University of New Mexico
UNM Digital Repository

Foreign Languages & Literatures ETDs   Electronic Theses and Dissertations

7-9-2009

The 'Uncanny' and The Android

Noah Cooperstein

Follow this and additional works at: https://digitalrepository.unm.edu/fll_etds

Recommended Citation

Cooperstein, Noah. "The 'Uncanny' and The Android." (2009). https://digitalrepository.unm.edu/fll_etds/82

Noah Cooperstein
Candidate

Foreign Languages and Literatures
Department

This thesis is approved, and it is acceptable in quality
and form for publication on microfilm:

Approved by the Thesis Committee:

_____ , Chairperson

_____ 4/10/09

_____ 4-10-09

_____

_____

_____

_____

Accepted:

_____
Dean, Graduate School

_____
Date

The 'Uncanny' and The Android

BY

NOAH COOPERSTEIN

B.A., Psychology/English, The University of New Mexico, 2000

THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

Master of Arts
German Studies

The University of New Mexico
Albuquerque, New Mexico

May, 2009

The 'Uncanny' and The Android

BY

NOAH COOPERSTEIN

ABSTRACT OF THESIS

Submitted in Partial Fulfillment of the
Requirements for the Degree of

Master of Arts
German Studies

The University of New Mexico
Albuquerque, New Mexico

May, 2009

The 'Uncanny' and The Android

BY

NOAH COOPERSTEIN

B.A., Psychology/English, The University of New Mexico, 2000
M.A., German Studies, The University of New Mexico, 2009

ABSTRACT

The character of the android is found widely in film and literature. While she appears across the entire spectrum of genres, she most often makes her appearance in the uncanny text. This appearance is nearly always accompanied by some variation of the vision motif. Despite wide spread interest in both the 'Uncanny' and the android, to date, there is not a theory which accounts for the uncanny nature of the android *and* the prevalence of the vision motif in the android text. This paper will attempt to develop just such a theory.

Any paper that addresses the 'Uncanny' must begin with Freud's 1919 essay, *The Uncanny*. While this paper does not propose a psychoanalytic reading of the android, Freud's work establishes the relationship between the android and the binary oppositions of strange/familiar, alive/dead and animate/inanimate. This discussion of binary oppositions leads to Ernst Jentsch's 1909 publication, "On the Psychology of the Uncanny." Jentsch's work is used to develop the uncanniness of the mechanical nature of life. Following Jentsch, Masahiro Mori's 1970 publication, "The Uncanny Valley," places the human and the android on the same continuum, thus eliminating the opposition

of man/machine. This, in turn, leads into a discussion of Donna Haraway's *The Cyborg Manifesto*. Haraway's model of the cyborg moves the discussion even further from dichotomous thought. The 'Uncanny,' it is concluded, is located at the midpoint of the binary pair. The android is uncanny because of her pivotal role in the dissolution of such pairs. Specifically, she compromises the mechanical/organic dichotomy. The android illustrates the mechanical nature of all life, thus making all life uncanny.

The absolute foregrounding of vision in the android text requires a rethinking of the android. While android life is no different than human life in its mechanical qualities, the android nonetheless retains one fundamental difference: the android is designed. Thus androids, through an adaptation of Laura Mulvey's "Visual Pleasure in Narrative Cinema," can be thought of as *to-be-looked-at-ness* machines. This enters the android into a reciprocal relationship with the camera, the *looking-at-machine*. It is this reciprocal machine-machine relationship which explains the ubiquitous pairing of the android with themes of vision.

TABLE OF CONTENTS

Introduction

In his 1919 essay, *The 'Uncanny,'* Freud inaugurates a discourse which remains vital and productive to this day. Taking up a subject both famous and infamous, he launches a multifarious investigation into the meaning and implications of the 'Uncanny.' In twenty-seven odd pages, his essay essentially establishes an entire subfield of study. True to form, Freud's work, while at times out of date or style, consistently demonstrates novel and profound ways of understanding the world. Like so much about psychoanalysis, his writing on the 'Uncanny' has yet to be fully fathomed.

The 'Uncanny' itself is at times lucid and exacting, at others contradictory and discordant. Freud retells tales and misreads details. He considers literary fiction, brings up personal anecdotes and details patient case studies. Initiating a practice which has become a staple of the uncanny essay, Freud produces a substantial, multilingual lexical investigation of the various definitions of the term. The essay also considers the role of infantile complexes, surmounted primitive beliefs, narcissism and castration. Indeed, Freud brings the entire arsenal of psychoanalysis to bear.

Along the way, Freud is forced to examine the automaton as a possible source of the 'Uncanny.' This examination, however, does not last long. Freud promptly asserts that there is nothing uncanny about 'dolls.' His work, nonetheless, sets the stage for an examination of automatic life in terms of the 'Uncanny.' Specifically, he develops a theory of the 'Uncanny' based, in large part, on the dichotomy of the strange and the familiar. This paper will thus begin its analysis of the 'Uncanny' and the Android by attempting to bring Freud's essay, along with its vast secondary literature, into focus. Specifically, Freud's work will be used to highlight the importance of the strange and the

familiar in any theory of the 'Uncanny.' Few things, it turns out, test and confuse the boundary between these terms better than the android.

Freud, however, was not the first to examine the 'Uncanny.' In 1906, another doctor wrote an essay on the subject. In "On the Psychology of the Uncanny," Ernst Jentsch avoids the toil of attempting to define the 'Uncanny,' nor does he examine myriad works of literary fiction or invoke anecdotal evidence. Instead, he attempts to identify and quantify situations that have a tendency to evoke feelings of the 'Uncanny.' In principle, he is seeking an objective, rational understanding of the 'Uncanny.' His conclusion is concise and convincing: doubt and uncertainty are at the core of the phenomenon.

This doubt, according to Jentsch, can take many forms. Most prevalent among these is doubt about the animacy of an object. Jentsch argues that the automaton is uncanny precisely because we are unsure about whether she is alive and animate or dead and mechanical. Thus, in stark contrast to Freud, Jentsch ascribes the automaton a position of the utmost importance in the 'Uncanny.' At the same time, Jentsch's work – by examining the mechanical nature of all life – begins to undermine the dichotomies of alive/dead, animate/inanimate and mechanical/biological. This paper's reading of Jentsch will pay special attention to the dissolution of these binary oppositions and will begin to develop an understanding of the 'Uncanny' in terms of its relationship to such oppositions. The android will once again be read as a key element in the destruction of these oppositions.

Complimenting the work of Jentsch, and to a lesser extent Freud, is the theory of the Uncanny Valley. Masahiro Mori, a Japanese robotics engineer, noticed during his

research into human response to nonhuman entities, that beyond a certain point of human likeness, robots begin to seem less, not more, familiar. In 1970, Mori published a short but extremely influential article, titled "The Uncanny Valley," in which he suggests that familiarity does not increase linearly when compared to human likeness. As the robot becomes more human like, changing, for example, from an industrial robot to fuzzy robotic toy, its familiarity increases. However, as the robot moves from the fuzzy robotic toy to an android with pigmented rubber skin and a limited ability to walk and talk, it becomes less familiar. This decrease in familiarity is due to uncertainty about the exact nature of the robot. That is to say, the robot becomes strange. Mori represents this strangeness as negative familiarity, thus creating a "valley" in the graph of the 'Uncanny.' This paper will use the Uncanny Valley (also called the UCV) as a tool for examining specific examples of uncanny androids. It will also use the UCV to make the case that the human and the android are actually more alike than different. This, in itself, is intended to be a somewhat uncanny proposition.

The Uncanny Valley thus sets the stage for a discussion of Donna Haraway's "Cyborg Manifesto." Mori, by placing the android and the human on the same continuum, dissolves the boundary between the two. The android (along with all of her surrogates) and the human become points on the same curve. The distinction between the two is no longer a question of profound difference. All points on a curve, after all, are the product of the same function. In part, this paper will use Haraway's work to further

blur the distinction between the human and android by making the case that both are actually forms of the cyborg[1].

Along these lines, Haraway, in efforts to theorize a revitalized and viable feminism, abandons the unobtainable ideals of purity and wholeness of organism, nature or woman. In place of these ideas, she resolves the world into a question of coding, of a place without "'natural' architectures" (162). Without these natural architectures, all dichotomies vanish. Thus, Haraway makes explicit that which is implicit in the Uncanny Valley: while the android and the human may differ in degrees, they are fundamentally the same in character.

While this paper focuses primarily on theory, it will, at times, turn to texts that typify the uncanny for examples and inspiration. The first choice for an examination of the automaton in the literature of the 'Uncanny' is an obvious one. Both Jentsch and Freud, not to mention the overwhelming body of secondary literature, use E.T.A. Hoffmann's 1816 romantic tale of *The Sandman* in their analysis of the 'Uncanny.' *The Sandman* tells the story of a student, Nathanael, who, although already engaged, falls in love with the somewhat stiff and dumb character of Olympia. In a gruesome fight over her parts, it is revealed that Olympia is, in fact, a robot. Nathanael is irrevocably shattered by this revelation. In the end, he kills himself.

In many ways, even for the contemporary critic, the character of Olympia is an excellent starting point for an examination of the 'Uncanny' and the automaton. As

---

[1] The word cyborg is derived from the concept of the *cybernetic organism*, terminology originally used in the nineteen-sixties to refer to the proposed augmentation of the human with mechanical and electronic enhancements. A cyborg is part human, part machine. This paper, using the work of Mori and Haraway, will argue that all humans and all androids are actually cyborgs. In this argument, the cyborg heralds the end of the human/android dichotomy.

Daniel Cottom points out in "The Work of Art in the Age of Mechanical Digestion," the automatons of the nineteenth century, with the exception of a few examples from antiquity, represent the first real coming to terms with the potential of technology to reproduce man in the form of a machine (52). Olympia is a reflection of these early attempts. She is certainly a technological marvel, yet she remains somewhat unconvincing as a human. Ultimately, an element of the occult, in the form of a spellbinding spyglass provided by the nefarious character of Coppola, is necessary to make Olympia appear fully animate. Only when Nathanael views Olympia through Coppola's accursed spyglass does she come to life before his eyes.

Fritz Lang's 1927 expressionist masterpiece, *Metropolis*, provides the next example of the automatic double. *Metropolis* presents a dystopian vision of a city-state divided, where the rich lead lives of leisure in the city above, while the workers toil in the depths below. In the film, Maria, a pacifistic spiritual leader, is cloned as part of a plot to infiltrate and control the workers. The plot fails when the android Maria – described as the *Maschinenmensch* – incites the workers to rebellion.

There is nothing to suggest, per se, that a straight line be drawn from *The Sandman* to *Metropolis*. Indeed, the primarily pastoral settings and bourgeois world of *The Sandman* contrast sharply with the highly charged urban and political environment depicted in *Metropolis*. Moreover, the German interest in the doppelganger generated myriad works both confronting and confounding the problem of the human double, such that an examination of the 'Uncanny' is by no means limited to these texts. At the same time, it is no coincidence that Olympia is often referred to in considerations of

Metropolis's Maschinenmensch.[2] Olympia and the android Maria both take the form of women. Both are objects of desire and both are used in a deceptive plot. In the end, both are harbingers of death. *Metropolis's* android is in fact a convincing double of *The Sandman's* Olympia.

Like *Metropolis*, Ridley Scott's 1982 cyber-punk classic, *Blade Runner*, offers a dystopian view of the future, this time in the form of a desperately polluted, vaguely post-apocalyptic incarnation of Los Angeles. The film's plot revolves around Richard Deckard, a special police agent – known as a blade runner – tasked with killing escaped androids, called replicants. *Blade Runner* and *Metropolis* are most obviously related in their troubling and revolutionary visions of the city. This paper, however, will examine how the replicants of *Blade Runner* continue a progression of androids begun in *The Sandman* and maintained in *Metropolis*.

Replicants in general, and *Blade Runner*'s Rachael in specific, have crossed the Uncanny Valley. They have emerged from the realm of negative familiarity fully familiar. Indeed, in their compassion for each other, and their naïve desire for more life, they have become more like us than we are like ourselves. They are, famously, "more human than human." What is uncanny about Rachael is that there is nothing uncanny about her. In the replicant, we see ourselves. In this self-recognition, our own mechanical nature is revealed. Through these texts, this paper will examine the diverse uncanny qualities of the android.

---

[2] See Michael Cowan, "The Heart Machine: 'Rhythm' and Body in Weimar Film and Fritz Lang's *Metropolis*", Judith Halberstam "Automating Gender: Postmodern Feminism in the Age of the Intelligent Machine," and Andreas Huyssen, "The Vamp and the Machine: Technology and Sexuality in Fritz Lang's *Metropolis*" for just a few examples of such comparisons.

Using the work of Freud, Jentsch, Mori and Haraway, in addition to the texts described above, this paper will attempt to develop a theory of the 'Uncanny' and the android. No such theory would be adequate, however, without a thorough discussion of vision. In all the texts examined by this work, and in seemingly all android texts, motifs of vision, eyes, the look, the gaze, peeping, blinding or enucleation appear to some extent. Despite the vast body of secondary literature on the 'Uncanny,' an equally extensive body of work on the android and the prevalence of the vision motif in the android text, little has been done to unify these elements. This paper will conclude its theoretical discussion of the 'Uncanny' with an attempt to account for the pervasiveness of the vision motifs in the android text. This investigation, in turn, will help to explain why the android so often takes a female form.

The Uncanny, Per Se

Freud starts *The 'Uncanny'* with a famously long definition of the term. A definition in which the meaning of the term ultimately collapses, even implodes, in a way that, finally, the word becomes synonymous with its antonym[3]. This leaves Freud to conclude that "Unheimlich is in some way or other a sub-species of heimlich" (226). Freud's definition, however, is unproductive. "Far from winning us over," writes Hélène Cixous in her influential essay "Fiction and Its Phantoms: A Reading of Freud's *Das Unheimliche* (The "uncanny")," "this chain of quotations which *Heimliche* or *Unheimliche* threads together, appears to us an overlong, delirious discourse in which the world is seen as a deceptive reduction, not without a polymorphic perversity gleaned from a *dictionnaire-enfant*" (530). While 'we' may not be won over, Freud's definition

---

[3] In later chapters, this paper will illustrate a similar process in which the android becomes synonymous with her opposite, the human, to form the cyborg.

does illustrate that the term "uncanny" belongs to a class of words that possess a rich and dynamic history of meaning. Considerations of the 'Uncanny' preceded Freud and have increased and thrived in his wake, creating a substantial body of work (Royle 40). This body of work at once seeks to understand the meaning of the word and attempts to redefine the word in terms of that very understanding.

Theorists writing on the 'Uncanny' are often apt to start their own essays in the manner of Freud (Cixous, Weber). That is to say, they begin by summarizing Freud's definitions and commentary, then adding commentary to Freud's commentary and finally, adding new definitions from modern sources and providing commentary on those definitions. Nicholas Royle, early in his book, titled courageously *The uncanny* ("uncanny" not capitalized), implores us to "…like Freud, take cover in dictionaries" (9). Indeed, Maria Tatar devotes an entire paper to a definition of the uncanny. She rightly titles her work "The Houses of Fiction: *Toward a Definition of the Uncanny*" (italics are mine). One can move toward a definition, but a definition can never be reached. Nonetheless, it is the movement that matters.

As Tatar points out, 'heimlich' and 'unheimlich' are both "charged with ambiguity" (169). Paradoxically, it is this ambiguity that, while confounding meaning, gives the word its significance. Freud, like those who followed him, fails at the definition game. But this failure, in the realm of the 'Uncanny,' is actually a success. In all cases, such lexical efforts must fail, but in their failure they become the source of clarification. Freud's uncanny failure implicitly illustrates an insight which Cixous would eventually lay bare: the word can only be understood in terms of its "basic sense". That is to say,

the question of the 'Uncanny' is "a question of a concept whose entire denotation is a connotation" (528). The term, then, while indefinable, is not ineffable.

Attempts to define the 'Uncanny,' by necessity, indeed by definition, must fall short. A fundamental characteristic of the 'Uncanny' – both as word and feeling – is uncertainty. Indeed, as Mladen Dolar, in "'I Shall Be with You on Your Wedding-Night': Lacan and the Uncanny," thoughtfully points out in her discussion of *heimlich/unheimlich*, "…it was fortunate for Freud that such a paradoxical word existed in the German language, and perhaps it gave him the idea for the paper in the first place." (5). There is little sense, however, in reveling endlessly in the complexity of definition and the paradoxical nature of the word. The word "uncanny" is like the 'Uncanny' itself: its definition is of less importance than connotation.

Ultimately, what so many astute definitions point out is that the 'Uncanny' is inseparably tied to the boundary of the binary opposition. We may not know what the word means, but we know what it is about: liminality. As Royle writes, the 'Uncanny' is "associated with an experience of the threshold, liminality, margins, borders, frontiers" (vii). The 'Uncanny' always finds itself on a boundary. It is found at the limits of those places and things which are at once strange/familiar, repressed/surmounted (Freud), romantic/rational, inside/outside(Cixous), imagined/real, figurative/literal, male/female (Bresnick), alive/dead (Jentsch) to name just a few. The sense of the 'Uncanny' is located at the convergence of any of these pairs. The importance of the 'Uncanny' is found in the dissolution and destruction of all such pairs. The 'Uncanny' occupies a border – or, better yet, a *boarder* – region, a no-man's-land found between such sets of binary opposites. It is a place holder, dividing the terms, creating a spectrum in which,

9

momentarily at least, both terms are equally true. The experience of this space is reckoned uncertain and felt uncanny. In his essay, Freud's clearest insights come when he writes about the 'Uncanny' in terms of the strange and the familiar, the known and the unknown. Ultimately, it is this uncertainty, generated by the simultaneity of these disparate experiences, that defines the 'Uncanny.'

Freud's The 'Uncanny'

Freud's essay, in addition to predicting much of deconstructive criticism as "thought beside itself" (Royle 61), can also be thought of as an early example of the performative scholarly text. That is to say, *The 'Uncanny'* is itself uncanny. "From our point of view, as unflaggingly disquieted readers," writes Cixous, "we cannot help but think that Freud has hardly anything to envy in Hoffmann for his 'art or craftiness' in provoking the *Unheimliche* effect" (Cixous 547). One sees in Freud's essay so many of the characteristics that he attributes to the 'Uncanny' itself, most prominent among these being uncertainty and repression. Todorov proposed a 'meta-uncanny' (qtd. in Royle 18). "Every allegedly uncanny text" explains Royle, "is always a text *about* the uncanny" (Royle 19). The converse seems equally true: every text about the 'Uncanny' is always allegedly uncanny. Freud's essay is a perfect illustration of the latter statement.

Even at a glance, *The 'Uncanny'* is strange. Indeed, the first line of the text, "It is only rarely that the psycho-analyst feels impelled to investigate the subject of aesthetics…" (219), is bizarre: the author of the text is himself "the psycho-analyst". The reader is thus left to wonder who is writing about whom: in the first sentence, Freud has already created his own double. Or, more precisely, one of his doubles. As Freud carries on, his own text becoming increasingly uncanny, Hoffmann becomes ever more distinctly

Freud's double (Cixous 540). In both cases, this doubling is centered on writing. "Freud sees in himself the writer," writes Cixous, "the one whom the analyst must question concerning the literature which psychoanalysis must understand in order to know itself" (532). Strangely, but fittingly, Freud institutes this pursuit of self-knowledge through writing. Strange because, as Derrida tells us in *Writing and Difference*, "writing is unthinkable without repression" (285). Fitting because, in the world of the 'Uncanny,' even the dichotomy between that which is known to the self and that which is repressed blurs into uncertainty.

While Freud would have us believe that castration is at the center of anxiety in Hoffmann's story, his essay, in its assertions and proportions, tells us otherwise. *The 'Uncanny'* is riddled with instances of uncertainty and repression. To start, it is sensible to address instances of the uncertain. That which is repressed in *'The Uncanny'* will be considered slightly later on.

Perhaps the most often cited instance of uncertainty comes after Freud's retelling (as Hoffmann's double or as a writer) of the story of *The Sandman*. "This short summary," writes Freud, "*leaves no doubt, I think,* that the feeling of something uncanny is directly attached to the figure of the Sand-Man, that is, to the idea of being robbed of one's eyes, and that Jentsch's point of an intellectual uncertainty has nothing to do with the effect" (qtd. in Cixous 535 and Royle 40, 48, 77. Italics are mine). "Jentsch," writes Roy Sellars, "emphasizes that the uncanny arises from a certain experience of the uncertain or the undecidable, and this seems to be intolerable for Freud." Freud's essay returns repeatedly to refute Jentsch's "intellectual" explanation of the 'Uncanny.' One eventually gets the sense of a "gentleman protesting too much" (Royle 40) or of an

"oversold uncanny" (Cixous 540). Most telling of all, however, is "the trembling fragility of that 'I think'" (Royle 40). In the moment when Freud would have his reader be most certain that uncertainty has nothing to do with the 'Uncanny,' he himself seems most uncertain.

Before considering what Freud has repressed, it is worthwhile to consider that which he endorses. Or, to be more exact, a small fraction of what he endorses, and even then, any conclusions must be bracketed. In order to provide some guidance, it would seem logical to present a summary, or even a rough sketch of *The 'Uncanny.'* Freud's essay, however, resists all attempts at quantification. Samuel Weber, for instance, in "The Sideshow, or: Remarks on a Canny Moment," attempts to make sense of the essay by way of the three sections which Freud imposes via roman numerals. This approach is reasonable enough, but when one gets down to brass tacks, it completely disintegrates. Weber is able to clearly identify the first section as lexical, and the second as "the *Musterung,*" or the search for examples. Weber's discussion of the third section (having something to do with the doppelganger), however, appears in the middle of a page-long paragraph and seems to be mentioned only in passing. The trail has gone cold. Freud divides up his essays, but his divisions serve only to confound its order.

Helene Cixous, perhaps taking a lesson from Weber, casts off Freud's sections in favor of "clusters" (539). All told, there are four clusters, each with a list of disparate elements, united only in their textual proximity to each other. As Cixous progresses through each cluster, the list seems more incongruent and the listing itself more frantic. Cixous "'selects' the most salient themes in order to seek out what [she] hopes to find" (538). The result, however, is a sort of organization similar to what one finds in a thrift

store: random, or only nominally similar, effects are sorted into bins. True, it is easier to search through several smaller bins than one large one, but the theorist cum bargain hunter is left to riffle through all sorts of unwanted items all the same.

Weber, Cixous and others run into the essay itself. While one might expect an academic text to submit readily to the seduction of synopsis, not so for *The 'Uncanny.'* True to its subject matter, *The 'Uncanny'* moves in the direction of story or novel, becoming increasingly uncanny as it progresses. *The 'Uncanny'* develops an asymptotic relationship to the 'Uncanny': increasing efforts to make sense of the text yield diminishing returns, until, eventually, a limit is reached. Once again, liminality plays its part in the 'Uncanny.' "Psychoanalysis," writes Dolar, "doesn't provide a new and better interpretation of the uncanny; it maintains it as *a limit to interpretation*" (19, italics are hers).

The cryptic nature of *The 'Uncanny'* can be explained in large part by its existence at the "limit to interpretation." Liminal texts are by necessity unclear: the writer is unable to achieve an adequate distance to his subject in order to bring it into focus. No amount of retelling can solve this problem. Indeed, any retelling of *The 'Uncanny'* results, by necessity, in the creation of a new text, one that is not *The 'Uncanny,'* but which mirrors it. In these cases, it is the theorist who becomes the writer. This, in turn, uncannily reflects Freud's own position.

It is Freud's strange, uncertain "I think" which reveals the split between Freud the Analyst and Freud the Writer. Freud, as Cixous puts it, "intervenes" in *The Sandman* in order to "establish explicit liaisons" (533) between the characters. Freud's intervention

organizes the text in a way more favorable to his own notions of the 'Uncanny.' Cixous continues:

> These interventions, in effect, constitute a redistribution of the story while they tend to attenuate, to the point of effacement, the characters who represent the *Heimliche*, like Clara and her brother. He minimizes the uncertainty revolving around Olympia, thus pushing Olympia toward the group of the *Heimliche* and clearly diminishing the texture of the story by trimming, in particular, the discontinuity of the exposition, the sequence, the succession of narrators, and points of view. These interventions organize a confrontation between the Sand-Man and Nathaniel which is much more sustained and obsessive but also less surprising than in the original version (533).

Freud rewrites *The Sandman*. Synopsis, by necessity, requires a degree of appropriation in the process of rewriting. There is nothing scandalous in any of this: the author of any persuasive text reorganizes and manipulates his subject in the process of (re)writing. Indeed, this paper, at this very instant, is in the process of retelling *The Uncanny*. Of interest here is Freud's inability to recognize the role of rewriting in his own essay. Ultimately Freud, author of *The 'Uncanny,'* is unable to see himself as a writer.

"What is bizarre," writes Royle, "is that Freud seems completely oblivious to the fact that his 'short summary' is fundamentally *his own* 'short story'" (40). From the first sentence of *The 'Uncanny,'* Freud the 'psycho-analyst' is in conflict with Freud the writer. That is to say, in conflict with his doubles: the author of *The 'Uncanny'* and Hoffmann, the author of *The Sandman*. The struggle to wrest control of the text exists

just below the surface in Freud's essay, becoming apparent in moments of contradiction (…leaves no doubt, I think…).

"Freud," writes Cixous, "Pruned the story of its involved narrative structure, of the heterogeneity of its points of view, of all "superfluous" detail…pruned it of any meaning which did not seem to contribute to the thematic economy of the story" (534). Most tellingly of all, this pruning, this struggle for control, seems to take place beyond Freud's conscious intentions. Royle continues:

> [Freud] recounts the story as if it were an objective, disinterested, merely 'factual' summing up. In highlighting what he sees as the central importance of the idea of blindness or 'being robbed of one's eyes' in Hoffmann's story, Freud himself seems robbed of the sense that telling or retelling a story is always, in some sense, something new, another story (40).

Freud is unable (or unwilling) to recognize that his summary of *The Sandman* is not the story itself. Nonetheless, he proceeds to draw his conclusions about the story from his summary. The conclusion he reaches – namely that castration is the primary source of the 'Uncanny' experience in *The Sandman* – is perhaps true for his own story (i.e. the summary). Whether it holds true for the original is suspect. For this reason, Freud's conclusions about castration and the 'Uncanny' must be bracketed. As Freud becomes Hoffmann's double, so *The 'Uncanny'* becomes *The Sandman*'s double. Without doubt, I think, castration is essential to Freud's text, its prevalence in Hoffmann's is less clear.

The 'Uncanny' and *The Sandman*

At a glance, it is as if *The Sandman* were written for psychoanalysis. Psychoanalysis holds that its themes, central among them castration anxiety, have always

been present in literature and that the science of analysis has simply brought these literary elements to light. For the unconverted, however, it seems near to bizarre that a story written some seventy-five years before the inception of psychoanalysis could nonetheless address the theory's content so clearly and directly. Weber provides the most concise synopsis of the psychoanalytic in the story:

> The compulsion to see the feared secret, Nathanael's dread lest he himself be seen, with the consequence of losing his eyes, the dismantling of his body by the Sand Man, the substitution or supplementation of the eyes by optical instruments, Olympia's eyes; finally the role of the parents, the spectacle of the father, lying dead with contorted features, the mother unconscious next to him, following the "entsetzliche(m) Schlag" – all this points towards castration or sets the stage on which its scenario is played out: that of the Urszene, the "primal scene." (1119).

This orgy of evidence in support of psychoanalytic theory seems undeniable. That is, as long as one neglects the fact that the story itself played a role in the formation of the psychoanalytic theory of the 'Uncanny:' Hoffmann, in writing his uncanny tale, uses some form of the word "unheimlich" a total of six times (14, 21, 23, 25, 42, 42); Freud, in writing about the 'Uncanny,' retells Hoffmann's tale twice (once in the body of the text, once in a footnote). There is an interaction between Hoffmann's story, the 'Uncanny' and psychoanalysis. Each forms and informs the other.

Beyond the complexities of inter-textual relationships, one is left to consider Freud's theory of the 'Uncanny' as it applies to *The Sandman*. Freud proposes that the uncanny effect in Hoffmann's story is produced by castration anxiety. "A study of dreams, phantasies and myths," writes Freud, "has taught us that anxiety about one's

eyes, the fear of going blind, is often enough a substitute for the dread of being castrated"
(231). The nature of these "dreams, phantasies and myths" – with the exception of the
mention of the Oedipal myth – is not discussed. Nor is the scientific metric "often
enough" delineated. Toward the conclusion of his essay, Freud defines two classes of
uncanny experience. "An Uncanny experience," he writes, "occurs either when infantile
complexes which have been repressed are once more revived by some impression, or
when primitive beliefs which have been surmounted seem once more to be confirmed"
(249). In the case of *The Sandman*, Freud proposes that themes of ocular loss activate
castration anxiety – a repressed infantile complex – in the reader, thus making the story
uncanny.

Freud's understanding of castration anxiety is not intended to turn merely on the
actual event of castration. "The *complexity* of the castration-*complex*," writes Weber,
"[is] not [to] be overlooked, either by reducing castration to a 'real' event or by equating
it with an imaginary or arbitrary fantasy" (1111). Weber, borrowing heavily from Lacan,
develops an understanding of castration as something that "is *almost nothing, but not
quite*". The Freudian-Lacanian understanding of castration is overwhelmingly complex.
Ultimately, castration partakes in a web of signifiers linked to the phallus, inscribing it in
"a chain of signifiers" (Weber 1112). We are to understand that castration structures
identity and obstructs consciousness of the self (Weber 1112). The ethereal nature of
castration theory allows for its near universal application. Given *The Sandman's*
thematic use of fathers and eyes, the story seems almost to beg for the application of
castration theory. In practice, however, the use of this theory requires that the majority of
the story be skimmed over, if not simply ignored entirely.

Whether or not one subscribes to castration anxiety as a source of *some* of the story's uncanny effect, there is no way to attribute *all* of its uncanniness to this theory alone. Adam Bresnick, in "Prosopoetic Compulsion: Reading the Uncanny in Freud and Hoffmann," points out that:

> According to Freud, the persistent theme of blinding and multiplication of eyes amount to a transposition upwards of castration anxiety that he sees as the key to the tale's disquieting affect. All the same, if Freud's interpretation of castration may be said to offer a plausible account of the uncanny affect occasioned by the traumatic Coppelius, it is unable to account for the uncanny affect produced by the episode of Nathanael's falling in love with the automaton Olympia, who is the object of his love during the second half of the tale (119).

In short, Freud's explanation for the uncanny in *The Sandman* is incomplete. Freud seems to know this. He denies, discredits and disregards Jentsch's ideas of intellectual uncertainty repeatedly and at great length. In principle, Freud's entire explanation of the 'Uncanny' and castration occupies only a single paragraph (231), while his denial of intellectual uncertainty appears repeatedly throughout the essay. This is not persuasive, it's defensive. This defensiveness stems from the impossibility of transforming the correlative relationship between enucleation and castration into a causal one. True, enucleation refers to castration, but castration also refers to enucleation. Neither one demands primacy over the other. The terms are interchangeable, subject to substitution, and substitution is always a matter of 'intellectual uncertainty' (Royle 41).

Freud, in losing control of his creation, succeeds in demonstrating the uncanniness of substitutions. The substitutability of enucleation for castration, for which

Freud makes such a clear cut case, serves only to emphasize other substitutions within the text: Olympia for Clara, Coppelius for Nathanael's father, The Sand Man for Coppelius, etc.. These interchangeable elements, however, are not to be confused with the real source of uncanniness, the site of uncertainty and the focal point of the double: substitution itself. Castration becomes a substitute for itself, but can go no further. "Freud," writes Cixous, "leaves one nonproof for another, by affirming that the secret of castration does not refer to another secret more profound than that which is articulated by anguish: the fear of castration refers back to castration…" (536). In a real sense then, castration seems almost to be a bad fit with psychoanalysis. The theory of depth is left to rely on a concept that has no meaning or import beyond its own surface.

Finally, castration falters here where it always fails: it neglects women. Not just women readers (who find the story just as uncanny as men), but the women of the story itself. Clara and Olympia are not trivial elements in Hoffmann's tale, simply to be skimmed over or accounted for and hastily dispatched. Neither figuratively nor literally is Clara to be thrown from the tower. This, however, is exactly what Freud attempts. Clara receives virtually no mention in Freud's essay: her name appears only twice in *The 'Uncanny,'* and then only in Freud's retelling of the story. One would expect that such a central character with a complex relationship to both Nathanael and Olympia would be of greater importance to an understanding of the 'Uncanny' in the context of the story.

Olympia, on account of her prominence in Jentsch's work, is somewhat more problematic. Freud makes Olympia into Nathanael's double, twice: she becomes his sister and she becomes his reflection. There is a myriad doubling or substituting of Nathanael's Father. In essence, Nathanael has two sets of two fathers. In his childhood,

there is his actual father and Coppelius. Coppelius, in turn, becomes Coppola who is paired off with Spalanzani. Coppola and Spalanzani are also the "fathers" of Olympia. Thus, Olympia is born a weird sister to Nathanael.

Freud attempts to use this fraternal relationship as evidence that Olympia is a manifestation of Nathanael's (heretofore unmentioned) narcissistic complex. "Olympia," writes Freud, "is…a dissociated complex of Nathaniel's which confronts him as a person, and Nathaniel's enslavement to this complex is expressed in his senseless obsessive love for Olympia. We may with justice call love of this kind narcissistic…" (232). Nathanael, Freud tells us, is fixated on his father due to his castration complex, and is unable to love a woman. Thus, Nathanael can only love Olympia, who is not a woman but merely a reflection of himself. In this scenario, Olympia is literally reduced to a footnote (Cixous 537) and her significance is radically diminished: she becomes just another aspect of Nathanael's castration complex.

Thus Freud, in efforts to bolster his own theory, seeks to radically mitigate Olympia's role in the story. Olympia is reduced to a doll. "Curiously enough," writes Freud, "while the Sand-Man story deals with the arousing of an early childhood fear, the idea of a 'living doll' excites no fear at all; children have no fear of their dolls coming to life, they may even desire it. The source of uncanny feelings would not, therefore, be an infantile fear in this case, but rather an infantile wish or even merely an infantile belief" (233). There are, however, myriad problems with this understanding.

Pediophobia, replete with self-help books, internet support groups and dictionary definitions, refers not only to a fear of children and dolls, but to any "false representation of sentient beings" (Schulman 38). The term automatonophobia does not (yet) appear in

any dictionaries, but has in any case been coined and finds itself widely used. Ultimately, one need go no further than Hoffmann's story itself: if the character of Olympia is trivial and "living dolls' are not terrifying, or at least not weird, why make Olympia an automaton in the first place? Besides the somewhat absurd and brazen conclusion that the fear of dolls simply does not exist, Freud's reading of Olympia overlooks another important aspect of the 'Uncanny,' an aspect which he himself develops at length throughout his essay (including the paragraphs immediately following the above citation): the double.

In a quotation by Schelling, which Freud tellingly misattributes to Schleiermacher (Todd 521), he asserts that "Unheimlich is the name for everything that ought to have remained… secret and hidden but has come to light." Freud forces us to reverse this assertion in our attempts to understand his essay. The question becomes, what remains secret and hidden in *The 'Uncanny,'* but ought to have come to light? Despite his best efforts, Freud is unable to dispense with either Clara or Olympia. *The Sandman* is all about women. So is the 'Uncanny.' In this context, Freud's position relative to Hoffmann's women becomes a question of repression. Repression is a complex mechanism and Freud's tact in its application – however subconscious – is especially canny:

> The way in which he misappropriates betrays a stinging boldness and the ploy of
> a fox! On the one hand, Freud quotes the Jentsch citation about the Sand-Man
> beginning with the character of the automaton, the doll Olympia. At the same
> time, he discards Jentsch's interpretation. The latter links the *Unheimliche* to the
> psychological manipulation of Hoffmann, which consists in producing and

preserving uncertainty with respect to the true nature of Olympia. Is she animate or inanimate? Does Freud regret the psychological argument? So be it. He takes advantage of it to displace the Unheimlich of the doll with the Sand-Man. Thus, under the cover of analytical criticism and uncertainty, the doll which had been relegated to the background is already, in effect, in the trap. Its repression will be accomplished, moreover, with the approval or the complicity of the reader, of whom Freud, henceforth, is well aware (Cixous 532).

Freud, having dismissed Jentsch from the start, nonetheless employs Jentsch's own work in order to obscure the very conclusions that Jentsch draws. Having established that texts about the 'Uncanny' are by necessity themselves uncanny, it comes as no surprise that repression also plays a role in such texts. "'The prefix *Un* is the token of repression,' says Freud. Let us add this: any analysis of the *Unheimliche* is in itself an *Un*, a mark of repression and the dangerous vibration of the *Heimliche*" (Cixous 545). Then again, repression always plays a role in writing (Derrida). Moreover, the object of repression is as important as the act of repression itself. In this case, the object of repression is essential to the uncanny text: the woman. Indeed, as will be argued later, the woman, the android and the look are all linked in the matrix of the 'Uncanny.'

Ultimately, the failure of psychoanalysis to fully account for the nature of the 'Uncanny' stems from the sort of inversion that reappears, obstinately, in discussions of the 'Uncanny.' The 'Uncanny' cannot be effectively folded into the psychoanalytic because the psychoanalytic is itself uncanny (Royle 15). That is to say, psychoanalysis cannot account entirely for the 'Uncanny' because the 'Uncanny' already accounts for the entirety of the psychoanalytic. "The Subject of the 'Uncanny,'" writes Freud, "…is

undoubtedly related to what is frightening – what arouses dread and horror" (219). After the advent of psychoanalysis, the 'what' of dread and horror, however, becomes the psychoanalytic.

It comes as no surprise, then, that in Freud's essay, one sees so much psychoanalytic theory on display. As Dolar explains:

> Freud is gradually forced to use the entire panoply of psychoanalytic concepts: castration complex, Oedipus, (primary) narcissism, compulsion to repeat, death drive, repression, anxiety, psychosis, etc. They all seem to converge on "the uncanny." One could simply say that it is the pivotal point around which psychoanalytic concepts revolve… (6).

Freud's complete mobilization of psychoanalytic theory results from the impossibility of his task. It is a case of not being able to see the forest for the trees. "Psychoanalysis has replaced (and thereby made superfluous) the fantastic literature," writes Todorov (168-169). By directly addressing the realm of the repressed, unconscious mind, psychoanalysis explicitly addresses the themes that fantastic literature had previously handled indirectly (Dolar 23). Even Freud says as much in his own essay: "Indeed, I should not be surprised to hear that psycho-analysis, which is concerned with laying bare these hidden forces, has itself become uncanny to many people for that very reason" (243).

The notion of psychoanalysis as uncanny in itself, however, serves only to complicate matters, driving Freud's essay further in the direction of the fantastic. Indeed, "psychoanalysis," writes Dolar, "appears to be the most fantastic of all fantastic tales – the ultimate horror story" (23). With its practice of "laying bare…hidden forces,"

psychoanalysis is in essence *the* art and science of the 'Uncanny.' From its location

within the 'Uncanny,' however, it is in no position to gain a distanced, objective

perspective. "Psychoanalysis is a mystery to itself – foreign to itself, *unheimlich*"

(Borch-Jacobsen qtd. in Royle 24). Thus, psychoanalysis is left only to become

increasingly tangled up in its own (horror) story (Royle 53).

Uncanny Realms

Psychoanalysis mixes worlds (and mixes worlds up). Psychoanalysis shirks and

unsettles binary oppositions. Primary among these is the opposition of imaginary/real

(Royle 15). In psychoanalysis, art, dreams, hallucinations, delusions and memories

'exist' and are understood in the same way as the actual, existing reality of everyday life.

"The moments of greatest heuristic power in the Freudian practice of reading, whether it

be the interpretation of dreams or the interpretation of literature," comments Bresnick,

"militate against this distinction [between art and 'real life'], which amounts to little

more than a chimerical *idée reçue"* (116). It is, however, precisely this failure to

distinguish between the real and the imagined, the lived and the literary, that leads the

psychoanalytic to become evermore ensnared in its own story.

Freud, taking examples from the fictional tales "The Three Wishes" and "The

Ring of Polycrates," invites his readers to understand the uncanny experiences of

fictional characters. As above, we are to imagine the psychological experience of these

fictional characters *as if* they were real experiences lived in the minds of actual people.

That is to say, we are asked to ascribe psychological depth to nonexistent minds. When

applied consistently, there is nothing inherently problematic about this practice. It

appears, however, that the attribution of psychological depth to the fictional character is only requisite for Freud when it proves useful. Otherwise, he is quick to abandon it.

When faced with a contradiction between real and fictitious accounts of the 'Uncanny,' Freud does not hesitate to differentiate between the two. Specifically, he makes the distinction between the "psychoanalytic interest in the problem of the uncanny" and the "aesthetic enquiry" into it (247). The psychoanalytic theory of the uncanny is, at this point in the essay, summarized as the "general contention that the uncanny proceeds from something familiar which has been repressed" (247). Freud points out that the instances which contradict his hypothesis are "taken from the realm of fiction, of imaginative writing" (247). "This suggests," writes Freud, "that we should differentiate between the uncanny that we actually experience and the uncanny that we merely picture or read about" (247).

Although done only out of necessity, Freud's impulse to distinguish between the lived uncanny and the imagined uncanny is in itself sound. In principle, the 'Uncanny' exists in three realms: (1) within the diegesis of the text, a fictional character experiences some event within the text as uncanny, (2) a 'real-life' reader or viewer of the text experiences some event within the text as uncanny, (3) a person existing in 'real life' experiences some event in the world as uncanny. Each of these types of the 'Uncanny' represents a valid object of study. Confusing or failing to distinguish between the three types of the 'Uncanny,' however, amounts to what Gilbert Ryle, in *The Concept of Mind,* calls a category mistake (16).

That which is 'experienced' by a fictional character is fundamentally different from that which is experienced by a person. Moreover, that which is experienced by a

person who enters the imaginative world of literature or film is also essentially different from that which is experienced by a person who actually sees or lives something which he or she experiences as uncanny. The world of the fictional, literary text is distinct from the physical world. A comparison of the experiences of a nonexistent, fictional character with the real world experiences of an actual, existing person requires that one world be reduced to the level of the other. These separate worlds are, however, irreducible. Such comparisons are unproductive. These are different categories of the 'Uncanny,' and cannot be compared. As Barthes reminds us in "The World of Wrestling," it is a worthwhile undertaking to avoid conflating events in the real world with those of mass entertainment or literary fiction.

It is essential to keep the categories of the 'Uncanny' straight. The fantastic is uncanny, but the 'Uncanny' is not fantastic. Indeed, there is nothing particularly uncanny about the 'Uncanny' itself. That is to say, while the experience, the feeling, of the 'Uncanny' is itself subjective, the process of producing that experience is, by and large, an objective one. Weber points out that "the uncanny has a particular structure, which, however intimately bound up with subjective feelings – above all with anxiety – is nonetheless determined by a series of 'objective' factors…" (1103). There are no mystical or unknowable processes at work here. Nor does the unconscious mind play that significant of a role (beyond containing notions of the strange and the familiar). Until this point, however, the uncanny has been confounded by the confusion of real and fictional categories. The delineation of these categories may leave the psychoanalyst at loose ends, but it sets the stage for a theory of the 'Uncanny' that is equally useful in both literature, science and 'real life'.

While the meaning of the word remains ambiguous, the 'Uncanny' experience has structure. It can be quantified, even reproduced. It does not require the complex structures of repression or castration. The experience of the 'Uncanny' exists at an infinite number of crossroads. In a sense, the 'Uncanny' is the '/' that comes between terms like repressed and surmounted, strange and familiar. The 'Uncanny' is the apex: instantaneous, it separates binaries without being either. It can even be found at the center of the very binary that is now the subject of discussion: clarity/opacity.

The 'Uncanny' holds place between the clear-rational-intellectual/opaque-fantastic-subjective. This brings us, finally, to Clara/Olympia and the archetypal uncanny text. Clara is the picture of rationality and – as her name suggests – clarity. Olympia embodies the obscure and deceptive. The 'Uncanny' divides clarity from obscurity. Subsequent chapters will show that it is the android – in her myriad forms – who brings the 'Uncanny' most sharply into focus. The artificial, automatic life is a clearing house of all sorts of oppositions. The android is the nexus of the 'Uncanny.'

Freud and the 'Uncanny'

In his essay, Freud looks to the characters of Coppelius and Coppola as the primary sources of uncanniness in Hoffmann's story. He argues that the 'Uncanny' in the story results from the activation of repressed castration fears vis-à-vis a fear of being blinded by the Sandman (or his surrogates Coppelius and Coppola). At the same time, Freud returns, time and again in his essay, to notions of the strange and the familiar. He writes in one of the essay's most cited lines, for example, that "the uncanny is that class of the frightening which leads back to what is known of old and long familiar" (220).

Near the end of his essay, Freud draws a conclusion about two types of 'Uncanny' experience. "An uncanny experience" he writes, "occurs either when infantile complexes which have been repressed are once more revived by some impression, or when primitive beliefs which have been surmounted seem once more to be confirmed" (249). This is Freud's own conclusion, but his castration theory, at the most, can only account for the first type of uncanny experience. The second type of experience, the surmounted primitive fear returning, is seemingly left to the sort of uncertainty which Freud refuses to tolerate in Jentsch's work.

An understanding of the 'Uncanny' based on notions of strangeness and familiarity, however, can account for Jentsch's work, as well as both classes of uncanny experience outlined by Freud. As Freud himself points out, these two classes are not as different as they might first appear. "When we consider" writes Freud, "that primitive beliefs are most intimately connected with infantile complexes, and are, in fact, based on them, we shall not be greatly astonished to find that the distinction is often a hazy one" (249). By mapping primitive beliefs onto infantile complexes, Freud simply points out that he, in principle, means the same thing when he writes "repressed" as when he writes "surmounted."

Taking the terms "repressed" and "surmounted" as (nearly) synonymous, all that remains is to develop a working theory of repression as it relates to the strange and the familiar. As suggested earlier, repression can be seen as the process by which the familiar is turned into the strange. Memories and experiences can be seen as existing on a continuum between the familiar and the strange. The familiar exists fully in the conscious mind, while the strange exists entirely in the unconscious mind. Repression is

28

the process by which familiar memories and experiences are slowly pushed into the unconscious. Recovery, which can be understood as the opposite of repression, is the process by which repressed memories and experiences rapidly return to the conscious mind.

The 'Uncanny' exists on the midpoint of this spectrum, where the repressed/surmounted/strange and the recovered/confirmed/familiar are in equilibrium. Uncertainty about the nature of an object can pin the individual's consciousness at or near the midpoint of the spectrum, where it normally does not reside, and thereby creates the sort of mental dissonance experienced as a sensation of uncanniness. This understanding of the 'Uncanny' is both phenomenological *and* analytical. Once again, the 'Uncanny' finds itself on a boundary. This time it is on the boundary of the phenomenological/analytical.

It is Jentsch, not Freud, however, who develops a theory of the 'Uncanny' based on uncertainty and disorientation. Strangely, then it is Freud who lays the ground work for Jentsch. And it is Jentsch who accounts for Freud. Uncertainty is the primary characteristic of the 'Uncanny.' In Jentsch's work, the repressed, the strange, the familiar – the 'Uncanny' itself – all fall under the heading of the uncertain.

Freud and Jentsch

Freud begins the second section of his essay with a discussion, and a rapid dismissal, of Jentsch. Jentsch, in passages made famous by Freud, proposes that "the most reliable artistic device for producing uncanny effects easily is to leave the reader in uncertainty as to the whether he has a human person or rather an automaton before him in the case of a particular character" (Jentsch 13). There is more to Jentsch's essay than the

29

few lines selected by Freud. Even this limited selection, however, speaks to the notion that the 'Uncanny' is produced by the interaction of the strange and the familiar and highlights the position of the 'Uncanny' on the border between the two.

In this theory, the automaton accounts for the strange, while the human accounts for familiar. It is the uncertainty about the nature of the being (is it strange and artificial or is it familiar and human?) that creates the sort of dissonance that results in feelings of uncanniness. Thus, Jentsch's theory positions the 'Uncanny' as a delineating element and a liminal force.

It has already been noted that Jentsch's use of uncertainty and un-decidability in developing his theory of the 'Uncanny' was intolerable to Freud (Sellars 7), despite the prevalence of uncertainty in his own essay. Whatever his reasons might have been, it is safe to say that Freud did not care for Jentsch's ideas and did not hesitate to put his distaste for Jentsch's work on display. Cixous provides a reasonable summary of Freud's dismissal of Jentsch:

> Jentsch will represent…the 'Layman's' attitude, which is 'intellectual' and indeed anti-analytical because of its phenomenological approach to strangeness. Freud offers, straightaway, a subjective explanation for Jentsch's failure: he has not sufficiently delved into literature; he concerns himself only with everyday experience. Thus he loses 'all claim to priority'(529).

It is worth pointing out that Jentsch does indeed write about *The Sandman*. In fact, writes about literature *and* 'everyday experience'. Strange that Freud, who disliked reading, and once joked that "I invented psychoanalysis because it had no literature" (Hertz 97),

should now criticize a work for not delving far enough into the literature, especially when that work indeed does.

This is, perhaps, once again a case of a gentleman protesting too much. "Freud begins by complaining," writes Sellars, "that aesthetics has not paid much attention to the aberrant and the repulsive…this complaint is also an expression of anticipatory pleasure, in so far as the uncanny in particular has no literature" (7). It may well have been that Freud, on some level, resented Jentsch's intrusion into otherwise unmapped territory. Like so many explorers of the nineteenth century, it may have troubled Freud to find that the territory that he was exploring had already been charted.

For Freud, the intellectual and the everyday experience had become understandably illegitimate and untrustworthy. At the time of his writing, psychoanalysis was state-of-the-art, cutting edge 'technology.' It had charted new depth to the human psyche. Hidden (sexual) forces, revealed only in dreams and neurosis, guided and formed the individual's world. Viewed in 1919 by a psychoanalyst, Jentsch's work must have seemed trite, superficial, even primitive. How could something that made common sense be right?

Granted, Jentsch's theory might seem austere in comparison to that of the psychoanalytic. In another reversal (or is it a cycle?), however, what was once cutting edge in the psychoanalytic now seems passé, even comic at times. Jentsch's work, on the other hand, now appears possessed of a certain elegance, simplicity and accuracy. There is more to Jentsch's essay, "On the Psychology of the Uncanny," than that which appears quoted in Freud's essay. Jentsch's essay is not 'familiar in advance' (Sellars 7), it is not known, and there is ample reason to read it. "On the Psychology of the Uncanny,"

however, is not a psychoanalytic work. While the text at times borders on the parochial, in other passages it is nuanced, subtle and insightful.

Despite the quality of Jentsch's work, interest in the 'Uncanny' remains almost universally limited to the Freudian 'Uncanny.' Thus, there is no 'vast' secondary literature on the 'Jentschian' uncanny. Nonetheless, it is Jentsch's work, albeit at times read through the lens of Freud, which has been the most influential in the development of modern theories of the 'Uncanny.' Ultimately, it is Freud's theory that nests in Jentsch's. Before considering contemporary theories of the android and the 'Uncanny,' it is worth finding out what Jentsch actually has to say. After all, it was Jentsch who first examined *The Sandman* with an eye toward the 'Uncanny.' It was Jentsch who first proposed the automaton as a principle source of the uncanny.

Jentsch and Freud

Appearing in 1906, Jentsch's essay was published in two parts, in two issues of *Psychiatrisch-Neurologische Wochenschrift*. The first part of the essay, generally speaking, can be understood as addressing the internal psychological processes related to the tendency of an individual to experience the 'Uncanny.' The second part of the essay describes external events which might prompt the individual to experience the 'Uncanny.'

While he embellishes at times, Jentsch primarily makes his case in direct, streamlined prose. The text itself is compact and efficient. Taken together, both parts of the article total a mere seven pages. Jentsch abstains from anecdotal evidence and lengthy summaries. The brevity of the text, however, belies its insightfulness. Indeed,

there are complexities to Jentsch which equal those of Freud. Moreover, it is Jentsch's

work that most clearly meshes with modern theories of the 'Uncanny' and the android.

After a somewhat verbose start to his essay in which he muses about the "spirit of

languages," Jentsch draws the conclusion that "[i]n a psychological analysis, it is always

a good idea to make the terminology clear in one's own mind" (7). In this way, the stage

is set for yet another discourse on the happy configuration of the word "uncanny" in the

German language. Jentsch writes:

> With the word *unheimlich* the German language seems to have produced a rather
>
> fortunate formation. Without a doubt, this word appears to express that someone
>
> to whom something is "uncanny" happens is not quite "at home" or "at ease" in
>
> the situation concerned, that the thing is or at least seems to be foreign to him. In
>
> brief, the word suggests that a *lack of orientation* is bound up with the impression
>
> of the uncanniness of a thing or incident (8, italics are mine).

This is all that Jentsch offers on the nature of the word itself. Beyond this, he refuses to

define the term. Moreover, he refuses to define the "essence of the uncanny" (8).

Jentsch reasons that, "the same impression does not necessarily exert an uncanny

effect on everybody…moreover, the same perception on the part of the same individual

does not necessarily develop into the 'uncanny' every time, or at least not every time in

the same way" (8). Instead, Jentsch suggests the use of a "working definition of the

concept of the "uncanny". While a definition of the 'Uncanny' would attempt to

explicitly characterize the meaning of the term, Jentsch's definition is to 'work' in the

sense that it is to provide the reader with an understanding of the 'Uncanny' without

explicitly stating its meaning. A definition corresponds to a word's meaning; a 'working' definition corresponds to its essence.

Jentsch's working definition, then, does not define, but instead locates. "If one wants to come closer to the essence of the uncanny," writes Jentsch, "it is better not to ask what it is, but rather to investigate how the affective excitement of the uncanny arises in psychological terms, how the psychical conditions must be constituted so that the 'uncanny' sensation emerges" (8). While it defies definition, the 'Uncanny' can be understood as a phenomenon. It is the product of a certain set of conditions. Jentsch realizes the problems inherent in defining the term itself, but he grasps that even without a definition, a consensus about the 'Uncanny' can still be reached.

Freud, in his much longer lexical investigation, reaches a conclusion – if it can be called that at all – about the meaning of the 'Uncanny.' This conclusion highlights the sort of global differences in the approaches taken by the two men. As mentioned earlier, Freud, at the end of the first part of his essay, writes that, "…heimlich is a word the meaning of which develops in the direction of ambivalence, until it finally coincides with its opposite, *unheimlich…unheimlich* is in some way or other a subspecies of *heimlich*" (226). Freud goes on to remind the reader of Schelling's definition of the 'Uncanny:' "*Unheimlich* is the name for everything that ought to have remained…secret and hidden but has come to light" (224). But Freud brings nothing into focus. Instead, he describes his conclusions about the meaning of 'Uncanny' and Schelling's definition simply as "hints".

Both Freud and Jentsch have run into the same problem of definition, but their solutions could not be more different. Freud proposes that "we go on to examine

individual instances of uncanniness," in hopes that "these hints will become more intelligible to us" (226). It is perhaps this emphasis on the "individual instance" of the 'Uncanny' that makes Freud's essay so complex. In Freud's view, the 'Uncanny' is as nuanced as the individual. Indeed, the 'Uncanny' has a facet for everyone who experiences it. In this scenario, the 'Uncanny' becomes unmanageable as it approaches the infinite.

In recognizing the role of individual difference in the 'Uncanny,' Jentsch has already identified this dilemma: "the same impression does not necessarily exert an uncanny effect on everybody" (8). Where Freud proposes looking at individual instances and extrapolating from there, Jentsch suggests a general approach with a limited scope. "It is a good idea provisionally to limit the posing of the problem even further," he writes, "and merely to take into consideration those psychical processes which culminate experimentally in the subjective impression of the uncanny with some regularity and sufficient generality" (8). The 'Uncanny' experience is individual and subjective. Across the spectrum of experience, however, one finds identifiable patterns and themes. Jentsch contains his theory of the 'Uncanny' by limiting his study to "regularity" and "generality." Freud is left to investigate every conceivable eventuality of the 'Uncanny' before he even gestures in the direction of a rule, principle or theory of the 'Uncanny.' Jentsch's work may seem "intellectual" and "anti-analytical" in comparison to Freud's, but it is also possessed of a certain strength and confidence lacking in Freud. It is Jentsch, after all, who is able to use the phrase "without a doubt" without having to resort to the addendum "I think."

Having outlined and delineated some of the lexical issues surrounding the 'Uncanny,' Jentsch provides his first example of an uncanny experience. Jentsch has already described the 'Uncanny' in terms of a certain 'lack of orientation', so it is fitting that his first example of the uncanny experience hinges on the individual's sense of position. "No-one in the world is surprised under usual circumstances when he sees the sunrise," writes Jentsch, but "when one removes such a problem from the usual way of looking at it…a particular feeling of uncertainty quite often presents itself" (9). Jentsch explains that this 'feeling of uncertainty' makes it self known when one reconsiders what is actually happening at sunrise.

One experiences sunrise as just that, the sun rising. Of course, it is not the case that the sun rises. Instead, the observer of the sunrise is himself moving around the axis of the earth. The earth itself is moving around the sun. The sun, in turn, orbits the center of the galaxy. Thus the observer finds himself suddenly on a small, strange planet in the vastness of the cosmos, inscribing a weird corkscrew arch though space. This is a disconcerting discovery. A discovery which makes the daily sunrise strange.

The question here is not so much one of disorientation or a lack of orientation as of reorientation. The observer moves from one orientation – the sun is moving around the earth – to another – the observer is moving through space. The 'Uncanny' is experienced at the midpoint of this transition. Once again, the 'Uncanny' is found at the center of a binary opposition, this time at the apex of oriented/reoriented. The 'Uncanny' moment is the instant of disorientation that comes between the two.

Jentsch suggests that this sort of reorientation takes place more often in individuals with more intellectually active and inquisitive minds. "The feeling of

uncertainty not infrequently makes its presence felt of its own accord in those who are more intellectually discriminating when they perceive daily phenomena, and it may well represent an important factor in the origin of the drive to knowledge and research" (9). Those who actually consider and (re)evaluate their surroundings are more likely to experience the 'Uncanny.' Jentsch uses the example of the sunrise. The same could be said, however, for any object for which the observer has or obtains even a rudimentary scientific understanding. Science is the art of uncertainty and it is Jentsch who brings its uncanny nature into focus. By taking into account the importance of differences in the capacity and tendency of the mind of the individual, this view also accounts for much of the variation in the range of uncanny experience.

Jentsch having sketched the 'Uncanny' in terms of a 'lack of orientation' and uncertainty, now addresses the role of the opposition between strange/familiar explicitly. In his explanation, Jentsch relates that which is strange to that which is new and that which is familiar to that which is old. Understanding the strange in terms of the new is rather straight forward. The relationship between the familiar, the old and the 'Uncanny,' however, shows Jentsch at his most nuanced.

"It is thus comprehensible," writes Jentsch, "if a correlation 'new/foreign/hostile' corresponds to the psychical association of 'old/known/familiar'." "In the former case [of the new/foreign/hostile]," he continues, "the emergence of sensations of uncertainty is quite natural and one's lack of orientation will then easily be able to take on the shading of the uncanny. In the latter case, disorientation remains concealed for as long as the confusion of 'known/self-evident' does not enter the consciousness of the individual" (9). If one considers the 'Uncanny' in terms of orientation and uncertainty, that which is new

or foreign is perceived as hostile because it disorients the subject. When encountering something new, one is taken out of one's element. In a sense, the foreignness of the object (be it a thing, a thought or an experience), spills over into the experience of the object itself. The subject is tasked with characterizing something new: is it harmful or helpful. The 'Uncanny' persists for the duration of this sorting.

In the case of what is old/known/familiar, the 'Uncanny' is somewhat more complex, and Jentsch's remarks are somewhat more cryptic. Specifically, what is meant by 'the confusion of the 'known/self-evident'? At a glance, there appears to be an inherent contradiction: there can be no confusion about that which is known and self-evident. It would seem, then, that Jentsch comes close to proposing a sort of repression. That is to say, it seems that he suggests a repression of the individual's disorientation or confusion about that which is assumed to be known. "Disorientation remains concealed," writes Jentsch, "for as long as the confusion of the 'known/self-evident' does not enter the consciousness of the individual" (9). It is tempting to take that which is "concealed" from the "consciousness of the individual" as that which is repressed. Jentsch's original German is equally suggestive of repression: "[Der Mangel an Orientierung] bleibt…so lange verkappt, als die Vertauschung 'bekannt-selbstverständlich' nicht in das Bewußtsein des Individuums tritt" (196). Jentsch, however, requires a more literal reading.

In repression, it is the mind that hides things from itself. In this case, the mind would conceal its own disorientation. In Jentsch's understanding, however, it is not the individual's mind that does the concealing, but rather, the banality of the everyday world. In effect, this is the opposite of repression: the mechanism comes from without, not from

within. This is one of Jentsch's more subtle points, but one that is absolutely essential to an understanding of the 'Uncanny.' Ultimately, Jentsch's line of thought will position the 'Uncanny' on the strangest boundaries.

Jentsch, like Freud, turns to the example of "primitive man", as if there were some great difference between men throughout time. With the exception of the extraneous attribution of sophistication to modern man in comparison to primitive man, the argument is cogent. Jentsch, in regards to the 'known/self-evident' continues:

> Apart from the lack of orientation arising from the ignorance of primitive man, *an ignorance which under usual circumstances is therefore hidden from him to a great extent by the everyday*, some stirrings of the feeling of psychical uncertainty arise with particular ease either when ignorance is very conspicuous or when the subjective perception of vacillation is abnormally strong (9, italics are mine).

It is the 'everyday' which conceals the individual's confusion. There is no need for primitive man in this example. Modern man is equally subject – if not more so – to this sort of hiding-of-phenomenon in plain sight, for he is surrounded by everyday objects – in the form of technology – which he holds to be self-evident, but whose inner workings he does not understand at all. This hidden ignorance is the source of disorientation and uncertainty about that which seems to be known and self evident. In some cases, this ignorance is better hidden than in others. The extent to which the individual understands his or her own intellectual limitations is a factor as well (10). In all cases, however, this sort of uncertainty involves the unknown unknown.

The 'confusion of the 'known/self-evident' is not only a question of what the individual knows he does not know, but of how well he knows it. There are three

permutations of known/unknown, each corresponding to an epistemological state or condition.[4] There are known knowns – things that one knows one knows. There are known unknowns – things that one knows one does not know. There are also unknown unknowns – things that one does not know that one does not know. In the first two cases, the individual's uncertainty about the quality of her knowledge is low. It is easy to know that one knows something. It is equally clear when one knows that one does not know something. One knows that one knows that the earth goes around the sun. One also might know that one does not know, off hand, the length of the orbit that the earth takes around the sun. There also remains, however, a third class of knowledge for which the individual can give no examples: that which one does not know that one does not know.

This type of knowledge, the unknown unknown, is what makes the known/self-evident uncertain and uncanny. The unknown unknown remains hidden. It is this hidden ignorance which unsettles the everyday and the familiar. When this ignorance makes itself apparent at the edges of consciousness, when it is "conspicuous" as Jentsch puts it, feelings of uncertainty become more pronounced. The banality of day to day life makes the otherwise extraordinary mundane. Over time, we learn not to question, among many things, the motion of the planet through space or the design and function of our own bodies. This complacency can, however, be tinged with anxiety, especially in instances where the everyday explanation seems particularly insufficient or trite. In such cases, the

---

[4] In a twist so bizarre it can only be described as uncanny, Donald Rumsfeld, in a 2002 press conference, gave an incredibly precise and astute summary of the three possible epistemological configurations. His statement has been the subject of much derision, even 'winning' a so called Foot in Mouth award from the Plain English Campaign. In reality, however, the terminology is nothing new and the statement's logic is sound. Rumsfeld merely continues a discussion of knowledge dating to Socrates' famous declaration that "I know that I don't know". [In]famously, Rumsfeld pointed out that: "There are known knowns. There are things we know that we know. There are known unknowns. That is to say, there are things that we now know we don't know. But there are also unknown unknowns. There are things we do not know that we don't know."

individual does not know what is wrong: he does not know that he does not know something. He does, however, experience a sort of creeping increase of disorientation and uncertainty, which is experienced as the 'Uncanny.'

As long as an everyday object, which is presumed known/self-evident, maintains about itself a set of unknown unknowns, it will incite, in direct proportion to the extent that those unknown unknowns make themselves known, the sort of insecurity that one often experiences as uncanniness. That is to say, the clearer it is that an object has some unknown characteristic that is not accounted for in the individual's understanding, the more likely it is to produce a sense of the uncanny in the individual.

Thus, the 'Uncanny' finds itself on the weirdest of all boundaries, on the boundary between the unknown and the unknown unknown. Marc Falkenberg, in *Rethinking the Uncanny in Hoffmann and Tieck*, suggests that Jentsch ignores unconscious factors altogether (19), but this is not exactly the case. Jentsch's explanation of the 'Uncanny' in terms of the known/self-evident requires a preconscious or non-conscious state at the very least. Jentsch makes as much clear when he describes confusion as not entering the consciousness of the individual (9).

The point is not that Jentsch developed a theory of the unconscious mind. He did not. At the same time, his emphasis on the practical, that is to say, objective, reproducible, general aspects of the 'Uncanny' does not mean that his understanding of the 'Uncanny' is any less nuanced or refined. The tendency, following Freud, has been to focus entirely on the 'intellectual' aspects of Jentsch's theory. This approach simplifies his ideas in a manner which is not only unwarranted, but counterproductive. Freud overstates the role of the unconscious in the 'Uncanny' (Falkenberg 20), while Jentsch

states it too subtly. The actual role of the unconscious is somewhere between the two, existing as the mediating '/' between oppositions and as the knower of unknown unknowns.

Jentsch completes part one of his essay with a brief discussion of children, neurotics and otherwise "mentally undeveloped, mentally delicate or mentally damaged individuals" (10). He proposes that these people are more often subject to feelings of uncertainty and the 'Uncanny' than those with a more complete and stable understanding of the world. Amid these somewhat brazen remarks on those with more fragile psychological dispositions, Jentsch also outlines the role of the senses in producing uncanny effects. He proposes that:

> The breakdown of an important sense organ can also greatly increase such feelings [of the 'Uncanny'] in people. In the night, which is well known to be a friend to no man, there are thus many more and much larger chicken-hearted people than in the light of day, and many people are much relieved when they have left a very noisy workshop or factory floor where they cannot make out their own words (10).[5]

Jentsch has already stressed the importance of disorientation in the uncanny experience. We rely on our senses to keep us oriented. When a sense is disrupted, our perception of the world changes. These changes to familiar objects make those objects strange, even uncanny.

---

[5] This argument seems to run counter to Jentsch's earlier argument about the role of intelligence in the uncanny experience. It is worth pointing out that in both cases orientation/disorientation are of central importance. In the first case, the intelligent individual might find herself disoriented by the inquisitiveness of her own mind, which brings familiar, everyday aspects into question, thereby making them strange. In the second case, the breakdown of a sense organ changes the individual's perception of the everyday and familiar, thereby making it strange as well. In both cases the familiar is made strange. The arguments are merely complementary, not contradictory.

Without directly mentioning *The Sandman* in this passage, Jentsch discusses the two senses most central to the story: hearing and vision. To get a sense of the uncanny effects of sound in the tale, just consider Olympia's weird "Ah-ah". With its motifs of vision, eyes, optics and enucleation, the vision motif is of paramount importance in *The Sandman*. Indeed, as will be discussed later on, vision, the android and the 'Uncanny' are all inseparable.

In part two of the essay, Jentsch deals more directly with the mechanics of the 'Uncanny.' He considers real world episodes which often have the effect of producing the sensation of the 'Uncanny.' This part of the essay, given its turn toward events in the everyday world, is much more explicit than the first. It is here that Jentsch introduces, among many other examples, the automaton and the wax figure. It is this second part of the essay which seems to have garnered much of the criticism as anti-analytical and phenomenological. Given the intensely psychological nature of part one, however, it seems fitting that Jentsch should round out his work with phenomenological examples.

Part two of the essay begins with the first of several passages cited by Freud and, more importantly, encapsulates several patterns that run throughout Jentsch's thought. Freud, in citing Jentsch, takes only part of a single sentence for his purposes. While this practice is not unreasonable, it is also worthwhile to look at a slightly larger section of the passage. This gives the reader a much clearer sense of what Jentsch is attempting to accomplish. Jentsch proposes that:

> Among all the psychical uncertainties that can become an original cause of the uncanny feeling, there is one in particular that is able to develop a fairly regular, powerful and very general effect: namely, *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 – and more precisely, when this doubt only makes itself felt

obscurely in one's consciousness. (11, italics represent lines cited by Freud).

It is notable that Freud omits the last sentence of this passage. While this passage

demonstrates several key elements in Jentsch's style and approach, it is this final sentence

which best demonstrates the nuance of his work.

The above passage's focus is on regularity and generality. Jentsch has already

acknowledged a range of variation in uncanny experience. He is not concerned with

obscure individual instances of uncanny experience. He is not concerned with anecdotal

evidence. Instead, his aim is to gain some general sense of the 'Uncanny.' He intends to

understand the 'Uncanny' more objectively.

Furthermore, in the above passage, Jentsch makes use of a statement and its

converse. Indeed, all statements about the 'Uncanny' in Jentsch's writing – with one

notable exception – are accompanied by their logical converse. Jentsch, in his

thoroughness, essentially develops another complete set of oppositions related to the

'Uncanny,' in which a statement and its opposite both hold equally true. Not only does

this development speak to the role of the opposition in the 'Uncanny,' but it suggests that

the opposition is a fundamental property of the 'Uncanny,' one that is present under all

circumstances and in all instances.

Finally, the above passage suggests the role of the unknown unknown. Jentsch

proposes that the uncanny effect of an object is heightened by, if not completely

dependent upon, a moderation of doubt. Doubt must "make itself felt obscurely in one's

consciousness". If doubt about the nature of an object is explicit, if the doubt is known

and conscious, then it is a question of a known unknown and the uncanny effect is reduced, if not eliminated completely. Only when doubt is 'felt obscurely' when it is left to sulk and slink on the periphery of the conscious mind, does it produce feelings of the 'Uncanny.' Uncanniness will persist about an object of this sort until its unknown unknowns are resolved into known knowns or known unknowns.

Following this passage so famously quoted by Freud, Jentsch provides his first dyad of examples. As already mentioned, these dyads consist of a description of an uncanny situation and its logical converse. This first set of examples addresses the animacy of objects in general and, as in all other cases, is concerned with intellectual mastery compared to intellectual uncertainty.

Jentsch begins with an example taken from the sort of travel journals and tales popular in the eighteenth and nineteenth centuries. "One can read," Jentsch writes, "that someone sat down in an ancient forest on a tree trunk and that, to the horror of the traveler, this trunk suddenly began to move and showed itself to be a giant snake" (11). Jentsch rightly questions the accuracy of such accounts. The authenticity of these accounts is ultimately immaterial: true or not, such tales effectively illustrate a facet of the 'Uncanny.' Jentsch continues:

> The mass that at first seemed completely lifeless suddenly reveals an inherent
> energy because of its movement. This energy can have a psychical or a
> mechanical origin. As long as the doubt as to the nature of the perceived
> movement lasts, and with it the obscurity of its cause, a feeling of terror persists
> in the person concerned (11).

Initially, this 'terror' is an intense experience of the 'Uncanny.' When the 'tree trunk'

begins to move, there is a sudden and radical disconnect between that which is known –

tree trunks do not move and are safe to sit on – and that which is happening – the tree

trunk is moving. The subject remains disoriented and terrified, in the throes of the

'Uncanny,' as long as he fails to perceive the 'tree trunk' for what it actually is. In this

example, the subject will remain terrified even after he realizes that he is sitting on a

giant snake, for now he sees that his life is in danger. There is nothing uncanny,

however, about this second wave of terror.

In the preceding example, we are presented with an apparently lifeless object

which, upon beginning to move, suddenly reveals itself to have a hidden energy. The

next example illustrates the converse of the first. In this case, Jentsch uses the example

of giant machines to illustrate his point. He writes:

> [T]he same emotion [as in the first example] occurs, when…a wild man has his
>
> first sight of a locomotive or of a steamboat, for example, perhaps at night. The
>
> feeling of trepidation will here be very great, for as a consequence of the
>
> enigmatic autonomous movement and the regular noises of the machine,
>
> reminding him of human breath, the giant apparatus can easily impress the
>
> completely ignorant person as a living mass (11).[6]

Jentsch once again needlessly resorts to the example of the so-called 'wild man'. One

could just as easily imagine a preindustrial European being equally terrified and

perplexed upon the sight of a giant machine. In any case, the relationship of this example

---

[6] Along with his arguments about intelligence and the senses, this example should again be read in terms of its relationship to orientation/disorientation. For the uninitiated, massive industrial machines are disorienting in both their scale and movement. That is to say, they seem at once strange in their scale and familiar in their liveliness.

to the first is clear. In the former, that which is animate at first appears to be dead. In the latter, that which is inanimate at first appears to be alive.

Someone who has never seen a locomotive before will find it terrifying not only in its sheer scale and power, but in its ambiguity. The rhythms and movements of such a machine give it the same characteristics of a living, breathing creature. This creature, however, is unlike any other creature, making the overall experience quite weird. The locomotive has the familiar traits of 'breathing' and moving, yet its appearance and means of movement – rolling on tracks – are strange. For the uninitiated, the first sight of such a machine is profoundly disorienting. Out of this disorientation, the 'Uncanny' is born.

With this first set of examples, Jentsch illustrates what could be considered the most general sort of uncanny experience. In this type of experience, an object shows some disorienting energetic quality. This disorientation is related to the individual's perception of the object. The object may be alive, but initially appears to be inanimate, or the object may be inanimate, but at first appears to be alive. In both instances, the uncanny experience of the object will persist until confusion about the nature of the object at hand is resolved. As Jentsch puts it, the subject must achieve "a kind of intellectual mastery of the situation" (11). This 'intellectual mastery' is accomplished by reconciling the individual's perception of the object with the reality or truth of the object. The uncanny experience will dissipate when the subject sees what is actually there – a snake instead of a tree trunk, a machine instead of an animal.

The intention here is not to open the Pandora's box of idealist philosophy. The nature of existence is not in question. Jentsch, grounded as he is in the trappings of

modern science, is clearly a materialist. He views the universe as material, observable

and governed throughout by laws. Seeing what is actually there means seeing

scientifically. If we are deceived, it is our senses which have deceived us, not the

universe. For Jentsch, then, a rock is a rock. That is to say, a rock is a rock unless the

rock begins to hop, and then it might be a toad. The toad, however, remains a toad. The

rock/toad changes only in how it is perceived.[7] And perception is key to the 'Uncanny.'

In Jentsch's next dyad of examples, perception is drawn even more radically into

question. Nothing is more apt to produce an uncanny experience in the subject than the

reproduction of the human form. "The unpleasant impression," writes Jentsch, " is well

known that readily arises in many people when they visit collections of wax figures,

panopticons and panoramas." "In semi-darkness," he continues, "it is often especially

difficult to distinguish a life-size wax or similar figure from a human person" (12). For

objects in general, the uncanniness of the object is coincidental: the object may turn out

to produce some uncanny experience, but not by design. In the case of the wax figure,

the uncanny experience is by design, at least in so far as the wax figure is intended to

deceive, disorient and confuse. The wax figure is intended to look as human as possible,

to look alive. Indeed, it is meant to seem so human that the viewer should forget that the

figure is an object and not a person. The figure's ability to confound is once again related

---

[7] This example is taken from Philip K. Dick's *Do Androids Dream of Electric Sheep*. Richard Deckard
finds himself alone in the nuclear wasteland surrounding L.A.. Sitting in his car, he observes a small rock,
which, to his amazement, suddenly begins to move. Closer investigation reveals that the rock is actually a
toad. Animals being exceptionally rare in this post-apocalyptic world, and amphibians being among the
rarest of the rare, Deckard momentarily believes that he has found his fortune – the toad being salable for
hundreds of thousands of dollars. Closer inspection of the toad, however, reveals that it is actually a
replicant toad – a machine made to emulate a toad in every possible way. Dick is a master of the radical
devaluation of perception . He draws everything into question; makes everything strange and uncanny.

to the precision of the senses. In this instance, darkness enhances the figure's efficacy by obscuring its nature to an even greater extent.

The uncanny effect of the wax figure is further increased with the addition of an energetic component. "This peculiar [uncanny] effect makes its appearance even more clearly," writes Jentsch, "when imitations of the human form not only reach one's perception, but when on top of everything they appear to be united with certain bodily or mental functions" (12). When the wax figure is made to move, that is to say, when it becomes the automaton, it also becomes that much more uncanny. This leads directly to *The Sandman* and another passage, made famous by Freud, from Jentsch's essay:

> *In story telling, one of the most reliable artistic devices for producing uncanny*
>
> *effects easily is to leave the reader in uncertainty as to whether he has a human*
>
> *person or rather an automaton before him in the case of a particular character.*
>
> This is done in such a way that the uncertainty does not appear directly at the
>
> focal point of his attention, so that he is not given the occasion to investigate and
>
> clarify the matter straight away; for the particular emotional effect, as we said,
>
> would hereby be quickly dissipated. In his works of fantasy, E.T.A. Hoffmann
>
> has repeatedly made use of this psychological artifice with success. (13, italics
>
> represent lines cited by Freud)

In this passage, Jentsch applies the same concept to the fictional automaton as he does to the real automaton.[8] The only difference between the 'Uncanny' in fiction and the 'Uncanny' in reality, is that the author of the fantastic tale has a greater degree of control over his creation than does the wax figure sculptor or the automaton mechanic. That is to

---

[8] 'Real' in the sense of existing in the material world.

say, the author can describe detail to a level of refinement impossible for the mechanic to (re)create.

Both the sculptor and the mechanic are limited by the technology of their time and the material resources at their disposal. The author, however, is limited only by his imagination and his talent. Put another way, the author can create what he imagines, while the mechanic is bound by, among other things, money and physics (usually in that order). Hoffmann's talent lies in doing just what Jentsch suggests: he creates a great deal of uncertainty around the characters of Olympia and Coppelius/Coppola, but he does so in a manner that is not at once clear. As Jentsch puts it, 'uncertainty [about these characters] does not appear directly at the focal point…of attention.'

Instead, by way of hints and suggestions, the reader slowly begins to sense that things are not quite as they should be. Second and third readings of Hoffmann's tale serve only to reveal more connections and indications. This paper will deal specifically with the 'Uncanny' in *The Sandman* in a later chapter. At this point, it is simply worth pointing out that for Jentsch, there is little difference between how the 'Uncanny' functions in fiction verses reality. Moreover, his theory is not contradicted by either, thus he avoids having to reject one or the other.

Moreover, this approach allows for a discussion of the 'Uncanny' in the fictional text without leading to the sort of category mistake discussed earlier. The author of fantastic literature, if sufficiently talented, is better able to control his creation than the sculptor or the mechanic. While the author is capable of intentionally creating an object which inspires a somewhat obtuse sense of uncertainty in the spectator/reader, even the most talented of mechanics is unable to meet his goal of creating a machine which seems

perfectly natural. Instead, the mechanic is left to accidentally bring the object of the author's design into existence. The mechanic's creation, by virtue of its imperfections, inspires the exact same uncertainty that the author has so painstaking developed around the character of the automaton.

In both cases, however, it is the nature of the uncertainty that is key. The more ethereal the uncertainty, the greater the 'Uncanny' effect. That is to say, the more obscure the nature of the uncertainty – the more uncertain the subject is about his own uncertainty – the more intense the uncanny experience becomes. This uncertainty about uncertainty is exactly the type of disorientation that Jentsch positions at the center of the 'Uncanny.' It is, however, always uncertainty on the part of the individual. Whether looking at an automaton or reading about one, the 'Uncanny' is experienced by a real existing person. The experiences of the actual, existing subject are never conflated with those of some imagined, fictional character.

The logical converse of the automaton example is somewhat more obscure. The automaton is a (seemingly) living being which reveals itself to be an inanimate object. The converse of this experience, Jentsch suggests, is when an obviously lifeless object is imbued by the imagination with the qualities or characteristics of a living creature. "[T]he effect of the uncanny," he writes, "can easily be achieved when one undertakes to reinterpret some kind of lifeless thing as a part of an organic creature, especially in anthropomorphic terms, in a poetic or a fantastic way" (13). In this way, "in the dark, a rafter covered with nails…becomes the jaw of a fabulous animal, a lonely lake becomes the gigantic eye of a monster, and the outline of a cloud or shadow becomes a threatening satanic face" (13). This is the least convincing of Jentsch's examples. Until this point,

51

Jentsch has made a strong effort to fold uncertainty and disorientation into his theory of the 'Uncanny.' These elements are simply not to be found in this example. It would seem that Jentsch, in his effort to be complete, has stretched the limit of the converse beyond that which is applicable. Indeed, he does not seem convinced himself – he quickly attributes this sort of experience to 'women, children and dreamers', and promptly moves on.

The Limits of Jentsch

Jentsch concludes his essay with a rather dramatic passage about the shelter of certainty provided by the natural sciences. Before doing so, he makes a few more observations about mental illness and neurosis. He then turns to one last critical example of the 'Uncanny,' this one related to a physical disorder. There is no logical converse for this example. It is, however, the example which tells us the most about ourselves. It is the example of the human and the epileptic seizure. Jentsch considers the seizure from the perspective of the spectator. He observes that:

> [I]f…relative psychical harmony happens markedly to be disturbed in the spectator, and if the situation does not seem trivial or comic, the consequence of an unimportant incident, or if it is not quite familiar (like an alcoholic intoxication, for example), then the dark knowledge dawns on the unschooled observer that mechanical processes are taking place in that which he was previously used to regarding as a unified psyche (14).

This 'dark knowledge', as Jentsch calls it, is the knowledge that, on a certain profound level, the human, like the automaton, is 'mechanical'. Jentsch continues the same passage, these lines alluded to by Freud (Royle 150):

It is not unjustly that epilepsy is therefore spoken of as the *morbus sacer*, as an

illness deriving not from the human world but from foreign and enigmatic

spheres, for the epileptic attack of spasms reveals the human body to the viewer –

the body that under normal conditions is so meaningful, expedient, and unitary,

functioning according to the directions of his consciousness – as an immensely

complicated and delicate mechanism (14).

In a very real sense, we too are machines, only instead of mechanical we are biological.

This is a strange realization that blurs the lines between man and machine. If we are

machines, then we can be manufactured, copied. We are animated not by spirit, but by

mechanism. You suddenly see yourself as a machine and that which has been most

familiar to you – your own body – suddenly becomes remarkably strange. This is the

most uncanny of experiences.

Jentsch explains, by way of the dark knowledge of mechanical life, the roots of

the uncanny effect of the epileptic seizure itself. He is, arguably, less successful in

explaining the uncanny effect of the wax figure and the automaton. Strangely, even after

the nature of the wax figure or the automaton have been revealed, even after all doubt

about the object has been removed and the viewer has achieved intellectual mastery over

it, such figures persist in their uncanniness. The automaton is uncanny when its true

nature is obscured *and* when its true nature is known. The automaton remains uncanny,

irrespective of the viewer's perception.

Jentsch recognizes this dilemma and suggests several possible explanations for

the persistence of the 'Uncanny' around the automaton. His efforts, however, end up

sounding somewhat strained, even seeming, at times, a little desperate. He writes:

53

> [S]uch a figure also has the ability to retain its unpleasantness after the individual has taken a decision as to whether it is animate or not. Here it is probably a matter of semi-conscious secondary doubts which are repeatedly and automatically aroused anew when one looks again and perceives finer details; or perhaps it is also a mere matter of the lively recollection of the first awkward impression lingering in one's mind (12).

For the first time in his essay, Jentsch uses the words 'probably' and 'perhaps'. He has clearly identified and quantified the problem of the 'Uncanny' and the automaton, but he is unable to formulate a concise theory of its cause. He is only able to suggest a couple of possibilities, and even these seem trite. His use of creative terminology – "semi-conscious secondary doubts" and "lively recollections" – has little in common with the rest of his language. Jentsch has run into a problem – the profoundly uncanny nature of the automaton – which would remain obscured and unaddressed for another sixty years after his writing.

Jentsch is unable to present a concise theory of how the automaton retains its uncanniness even after its nature is known and understood. His essay, however, hints at the answer. In the course of his writing, Jentsch makes two crucial observations about the automaton. First, he recognizes that although anatomical detail in the wax figure plays a role in increasing its uncanny effect, it is not an essential component of the figure's uncanniness. In the same passage, he also draws the crucial comparison between the wax figure and the corpse. "The fact that such wax figures often present anatomical details," Jentsch writes, "may contribute to the increased effect of one's feeling [of uncanniness], but this is definitely not the most important thing: a real anatomically

54

prepared body does not need in the least to look so objectionable as the corresponding model in wax" (12). Paradoxically, then, the wax figure is more unnerving than the dead body.

Jentsch also realizes that the more accurately an automaton is able to mimic the actions of the human, the more uncanny it becomes. Jentsch explains that:

A doll which closes and opens its eyes by itself, or a small automatic toy, will cause no notable sensation of [the 'Uncanny'], while on the other hand, for example, the life-size automata that perform complicated tasks, blow trumpets, dance, and so forth, very easily give one a feeling of unease. The finer the mechanism and the truer to nature the formal reproduction, the more strongly will the special effect also make its appearance (12).

At first it would seem that Jentsch's conclusions about the wax figure and the automaton are somewhat at odds: adding detail to the wax figure fails to increase its uncanniness, while refining the movement of the automaton makes the device that much more uncanny. Adding detail to a wax figure, though, is not analog to refining the movement of the automaton.

Once the wax figure crosses a threshold of human likeness, it becomes uncanny. Beyond this point, the practice of refining the figure's details yields only diminishing returns. Adding accurate and refined movement to the automaton is much more difficult than adding superficial detail to the figure. Given the complexity of this task, it is difficult to make even small gains in precision or quality of movement. It seems that one could refine the quality of the automaton's movements indefinitely, all the while only adding to its uncanniness. This is not the case, however.

55

It is possible, at least in theory, to improve the movement of the automaton until it is indistinguishable from the movement of the human. At this point, if the flawless movement of the automaton were to be combined with a wax figure whose details are also perfectly refined, the automaton ceases to be uncanny. When the automaton becomes a perfect imitation of the human, it loses its uncanniness altogether. In a sense, we have seen this already in Jentsch's 'dark knowledge'. Life is automatic. The android and the human are reflections of each other. The perfect automaton is only uncanny to the observer who, through an understanding of the automatic nature of life, now finds all living things somewhat uncanny.

Although Jentsch's initial observations lead to these insights into the 'Uncanny,' all of this goes well beyond the scope of Jentsch's work. Instead, we now find ourselves at the door step of Masahiro Mori and his Uncanny Valley. The Uncanny Valley not only accounts for the uncanny experience of the automaton, but ultimately reconciles Jentsch's dark knowledge about the mechanical nature of all life to the larger understanding of the 'Uncanny' in terms of liminality, uncertainty and disorientation. It is Mori who definitively places the human on the same continuum as the automaton and the android.

Introducing Masahiro Mori

Biographical information is not usually included in serious academic writing. In the case of Masahiro Mori, however, a brief biography helps to explain the nature of his work on the 'Uncanny.' Born in 1927 in Japan, Mori spent the war as a teenager before becoming an engineer amidst the ruin of post war Japan. He is a polymath in the truest sense of the word: in addition to heading up robotics and control engineering at the

Tokyo Institute of Technology, Mori is a widely respected Buddhist scholar and a premier classical flutist. In short, he is a prototypical genus.

And Mori's work is typical of the genius: based on a few observations, and with seemingly little or no effort, Mori drew a few eloquent conclusion which revolutionized (or in this case created) a field of study.[9] While their work on the 'Uncanny' varies widely, a brief – fleeting really – interest in the 'Uncanny' is one similarity that Freud, Jentsch and Mori all share. Not one of them published more than a single paper on the subject. Yet, collectively, they are responsible for the entire field of investigation into the 'Uncanny' across the humanities and the natural sciences.

Mori's work on the 'Uncanny,' however, could not be further removed from that of Jentsch or Freud. But then, Mori himself could not be further removed from them geographically, culturally or intellectually. Perhaps the most influential separation between Jentsch, Freud and Mori, though, is technological. In the late nineteenth and early twentieth centuries, the automaton was primarily a novelty: a source of entertainment at carnivals and the root of horror in fantastic literature. At the time, one could only imagine the automaton walking, talking and acting on its own.

By the late nineteen-sixties, when Mori first began thinking about the 'Uncanny' and the robot, one could actually find rudimentary robots capable of the above tasks. However imperfect, the factual android began to replace the fictitious automaton. Moreover, by the sixties, industrial robots had already begun to replace human workers

---

[9] Another, more famous example along these same lines is the case of Richard Feynman and the Mayan Hieroglyphics. While on his honeymoon in Guatemala with his second wife, Feynman purchased a copy of the Dresden Codex – an original Mayan text discovered after many years of neglect in Dresden. To keep himself occupied, he covered all captions and began deciphering the hieroglyphics completely on his own. He quickly surpassed the entire body of knowledge on the subject. His work during that week in Guatemala revolutionized the modern understanding of the Mayan calendar. (Surely You Must Be Joking, Mr. Feynman…).

on a massive scale and the fear of being replaced by a robot was salient among workers. It comes as no surprise that Mori, an engineer, would approach the 'Uncanny' from the perspective of industrial design. It's not inconsequential, however, that he did so at a time when the fear of robots was moving out of the fantastic and into the real. Mori's work on the 'Uncanny,' while brief – and widely unnoticed in the humanities – nonetheless is responsible for the creation of Android Science[10] in the cognitive sciences. Of greater interest to this paper, Mori's notion of the Uncanny Valley, abbreviated UCV, provides a sort of graphical overview of the 'Uncanny' as it relates to the android.

The extent to which Mori familiarized himself with the work of Freud, Jentsch or any subsequent scholars of the 'Uncanny' is unclear. Mori, in a letter to the Mukta Research Institute, asserted that he has not considered the matter of the Uncanny Valley all that deeply (1). Nonetheless, the Uncanny Valley explicitly and directly addresses the themes which this paper has thus far sought to develop as central to the 'Uncanny.' Namely, it unifies Freud's use of the strange and the familiar with Jentsch's understanding of automatic life. Mori's work is an essential first step toward a fully contemporary understanding of the 'Uncanny.'

Mori and the Uncanny Valley

During his work in robotics, Mori observed that the progress of the robot toward a complete human likeness does not continue uninterrupted. Paradoxically, beyond a certain degree of human likeness, the android actually begins to seem *less* human. Mori quantified this problem graphically. By placing human likeness on the x-axis and

---

[10] See "Android science: conscious and subconscious recognition" by Hiroshi Ishiguro and "The uncanny advantage of using androids in cognitive and social science research" by Karl F. MacDorman and Hiroshi Ishiguro.

familiarity on the y-axis, the uncanniness of the android can be expressed as a function of

its human likeness. Strangeness is understood as negative familiarity. This region of

negative familiarity forms a valley on the graph, leading Mori to coin the term 'Uncanny

Valley.'
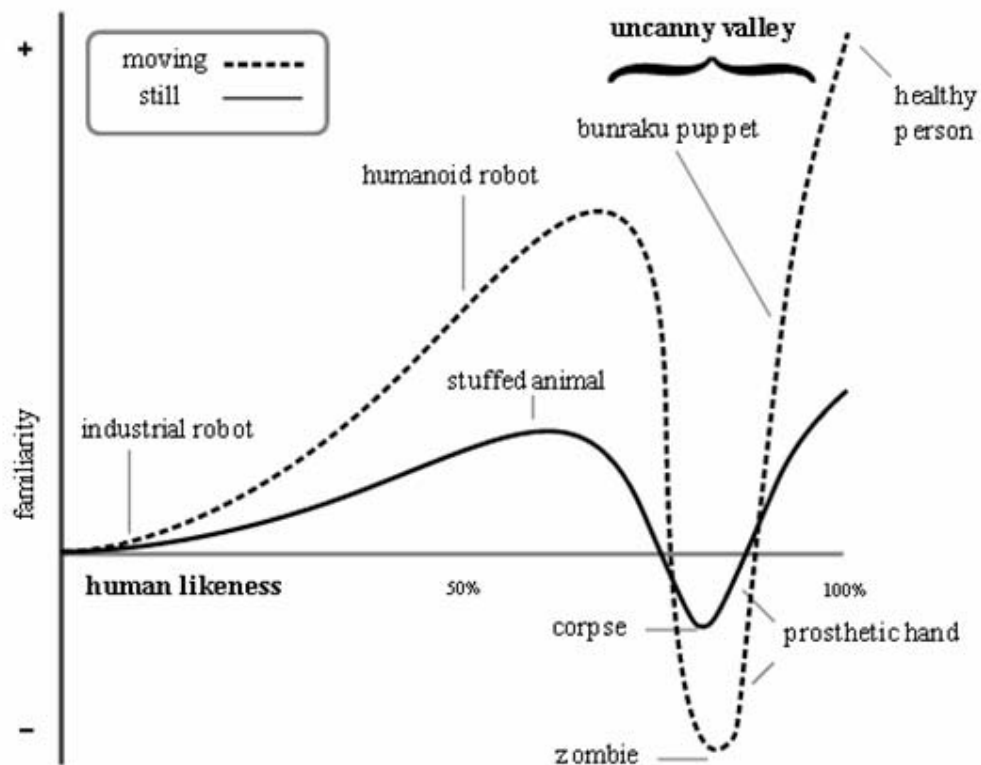
Mori's graph of familiarity vs. human likeness. As the robot approaches 100% human likeness, its familiarity suddenly drops below zero. This region of negative familiarity (or strangeness) is the uncanny valley. Taken from Mori's 1970 publication in *Energy*.

While this graph, in itself, by no means revolutionizes the discussion of the

'Uncanny,' it certainly can be used to clarify and organize several aspects of it. First, it

clears away all of the tertiary elements of the 'Uncanny' and clearly focuses on the

central principle of strangeness and familiarity. Second, it places the human and the

android on the same continuum. This speaks directly to the sort of dark knowledge of

automatic life described by Jentsch. The human is different from the android only to the extent that the human is more human-like than the android. Once the android achieves the same degree of human-likeness as the human, she ceases to be uncanny and, arguably, becomes human. Thus, the graph moves in both directions, machines can become human and humans can become machine like, as in the case of a seizure. This gives rise to the third implication of the graph: the uncanny valley overlaps with what we perceive as the boundary between human and nonhuman.

In reality, there is no boundary between the human and the android, only degrees of likeness. When the spectator cannot be certain that the android is human, she is uncanny. When the spectator *is* certain that the android is human, she ceases to be uncanny. Thus, the x-axis is not so much 'human likeness' as it is the 'degree of certainty about humanness'. 'Human likeness', after all, is a question of perception - a question of how human like something seems or appears. This not only highlights the role of perception, but once again implies the liminal nature of the 'Uncanny.' The 'Uncanny' exists in this border region of perception. As the spectator becomes less assured of his perception, the android becomes more uncanny; as the spectator becomes more assured of his perception, the android becomes less uncanny. The minimum of the uncanny curve represents the android at her most ambiguous and the spectator at his most uncertain.

The Uncanny Valley leads to a new understanding of the android – an understanding which surpasses Jentsch and takes us out of the Freudian abyss. The Uncanny Valley facilitates a reading the mechanical life which does not rely on the archetype or the prototype. This new reading, achieved by way of the UCV, accounts for

60

the android/human relationship in a manner compatible with a cyborg mentality. It makes sense that the destruction – really annihilation, but in no case deconstruction – of the division between the human and the machine be achieved by the cyborg – that which is the embodiment of the two as one. Of course, this line of thought is indebted to Donna Haraway's *Cyborg Manifesto*.

Haraway and the Uncanny Valley

In the *Cyborg Manifesto*, Haraway asserts that scientific and technological discourse since the Second World War has been defined by the search for a common language (164). This search, which has been particularly prevalent in the communications and biological sciences, has, in effect, translated the world "*into a problem of coding*" (164). This problem of coding fundamentally changes the discussion of all objects. Machines, animals, people can no longer be thought of as having fundamental properties (162). Instead, things must be considered in terms of their code. "Any objects or persons can be reasonably thought of in terms of disassembly and reassembly," writes Haraway, "no 'natural' architectures constrain system design" (162). That is to say, the object no longer has an ideal or archetype. There is no correct design, only the constraints of design. Thus, "dichotomies between mind and body, animal and human, *organism and machine*, public and private, nature and culture, men and women, primitive and civilized are all in question ideologically" (162, italics are mine). It is precisely the android which brings the 'organism and machine' dichotomy into question.

The *Cyborg Manifesto* rejects the need for 'organic holism' or other notions of 'wholeness' (179). The Uncanny Valley, however coincidentally, reflects this rejection. On a continuum, all points are a function of the same restraints. That is to say, there is no

61

fundamental separation of characteristics or traits – everything is a question of degrees. There are no essential properties – the human and the machine are merely aspects of the same code. As Haraway writes: "The Machine is not an *it* to be animated, worshipped, and dominated. The Machine is us, our processes, and aspect of our embodiment" (180). In relation to the 'Uncanny,' this paper has addressed – and attempted to make sense of – the breakdown of the dichotomy in general, and the dichotomy between the human and the android in specific. The UCV, by placing the human and the android on the same continuum, provides yet another example of the bending and blurring this dichotomous relationship.

The Android and the Uncanny Valley

The UCV can serve as a kind of road map for the texts this paper addresses. The UCV unifies these texts in terms of familiarity, uncertainty, liminality and the 'Uncanny.' It provides a method for understanding the android and the 'Uncanny' which is graceful, yet reflects many of the complexities inherent in the 'Uncanny.' *The Sandman*, *Metropolis* and *Blade Runner* present a progression of androids that can be mapped onto the UCV's continuum. This progression, from left to right, indicates an increase in technological sophistication, from Olympia's clockwork to Rachael's DNA. It represents the evolution of the android from doll to human, and from human, to more human than human.

Of all the androids considered in this paper, Olympia is the most mechanical, both in her construction and in her action. While she appears beautiful at a glance, it quickly becomes apparent that Olympia is "without a ray of life." Her primary occupation is sitting motionless for hours on end at a small table in her room. Her dancing is off

rhythm and her singing keeps the "same spiritless time as a music box." She is said to

have a voice like a glass bell, which – like a music box – comes from "deep within her."

Her only utterance is ever "Ah, ah!" followed, on occasion, by a "Goodnight, dear." In

short, there is something funny about Olympia. Not funny in the comic sense. Not 'Ha,

ha!' funny. She is funny in the way things are said to be funny when they are some how

off or weird. She is 'Ah, ah!' funny. Thus, Olympia falls to the left, and low, in the

Uncanny Valley.

Like Olympia, *Metropolis's* android – the android clone of Maria – is mechanical

in nature. Unlike Olympia, she is seemingly indistinguishable as other than human.

While Olympia is described as beautiful but lifeless, the android Maria is possessed both

of beauty and a very real sensuality – a sensuality displayed nightly for the men of

Metropolis at the Yoshiwara club. Moreover, where Olympia is limited both in action

and speech, the android Maria is able to spur the workers of Metropolis to revolt with her

words. Yet the android Maria remains somehow strange in her jerky, demonic

movements and her enticing, unnerving sexuality. Winking and spinning, there is a

persistently non-human aspect to her presence. On the Uncanny Valley, the android

Maria finds herself to the right of Olympia, but in realm of negative familiarity

nonetheless.

Among the texts examined in this paper, *Blade Runner* has the distinction of

being the only text with more than one android. Indeed, there are at least five – Roy,

Pris, Zhora, Leon and Rachael – and probably six[11]. While it would be a worthwhile

---

[11] Richard Deckard makes six. Although it seems apparent in later versions of the film that Deckard is a
replicant, the discussion of whether he is or isn't runs the gamete from internet fan-sites to peer reviewed
academic writing.

undertaking to apply much of the theory developed thus far to each of these characters, such an undertaking is simply impractical in the context of this work. Thankfully, while each of these characters is representative of an aspect of the android and the android mind, there is one among them who serves as a complete model of the android. Rachael, as Haraway points out, "stands as the image of a cyborg culture's fear, love, and confusion" (178). Rachael, with her flawless appearance, graceful movements, seductive smoking, alluring vulnerability, with her implanted memories and fake family photos, epitomizes the android perfected. Indeed Rachael seems so human – is so human – that when her android nature is revealed, it draws the humanness of everyone around her into question. Even Rachael herself does not know that she is an Android. She has completely crossed the Uncanny Valley and emerged, for all intents and purposes, absolutely human.
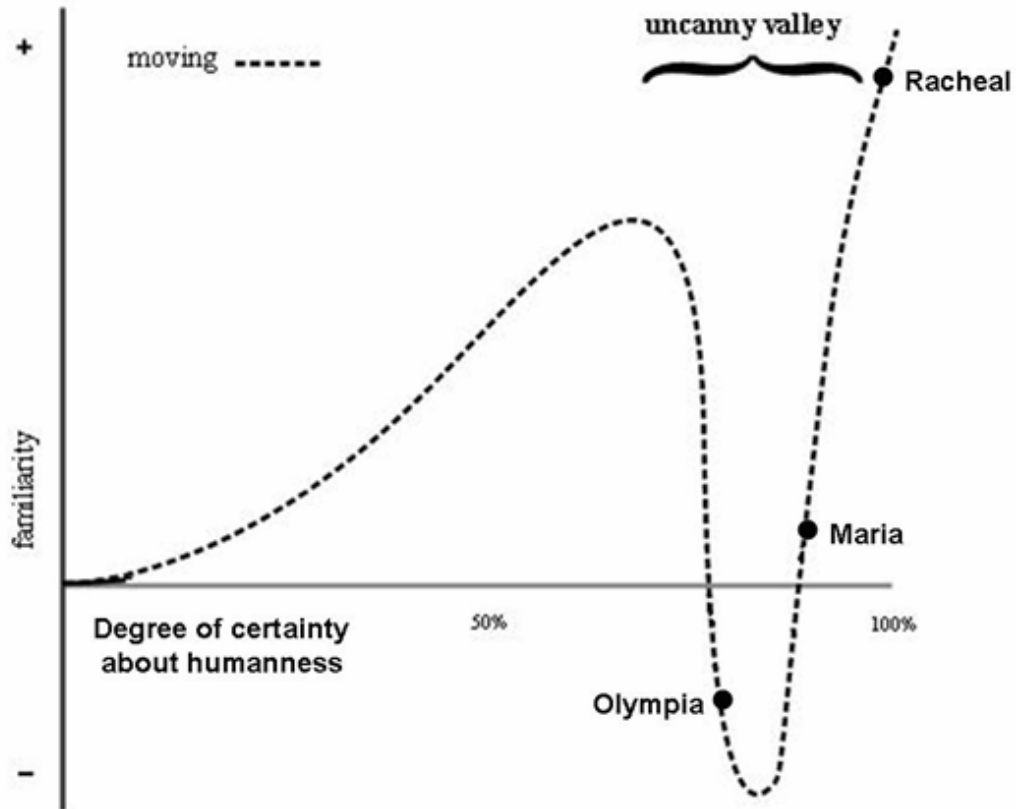
A revised graph of the uncanny valley. The x-axis represents a degree of certainty rather than 'human likeness'. Human likeness is a question of perception, not an objective metric. A 'degree of certainty' is clearly subjective and focuses attention on the psychic state of the spectator. On this graph, Maria is the *Maschinenmensch*.

Rachael's position, her lack of self knowledge, speaks to her complexity. She does not (yet) know what she is, but she is capable of knowing. She is capable of knowing herself (or as capable of it as any of us). It is not only the android's appearance that becomes more sophisticated over time, but her psychology. To appear human, the android must act human. To act human, she must think as if she were human. Indeed, in the most advanced androids, those that have fully traversed the Uncanny Valley, there seems to be little left to distinguish them from actual humans. This raises one final question: How does the android perceive itself ? A further adaptation of the Uncanny Valley helps answer this question.

The android comes into existence not when it is looked at, but when it looks back. "The emergence of this impossible subject is the emergence of the gaze," writes Mladen Dolar, "the opening of a hole in reality which is immediately also that which comes to fill it with an unbearable presence, with a being more being than being, *vacuum* and *plenitudo* all in one, the plenitude as the direct consequence of the emptiness" (20). Its ability to look back not only makes the android real, but makes her uncanny. And with extrospection comes introspection. As the android's humanness increases, so does her ability to introspect, such that when she is most convincing as a human she is also most capable of perceiving itself as other than human, as strange. The android is most uncanny to itself when it is most recognizable to us as human. Philip K. Dick pointed this out in a speech entitled "The Android and the Human."

> Someday a human being, named perhaps Fred White, may shoot a robot named Pete Something-or-other, which has come out of a General Electrics factory, and to his surprise see it weep and bleed. And the dying robot may shoot back and, to its surprise, see a wisp of gray smoke arise from the electric pump that it supposed was Mr. White's beating heart. It would be rather a great moment of truth for both of them (187).

This moment of truth is the moment in which each realizes that the other is really no different than the self. The android and the human are more alike than unlike. That each contains '*vacuum* and *plenitude*.' This is the dark knowledge with which we are all saddled. Android life is mechanical life, but all life has a mechanical aspect. It is this realization that makes the android strange to itself. It is this same realization, by way of

the android, that makes the human strange to him or herself. Life is automatic. Life is

uncanny.
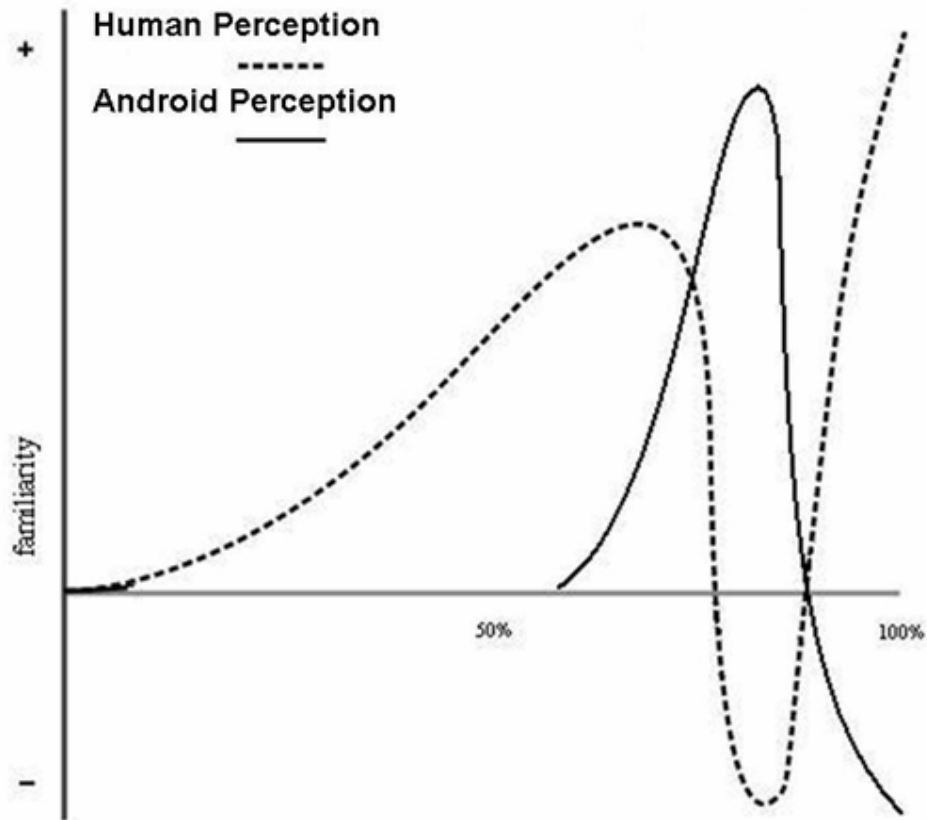
A representation of the android's familiarity with itself as compared to the uncanny valley. The android comes into existence not when it is looked at, but when it looks back. As the android's humanness increases, so does its ability to introspect, such that when it is most convincing as a human it is also most capable of perceiving itself as other than human, as strange. The android is most uncanny to itself when it is most recognizable to us as human.

Looking at Automatic Life

The eye, the look, the gaze, blinding, spying and peeping are all central motifs in

the android text. In *The Sandman*, there is, the Sandman himself and his doubles: the

advocate Coppelius roaring "Bring the eyes! Bring the Eyes!" (90) and the barometer

dealer Coppola selling "beautiful eyes-a" (105). In the workshop of his father, a young,

spying Nathanael sees faces lying around without eyes (90). There's also Olympia, with

67

her lifeless eyes , who, nonetheless, rigidly returns Nathanael's gaze (105). When

Olympia is destroyed in the struggle between Spalanzani and Coppelius, Nathanael

"perceive[s] only too clearly that Olimpia's deathly pale wax face had no eyes, just black

caverns where eyes should be" (114). And there's the case of Nathanael, "as though

impelled by an irresistible force" (107), peeping and spying on Olympia with Coppola's

accursed spyglass, an object which leaves him "enraptured, captivated…in a trance"

(Weber 1117).

In *Metropolis*, Fredersen and Rotwang spy on the workers of the underground city

through an eye shaped opening in the catacombs. The *Maschinenmensch* is not only

given Maria's appearance, but is imbued with some aspect of her (repressed) feminine

sexuality. As proof of this, when the transformation of the robot is complete, she opens

her eyes and looks directly at the camera (at us). In a subsequent scene, when Fredersen

bids her to "visit those in the depths, in order to destroy the work of the woman in whose

image you were created," the android accepts her assignment with a nod and a menacing

wink directed straight at the camera. And when she, the vamp, performs a seductive

dance at Yoshiwara club – a dance designed to test her credibility as a double – the

sequence dissolves into a montage of coveting, spellbound eyes. This scene, in turn, is

repeated when the vamp travels to the workers, enchants them like she has enchanted the

rich sons of Metropolis and incites them to violent revolt.

In *Blade Runner*, there's the Voight-Kampff machine, which distinguishes

androids from humans using ocular response and the Esper computer, which can

interpolate two dimensional photos into three dimensional space, such that elements in

that space *which are not visible in the photo* are made visible in the new rendering. And

there's the moving photograph which Rachael presents to Deckard as proof that her memories are real. There's the use of 'kickback'[12] in the eyes of the androids and the synthetic owl. There's also Dr. Chew's workshop – a partly modern, partly alchemic space that mirrors both images of Coppelius's eyes and Rotwang's Laboratory – where Roy Batty proclaims to Dr. Chew, "If only you could see what I have seen with your eyes," before killing him. Finally, there is the episode in which Batty, dissatisfied with his creator's inability to give him more life, kills Tyrell by pressing out his eyes.

Despite the extreme prevalence of these motifs, little has been done in the literature of the 'Uncanny' to account for the absolute foregrounding of vision in the android text. Yet the pervasiveness of association between the look, the android and the 'Uncanny,' cannot be accounted for by coincidence. While any two of these elements might find themselves discussed in the same analysis, there is not, to date, a theory which attempts to account for the persistent affiliation of all three of these elements in the android text. Moreover, the manner in which the android looks back at the human – indeed the very means by which she comes into existence – has seemingly been completely neglected.

This is not to imply that the motif of vision has been ignored altogether. Freud, for example, pays close attention to Coppelius and his eyes, but he casts off Olympia as little more than a reflection of Nathanael's own narcissistic love for himself (232). He thus ascribes little importance to her role in the 'Uncanny.' Conversely, great attention has been paid to both *Blade Runner*'s replicants and its various motifs of vision and blinding, but little has been done to account for the film's uncanny aspects. When the

---

[12] This refers to the reflection of light off the back of the eye, creating an eerie, luminescent effect.

'Uncanny' is mentioned in discussions of *Blade Runner*, it is always in a round-about way: replicants are often discussed or introduced as Doppelgangers, and it is this discussion of the Doppelganger which leads, to a brief introduction – really a glossing over – of the 'Uncanny.'[13] The exceptions, which perhaps prove the rule, are Andrew Webber's "Canning the Uncanny" and Andreas Huyssen's "The Vamp and the Machine," both of which examine *Metropolis*. These texts will be addressed shortly.

Yet the question remains: why is the android so bound up with vision? The answer, perhaps, lies not in reading the android as something other than it is – as a narcissistic complex, a double or a simulacrum – but in considering *das Ding an sich*, the thing in itself. Androids are machines. Machines, all machines, have a purpose; they have a function. The function of the android, like so many things about her, is at first somewhat obscure. Olympia appears to have been made to fulfill some twisted, on-going desire on the part of Coppelius to create an automatic woman. The *Maschinenmensch* was designed and built to replace Rotwang's (and Fredersen's) lost love, Hel, but was instead used in a nefarious plot to destroy the workers of Metropolis. The replicants in *Blade Runner*, we are told, were built as various sorts of slaves, either to serve as soldiers, workers or sex toys. Thus, a cursory glance reveals little commonality between these disparate applications. In the case of the android, however, there is a difference between her application or use, and her function.

While the android has many uses, she only has one purpose. The android is a different sort of machine: she is a machine designed to be looked at. Her purpose is to be

---

[13] For just two examples of this, see Ramble City page 68 and Retrofitting *Blade Runner* page 5. In fairness, page 14 of the latter text offers two worthwhile sentences applying notions of strangeness, familiarity and intellectual uncertainty to the replicant.

seen. The human body, as much as one might like to imagine its perfection, is highly

flawed. For this reason, robots and humans rarely look anything alike. Consider the

dissimilarity between an auto worker and an industrial robot (placed far to the left on the

UCV) or a bank teller and an automatic teller machine (ATM). There is, in reality, no

use for a robot which requires that the robot take the form of a human.

In order for the android to function, she must look human, otherwise, there would

be no reason to look at her. In the same way that the machines of daily life blend into the

background, the android too would disappear if not for her human form. Thus, the

android achieves her function by way of deceit: to be looked at, she must appear to be

other than what it actually is. Along the lines of this premise, it come as no surprise that

more general motifs of eyes and vision are central in texts about the android. In these

texts, vision is distorted, denied and blocked by the deceit inherent in the android's

function. These motifs remind the spectator, despite his frustration or feelings of

uncanniness, to keep looking.

This understanding of the android – a machine whose purpose it is to be seen –

accounts for several other difficult questions about the android and the android text. In

order for the android to function, she must be looked at. Thus, in any text about the

android, the android must, in some way, be seen. In the absence of the gaze, the android

is dead. Moreover, the spectator does not merely look at the android, the android looks

back. As has been pointed out, it is this 'looking back' which brings the android fully

into existence. This 'looking back,' this return of the gaze, also insures a continued gaze

from the spectator.

Nathanael repeatedly perceives that Olympia gazes *at him*. From her room she "gaz[es] rigidly across at him" (105), as an apparition she "look[s] at [Nathanael] with great radiant eyes" (107), and during her performance at the Spalanzani's dance, she "gaz[es] at him yearningly (108). Likewise, in *Metropolis*'s, in both the montage sequences at the Yoshiwara club and during the seduction of the workers, the gaze of the spectator is returned and maintained by that of the vamp. In *Blade Runner*, there is the Voight-Kampff test which entails not only the (suspected) android being looked at, but her looking back. Indeed, with its requirement that the gaze be sustained in both directions, and the intensity of magnification and focus on the eye, the V-K systematically sustains and concentrates the gaze. Thus, the android establishes herself in a matrix of looks. This matrix – in which looking begets more looking - allows the android, the machine, to function optimally.

The way the android constitutes herself in terms of the look further establishes not only her own uncanny nature, but also the nature of the 'Uncanny'. To be seen, the android must look a certain way. She must look human. The extent to which the android is convincing in her humanness determines the extent to which she is uncanny. When the android is imperfect in her deceit, she blends elements of the mechanical and the living, the strange and the familiar. This aspect of the android uncanny – which has already been discussed in great detail – can thus be understood in terms of the android's performance *as a machine*. The better the machine performs, the less uncanny it is. When the machine performs perfectly, when the deception is complete, the android ceases to be uncanny altogether. This is the case for Rachael. In such cases, the android is only uncanny when her actual (mechanical) nature is discovered. In such instances,

72

she is uncanny along the lines of dark knowledge: she is uncanny in that she reveals the mechanical nature of all life.

One could thus make the case that the android functions best when she is slightly imperfect or strange in her human form. If the android is too weird, the spectator will be put off. If she is too perfect, she disappears, not into the world of machines, but into the faceless crowd. Give the android just the right amount of uncanniness – position her correctly on the UCV, as it were – and the spectator won't be put off by her, but also won't know quite what to make of her. This uncertainty leads the spectator to continue looking, to maintain the gaze.

The best performing androids are those that are uncanny enough to hold the spectator's look without forcing him to turn away. This balance of uncanniness can be found in both Olympia and the android Maria. Neither is an obvious fraud, yet both are strange either in their appearance (Olympia) or movement (*Maschinenmensch*). The pleasure of looking at their physical beauty is augmented by the slight uncanniness of their overall appearance.

The Android and the Camera

The android, in order to be better looked at, has developed along the lines of (and indeed been developed by) Hollywood cinema. This is where Andrew Webber's "Canning the Uncanny" and Andreas Huyssen's "The Vamp and the Machine" are indispensible. Weber suggests that the android is produced "*ex machina*: out of the cinema's theatrical machine" (253). The movie and the android are both designed to be seen. To this end, the spectator must be given some reason to look. Thus the android, like the movie, is the subject of the kind of "skilled and satisfying manipulation of visual

73

pleasure" that Laura Mulvey outlines in "Visual Pleasure and Narrative Cinema." (839).

This manipulation accounts for an often overlooked fact: the android nearly always takes

the female form (Huyssen 203).

Laura Mulvey famously addresses the "Woman as Image" in "Visual Pleasure

and Narrative Cinema". Her analysis of the filmic image of woman can be applied to the

android (filmic or otherwise):

> In a world ordered by sexual imbalance, pleasure in looking has been split
>
> between active/male and passive/female. The determining male gaze projects its
>
> phantasy onto the female figure which is styled accordingly. In their traditional
>
> exhibitionist role women are simultaneously looked at and displayed, with their
>
> appearance coded for strong visual erotic impact so that they can be said to
>
> connote *to-be-looked-at-ness* (839).

It is this *to-be-looked-at-ness* which *is* the function of the android. Since the world is

ordered in such a way that men look and women are looked at – "the active/male and

passive/female" relationship – it follows that the android, in order to function, must take

the form of woman.

The clearest filmic example of the android and the gaze – although present in

Blade Runner as well – can be found in *Metropolis*. Andreas Huyssen, in "The Vamp

and the Machine" provides an excellent synopsis of exactly how the android is

constituted not only by the gaze, but by the camera itself. In reference to the montage of

male eyes, he writes:

> Woman appears as a projection of the male gaze, and this male gaze is ultimately
>
> that of the camera, of another machine…vision is identified as male vision. [T]he

74

male eye, which is always simultaneously the mechanical eye of the camera,

constructs its female object as a technological artifact (i.e., as a robot) and then

makes it come to life through multiple instances of male vision inscribed into the

narrative (208).

Since the eye of the camera is identical with the male eye, it is understood that the filmic

android is constituted by the camera in the same way that she, filmic or otherwise, is

constituted by the male gaze. Webber expresses the role of the Vamp even more

explicitly in terms of Mulvey:

From the start, Maria is established bifocally. On the one hand she acts as a

visual aid, directing the gaze of others; hence her first word: "Look!" At the same

time…she corresponds…to the desire that Rotwang…invokes in Fredersen, as he

draws back the curtain, revealing the robot in his cabinet, with the words: "Do

you want to look at her?" Thus Maria, as an object of double vision, is produced

to serve the dual drives of the visual field, showing and looking. She is a prime

cinematic object, appealing in a dialectical fashion to Zeigelust and Schaulust

(262).

Thus Maria, constituted by the gaze, is the embodiment of *to-be-looked-at-ness*. She is at

once the object of the look and its director.

Both Huyssen and Weber, however, require that the android be read not as

machine, or even as machine-woman (although they both apply some variant of this

term), but as woman alone. That is to say, they take Mulvey's notion of visual pleasure –

a theory of filmic looking and *the woman* – and apply it directly to *the android*. This

application, however, contains within it a fundamental oversight: The android is not

synonymous with the woman, even when she is in the form of the woman. Maria's double, the vamp, is like Maria – uncannily like her – but is not her, is not the same as her. The "female object as a technological artifact" is something other than woman, so cannot be made to fit seamlessly into Mulvey's theory. In short, the android, although it is female in form, must not be conflated with the Woman.

This paper has sought to place the human and the android on the same continuum, but this has not been done with the intention of reducing one to the other. The android is not identical with woman; woman is identical with the android. In the age of the android, not only is the machine made more human, but the human is made more machine. At once, the purity of both is lost and the significance of each is increased. For this reason, the cyborg is such an important metaphor for our present condition. While visual pleasure sets the parameters, the android warrants her own reading in terms of the look.

The android – the *to-be-looked-at-ness* machine – enters into a reciprocal relationship with the camera – the *looking-at* machine. It is this reciprocal relationship which necessitates a reconsideration of the visual pleasure model. The camera is designed to look, that is its purpose as a machine. The Woman, however, is not designed – at least not in any direct way – to be looked at. It is in this sense that the android fundamentally differs from woman. The android is designed – and this design is a conscious and directed effort – to be looked at. Her function as machine demands that she be looked at – this is at once a design requirement and a constraint.

The android, however, by virtue of her design, disrupts the active/passive dichotomy outlined by Mulvey. There is something different and novel about the way the camera sees the android. This difference is the result of how the android *sees* the

76

camera. Unlike the subject of the male gaze described by Mulvey, the android looks

back. This looking back not only brings her into existence, it substantially changes the

dynamic of looks. Where before the subject was completely passive – watched and

controlled without any knowledge of her position – the android acknowledges the

camera's gaze. She sees us looking. She understands the quality of her *to-be-looked-at-*

ness because she is designed to be seen.

An image of the android Maria taken from Fritz Lang's *Metropolis*. In the very first shot
of the newly formed robot-Maria, the android opens her eyes and looks directly into the
camera. This looking back not only establishes the android's existence, it undermines the
active/passive relationship between spectator and subject outlined by Mulvey.

It is not that the android takes control of the camera, but rather that the very

oppositions of active/passive, controller/controlled, spectator/subject disintegrate in her

presence. There is more than passive acceptance in the android's return of the gaze: there is implied consent to being watched. It is this consent which undermines the active/passive opposition. The spectator's look may still be one of control, but this control is mitigated by the android's knowledge of her position. Indeed, the very act of knowing her position empowers her. She may still be the subject of a controlling look, but unlike the Woman in Mulvey, she knows that she is the subject of that look. Indeed, that is what she is designed to be. Thus, by consenting to the look, the android destabilizes and exposes the spectator's position.

The spectator is no longer a clandestine operator. The android has seen his look and she is no longer the subject of his control. Indeed, he, too, is now the subject of her gaze. This leaves the spectator at lose ends. Neither empowered nor subjugated, he is made uncertain of his position. This is once again the territory of the 'Uncanny.' Watching the android is unsettling. She positions the spectator at the mid-point of dichotomies of control, and then proceeds to disband those very dichotomies. Indeed, this analysis demands a reassessment of control itself.

Control is not a zero-sum phenomenon: it can be lost at one position without being gained at another. That the android acknowledges the gaze and thereby undermines the nature of the controlling look, does not imply that she is now in control of the look. At the same time, she is no longer the passive subject of that gaze. Instead, in the context of the android, notions of controller/controlled simply don't apply. By returning the look, the filmic android disrupts the gaze of the camera and its proxy – the male gaze. In effect, she creates an uncanny equality in which she consents to and permits the controlling look of the spectator. Indeed she is designed to consent to the

look. Thus the android, in an additional uncanny twist, dissipates yet another set of binary oppositions.

The human/android relationship is, in turn, informed by the machine/machine relationship of the android and the camera. Typically, the human/machine relationship is thought of as that of master and slave. Even in the case of very simple machines, however, the human/machine relationship is never identical to the master/slave relationship[14]. Mori, in a book length study on the nature of the robot, titled *The Buddha in the Robot*, draws the entire man/machine relationship into question. The design of the machine, suggests Mori, inflicts a certain amount of control back on its human operator. That is to say, the controls, in a very real way, control the operator. "[Machines]," writes Mori, "don't do what you want them to do unless you do what they force you to do" ("Buddha" 177). In much the same way that the android reciprocates the look, the machine in general reciprocates control: it demands of its operator that it be operated in accordance with its design. This scenario, in which the machine undermines the control of its operator, has consequences for the man/android relationship.

In effect, when we interact with a machine, we become part of a system, a code and a continuum. In this system, notions of control blur. Notions of slave and master, body and mind are subverted (Haraway 176). Man controls the android directly through her programming: Olympia runs on a rudimentary, mechanical algorithm, the android Maria follows the commands of Fredersen and Rotwang and the Replicants are guided by implanted memories and hard-wired to perform their assigned specialties. At the same time, Olympia (albeit with the aid of the spyglass) impels and compels Nathanael to

---

[14] This is not to suggest that the master/slave relationship is uncomplicated. Indeed, many of the aspects of control which complicate the human/machine relationship also complicate that of the master and the slave.

forget his beloved Clara, the vamp commands the gaze of the sons of Metropolis and spurs the workers to revolution and Rachael, by virtue of vulnerability, paradoxically achieves the protection of a Blade Runner. So while the android at first appears merely to do the bidding of man, ultimately she subverts his authority and, in many cases, even precipitates his destruction.

The android has ceased to be the passive subject of male control. In fact, the very notion of control seems no longer to apply. This is exactly the sort of 'illegitimate fusion' that Haraway advocates. Indeed, all dualism dissolves in this relationship. "It is not clear," writes Haraway, "who makes and who is made in the relation between human and machine…It is not clear what is mind and what body in machines that resolve into coding practices" (177). Thus, it is our own participation in this man/machine system – our resolution into code – which completes the android story.

There are simply no dichotomies which can effectively be applied to the android. The android's function is to be looked at, yet she is not merely seen. Nor do we merely look, but are impelled to look. When the android returns the spectator's look, she is consenting to being watched. This consent renders typical notions of control irrelevant. In this system, the concepts of master and slave make no sense. Control is exerted equally in both directions. Thus the android undoes another set of oppositions. She is profoundly uncanny.

Conclusion

Clearly, there is still work to be done. This paper has attempted to condense a vast body of material into a single theory of the 'Uncanny' and the android. While *The Sandman*, *Metropolis* and *Blade Runner* have been used to illustrate aspects of this

theory, in the context of this work, a close reading of these texts is untenable. Myriad

opportunities for new research remain. While much has been written about *The*

Sandman, there is certainly no consensus on the text, and a close reading which

incorporates the ideas presented here has yet to be undertaken. Moreover, the androids of

Metropolis and *Blade Runner* seem to have received particularly little attention,

especially given the prominence of these films. As late as 1986, a thorough examination

of the motif of the android in *Metropolis* could not be found at all (Huyssen 201). To

date, there appear to be only two articles which address the 'Uncanny' and the android in

Metropolis in any real depth[15]. There does not, as yet, appear to be an effective analysis,

of any sort, of the 'Uncanny' and the android in *Blade Runner*.

There are also larger philosophical questions surrounding the android which have

yet to be addressed. The android has always raised questions about body and mind.

Dolar provides an excellent synopsis of dualism and the android since the Enlightenment:

> [If] Descartes could think of animals as machines, somewhat more complicated
>
> than human products, if he could see the human body as essentially a mechanism,
>
> a machine like a watch, it was only to highlight the difference between the *res*
>
> *extensa* and the spirit. The Galilean revolution in physics opened the perspective
>
> of the cosmos as a mechanism…and put in question the autonomy of the spiritual.
>
> A hundred years later La Mettrie's point was precisely to do away with that
>
> difference, to see the automaton not only in the body, but also in the spirit (17).

Implicit in Cartesian Dualism is not only the assumption that there is a soul and a God,

but that in order for the soul to exist, it must be separate from the body. La Mettrie

---

[15] Those are the articles by Huyssen and Weber examined in this paper.

sought to undermine the divine by illustrating the mechanical nature of the body, thereby eliminating the soul (and taking God with it). Grounded as they were in a completely material paradigm, it was impossible for either of these thinkers to imagine that the body and the mind could both be extensions of some greater whole. By confounding the opposition of mind/body, the android seems to draw the entire enlightenment project (even further) into question. In short, material/ethereal and corporeal/incorporeal dichotomies from the eighteenth century deserve a closer look in terms of the android and the 'Uncanny.'

The android has metaphysical implications as well. In her refusal to be ordered into any sort of binary opposition, the android heralds not only the end of Cartesian dualism, but of a host of dichotomies surrounding the human. Indeed, even the dichotomy of human/android vanishes. The human and the android are inherently the same. As has been argued, they are products of the same function. Put another way, the human and the android are simply facets of the cyborg. Indeed, the human becomes the cyborg by virtue of being on the same continuum as the android. Thus, what is true for the human is true for the android. This assertion has many implications, all of which warrant further study. Among these implications, however, one stands out: If man is to have a soul, so must the android. And this is a truly uncanny proposition.

Works Cited

Barthes, Roland. *Mythologies*. Trans. Annette Lavers. New York: Hill and Wang, 1972.

Blade Runner – Final Cut. Dir. Ridley Scott. Perf. Harrison Ford, Rutger Hauer, Sean
    Young. DVD. Warner Brothers, 2007.

Bresnick, Adam. "The Prosopoetic Compulsion: Reading the Uncanny in Freud and
    Hoffmann." *The Germanic Review* 17 (1996): 114-132.

Bruno, Giuliana. "Ramble City: Postmodernism and *Blade Runner*." *October* 41
    (Summer 1987): 61-74.

Cixous, Hélène. "Fiction and Its Phantoms: A Reading of Freud's *Das Unheimliche* (The
    "uncanny")." *New Literary History* 7.3 (Spring 1976): 525-548.

Cottom, Daniel. "The Work of Art in the Age of Mechanical Digestion."
    Representations 66 (Spring 1999): 52-74.

Derrida, Jacques. *Writing and Difference*. Trans. Alan Bass. 2nd ed. New York:
    Routledge, 2001.

Dick, Philip K., and Lawrence Sutin. *The Shifting Realities of Philip K. Dick: Selected
    Literary and Philosophical Writings*. New York: Pantheon Books, 1995.

Dolar, Mladen. "'I Shall Be with You on Your Wedding-Night': Lacan and the
    Uncanny." *October* 58 (Autumn 1991): 5-23.

Falkenberg, Marc. *Rethinking the Uncanny in Hoffmann and Tieck*. Bern: Peter Lang
    Pub Inc., 2005.

Francavilla, Joseph. "The Android as *Doppelgänger*." *Retrofitting Blade Runner*. 2nd
    ed. Ed. Judith B. Kerman. Madison, Wisconsin: The University of Wisconsin
    Press, 1997. pp. 4-15.

Freud, Sigmund. "The Uncanny." *Standard Edition of the Complete Psychological Works of Sigmund Freud*. Vol. XVII. London: The Hogarth Press, 1955.

Haraway, Donna J. *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge, 1991.

Hertz, Neil. *The End of the Line: Essays on Psychoanalysis and the Sublime*. New York: Columbia University Press: 1985.

Hoffmann, E.T.A. *The Golden Pot and Other Tales*. Trans. Richie Robertson. New York: Oxford University Press, 1992.

Huyssen, Andreas. "The Vamp and the Machine." *Fritz Lang's Metropolis*. Ed. Michael Minden and Holger Bachmann. Rochester, New York: Camden House, 2002.

Jentsch, Ernst. "On the Psychology of the Uncanny." Trans. Roy Sellars. *Angelaki* 2.1 (1996): 7-15.

---. "Zur Psychologie des Unheimlichen." *Psychiatrisch-Neurologische   Wochenschrift* 22 and 23 (1906): 195-198, 203-205.

Metropolis. Dir. Fritz Lang. Perf. Brigitte Helm, Alfred Abel, Gustav Fröhlich, Rudolf Klein-Rogge, Fritz Rasp. DVD. Paramount Pictures, 2003.

Mori, Masahiro. "On Uncanny Valley." *AndroidScience*. 18 Aug. 2005 <www.androidscience.com/theuncannyvalley/proceedings2005/. MoriaMasahiro22August2005.html>.

---. *The Buddha in the Robot: A Robot Engineer's Thoughts on Science and Religion.* Trans. Charles S. Terry. 7th ed. Tokyo: Kosei Publishing Co., 2005.

---. "The Uncanny Valley." *Energy* 7.4 (1970): 33-35.

Mulvey, Laura. "Visual Pleasure and Narrative Cinema." *Film Theory and Criticism*. 6th ed. Ed. Leo Braudy and Marshall Cohen. New York: Oxford University Press, 2004. pp. 837-848.

Royle, Nicholas. *The uncanny*. Manchester: Manchester University Press, 2003.

Ryle, Gilbert. *The Concept of Mind*. Chicago: University of Chicago Press, 1984.

Schulman, Michael. "Worst Nightmares: In all five boroughs, haunted houses contain local fears." *The New Yorker,* 30 Oct. 2006: 38

Tatar, Maria M. "The Houses of Fiction: Toward a Definition Of the Uncanny." *Comparative Literature* 33.2 (Spring 1981): 167-182.

Webber, Andrew. "Canning the Uncanny: The Construction of Visual Desire in Metropolis." *Fritz Lang's Metropolis*. Ed. Michael Minden and Holger Bachmann. Rochester, New York: Camden House, 2002.

Weber, Samuel. "The Sideshow, or: Remarks on a Canny Moment." *Comparative Literature* 88.6 (Dec. 1973): 1102-1133.