers that we can begin to grasp the nuanced intricacies of uncanniness—both the pleasures and unpleasures—in our relationships with artificial bodies.

² See de Fren 2008.

Such distinctions were, in fact, of concern to the earliest theorists of the uncanny, physician Ernst Jentsch (1906) in his essay, “On the Psychology of the Uncanny” and psychoanalyst Sigmund Freud (1953–74a) in his essay, “The Uncanny.” While both make reference to the 1816 short story “The Sandman” (Der Sandmann) by E.T.A. Hoffmann (1967), in which a young man unwittingly falls in love with a mechanical doll, each acknowledges the differences between the real and the representational in elaborating his interests and opinions. Jentsch is interested in the aesthetics of the uncanny and, in particular, how something frightening in real life can become a source of pleasure within art—including literature and theater. For Jentsch, the mechanical doll Olympia in Hoffmann’s story is an example nonpareil of this phenomenon, since her uncanny indeterminacy is a source of vicarious enjoyment for readers (as well as viewers of the operatic and balletic adaptations of the story) while, in reality, there is no more potent source of uncanny displeasure than “doubt as to whether an apparently living being is animate and, conversely, doubt as to whether a lifeless object may not in fact be animate” (Jentsch 1906: 11).

For Freud, on the other hand, the mystery surrounding Olympia is of less interest as a source of uncanny effects than the theme of the Sandman, a mythological figure who steals the eyes of bad children while they’re sleeping, and whose image haunts the protagonist, Nathanael, in different forms throughout the story. While Freud concedes that Olympia is uncanny, he suggests that the animation of an inanimate doll holds no more psychological interest than any other fantastic or supernatural event. Moreover, unlike Jentsch, Freud is not interested in Hoffmann’s story for its aesthetic pleasures, but rather as an illustration of a psychological drive that lays beyond the pleasure principle, which he calls the “death instinct” and links to repetition compulsion. Indeed, his elaboration of this drive in the book *Beyond the Pleasure Principle* (Freud 1953-74b) was the impetus for his essay “On the Uncanny”—the latter was written between drafts of the former and published the year before. In the book, he states early on that while the enjoyment derived from “painful experiences” in the theater or art hints at that which he is addressing, they “are of no use for our purposes, since they presuppose the existence and dominance of the pleasure principle; they give no evidence of the operation of tendencies beyond the pleasure principle, that is, of tendencies more primitive than it and independent of it” (Freud 1953-74a: 17). Uncanniness is, for Freud, marked by a return of repressed infantile complexes or amputated aspects of self that are buried in the unconscious.

The compulsive nature of such experiences, which Freud suggests override the pleasure principle, is better represented by the imaginary Sandman, who inspires revulsion and fear in Nathanael in every form in which he is repeated, than by Olympia, whose mechanical movements, however much they hint at the “death instinct” lurking beneath Eros, are marked by a vacillation between life and death, beauty and its shadow, which is experienced by Nathanael (and the reader/viewer) as both compelling and strangely pleasurable.



FIG. 2
REALDOLL

In short: Freud is interested in that which drives the fictional Nathanael mad, discussing his case as he might that of an analysand, while Jentsch is more interested in the psychological experience of the audience watching at a remove Nathanael's interactions with the mechanical Olympia. Taken together, however, they demonstrate the complex entanglement of fantasy, reality, and psychology in considerations of the uncanny. Thinking through such entanglements became important in the course of making my documentary, as I journeyed into a world where all three were at play, and where I experienced repeatedly uncanny bodies that were horrifying for some, desirable for others and, for still others, fascinating in the ambivalences they produced. Indeed, one gets a sense of all three in relation to the doll owners in my documentary.

All of the sexdoll owners I interviewed spoke about their doll(s) in highly idealistic terms, as if their dream girl(s) had become a reality. This idealization is encouraged in the ordering process: most dolls are ordered piecemeal (head type, body type, hair color, etc.) so that they are constructed to the exact contours of their owners' desires. Such imagineering—although directed at a precise material outcome—also encourages generative fantasies that get played out even before the dolls arrive, and that are sustained long after.

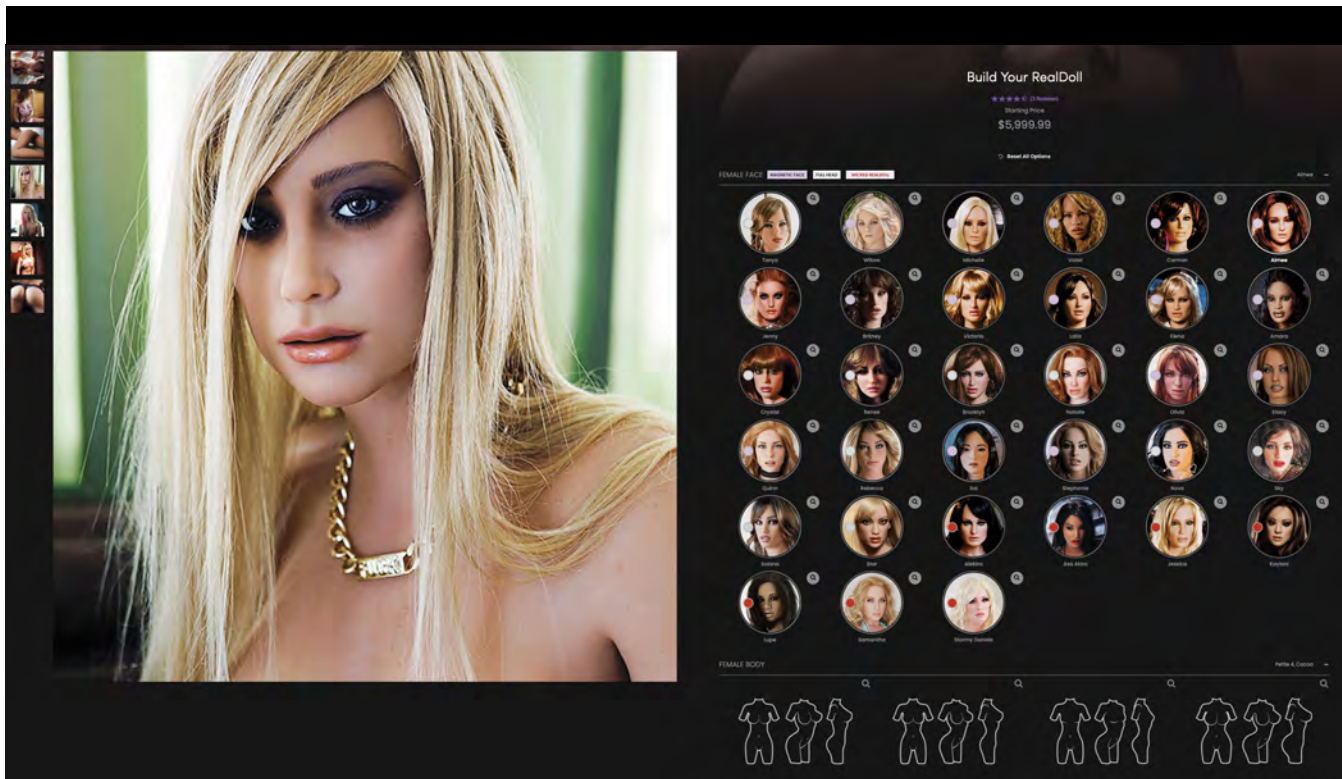


FIG. 3
BUILD YOUR
REALDOLL

There is, however, for anyone experiencing the dolls at close range, a notable discordance between their owners' descriptions and the stark reality—the dead weight, immobility, and vacant stares; the degraded silicone around the eyes, mouths, and joints of older dolls; hair and fingernails that had been rendered askew through repetitive use. The exterior reality—however obsessively tailored—seems to fade from view as the dolls become emotionally and libidinally cathected. While such relations generally happen in private, once made public, the contrast between the subjective experience of the dolls as desirable and their objective undesirability for all others can become a source of curiosity, pathos, horror, and even humor, depending on how it is framed.

E.T.A. Hoffmann was far ahead of his time in contemplating the inherent drama of the subjective/objective split in human/non-human interactions. He was writing at a time when human automata were touring Europe, and his stories involving mechanical humans were most certainly inspired by his first-hand impressions, which were by all accounts not favorable. He rightly intuited, however, the dramatic and critical possibilities in stories of artificial love. In “The Sandman,” the awkward encounters in which the enamored

Nathanael attempts to woo the stiff and taciturn Olympia to the horror of his friends and the intrigue of the story's readers, anticipates similar scenarios in films ranging from *Metropolis* (1927) to *The Stepford Wives* (1975; remade 2004) to Fellini's *Casanova* (1976) to *Lars and the Real Girl* (2007). Within these works, scenarios that might otherwise play out as a typical erotic or romantic encounter are defamiliarized by the insertion of an artificial body. In the process, they draw attention to the constructedness—indeed, to the cultural and social programming—involved in acts of love, sex, and romance, raising intriguing questions about human agency.

Such moments of derealization are not only thought provoking and entertaining, but also potentially erotic, as I discovered after meeting a subculture of robot fetishists. I have written at length elsewhere about this fetish subculture, whose members call it A.S.F.R. (alt.sex.fetish.robots) after the internet newsgroup where they originally congregated online (see de Fren 2009). What is worth reiterating here is their unabashed attraction for uncanny scenarios. As an example, although most ASFRians (as they call themselves) love the film, *The Stepford Wives*, their interests reside less in the idea of the perfect robotic housewife than in those uncanny scenes in which the wives malfunction or get caught in a repeat loop, scenes beneath which forboding music plays and that are intended to evoke horror. These are moments of vertiginous rupture that not only offer a glimpse of the robotic programming beneath the ideal exterior of the Wives, but that also throw into relief the cultural norms through which such ideals are constructed. Indeed, in the film, such scenes serve as feminist commentary on the extent to which real women (and men) have been socially programmed. Such moments of robotic unmasking and defamiliarization recall, of course, the climactic scene in *The Sandman*, when Olympia's eyes are removed and she is revealed as a mechanical doll to Nathanael. It is just such scenes that are uploaded and played repeatedly on their websites by ASFRians for their own erotic pleasure.

Although human-looking dolls and robots are, since the time I made my documentary, increasingly in development and the news, they remain liminal figures existing somewhere between the human and non-human, fantasy and reality, subjective and objective experience. The extent to which such humanoid creations produce uncanny effects is often dependent on where they fall along these continuums, but also their creators' intentions. Rather than approach the Uncanny Valley as a hurdle to be avoided at all costs, it would serve us well to amble its many footpaths in curious exploration of its aesthetic and critical possibilities.



FIG. 4
DETAILS OF REALDOLL

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