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BREATHING MACHINES, PATCHWORK MONSTERS AND MECHANICAL LIMBS: STEAMPUNK AND THE GROTESQUE

by

ANGELA CALABRO SANTORO

Under the Direction of Michael Galchinsky

ABSTRACT

Steampunk literature commonly focuses on improving, constructing, and reconstructing living bodies, through living machinery, vivisections, and other techno-fantastical experimentation. These bodies are grotesque forms. Focusing on various steampunk grotesque creations and creators, and exploring the audience relationship to the grotesque through an examination of the grotesque interval, this study aims to explore how steampunk authors use these grotesques to examine their own relationship with technology and scientific progress. "Breathing Machines, Patchwork Monsters, and Mechanical Limbs: Steampunk and the Grotesque," concludes by applying its analysis of the steampunk grotesque to the steampunk subculture, especially as this applies to costuming, art, music, and technology.

INDEX WORDS: Steampunk, Grotesque

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ANGELA CALABRO SANTORO

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Fine Arts

in the College of Arts and Sciences

Georgia State University

2014

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2014

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ANGELA CALABRO SANTORO

Committee Chair: Michael Galchinsky

Committee: Christopher Kocela

Scott Lightsey

Electronic Version Approved:

Office of Graduate Studies

College of Arts and Sciences

Georgia State University

May 2014

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INTRODUCTION: STEAMPUNK BEGINNINGS

In the introduction to the very first issue of *Steampunk Magazine*, Margaret P. Ratt states that, "We love machines that we can see, feel, and fear"(9). Later in the same issue, the Catastrophone Orchestra and Arts Collective echoes her desire: "steampunk machines are real, breathing, coughing, struggling and rumbling parts of the world…the hulking manifestations of muscle and mind, the progeny of sweat, blood, tears and delusions. The technology of steampunk is natural; it moves, lives, ages and even dies"(10). Most machines, and more broadly, most applied science and pseudoscience explored in steampunk literature, attempts to recreate or improve upon the living body, playing with the idea of living machinery. Steampunks, according to Rebecca Onion, "see modern technology as offensively impermeable to the everyday person, and desire to return to an age when, they believe, machines were visible, human, fallible, and, above all, accessible"(145). Onion's views reflect those of so many other critics and steampunks who see steampunk as rebelling against the soulless mass-produced technology of the modern world. Steampunk machines and inventions are "physically humanized through their added qualities of vulnerability and individuation, they are also humanized in the most literal of ways—through acting as mediators or modifiers in what could be described as steam cyborg creations"(Onion 147). These machines and inventions are far from mass produced, soulless creations. In fact, they commonly take on lives of their own, and, in the majority of steampunk literature, these creations manifest as either new living creatures, or modifications improving upon already living beings.

K.W. Jeter first coined the term in a 1987 letter written to *Locus* magazine in attempt to place a "collective term" on the "gonzo-historical", "Victorian fantasies" written by himself, Tim Powers and James Blaylock. He offhandedly proposed a name "based on the appropriate

technology of the era," not expecting it to actually "[slip] into parlance" ("Letter to" 8). The subgenre has grown immensely since then, spawning a subcultural movement of fashion, art, and even music. Despite all appearances, steampunk subculture evolved somewhat separately from steampunk literature. The literature emerged first, though there is much argument over what the first steampunk novel truly was: Michael Moorcock's 1971 *Warlord of the Air,* William Gibson and Bruce Sterling's 1990 *The Difference Engine*, and even the works of H.G. Wells and Jules Verne tend to appear in the arguments. The subcultural movement emerged much later, around 2006/2007, when steampunk internet activity began to increase, more sources for those interested in steampunk, like the popular *Steampunk Magazine*, became available, and popular media started taking interest in the trend.

Little evidence shows how the literature and subculture converged, although, with their shared interests in gears, goggles, and Victoriana, the convergence was inevitable. Gail Carriger, steampunk author of the *Parasol Protectorate* series, in her article, "Which is Mightier, the Pen or the Parasol?", contemplates this collision finally calling it "fate or serendipity or one of those cosmic coincidences" that brought together "not just the writers and the fashionistas, but the makers and the musicians and the artists as well. And we formed into a strange little social movement without any real objective, organization, or political agenda"(401). Despite the unacademic nature of Carriger's article her statements actually ring true, that the movement lacks any real, universally acknowledged objective. Mike Perschon agrees, arguing that complications arise in defining the steampunk because of the "appropriation of the term by people wanting to make more of the –punk suffix than was ever intended. They conflate steampunk with radical political positions, such as anarchy, and have attempted to define 'real steampunk' with these radical ideologies in mind"(4). Jeter himself says of the "punk" suffix that it "might have been

more of a humorous jab at a tendency going around those days, of labeling any two genre writers with more in common than bipedal locomotion as the '[insert word here]—punk' movement"(*Infernal* 7).

According to Dick Hebdige, in a subculture, "objects are made to mean and mean again as 'style'." He continues, "this process begins with a crime against the natural order, though…the deviation may seem slight indeed." The process ends "in the construction of a style, in a gesture of defiance or contempt, in a smile or a sneer. It signals a Refusal"(3). Steampunk's "crime against the natural order" lies in its ties to Victorian culture and history. As Bruce Sterling notes, "you cannot, ever, be an authentic denizen of the 19th century"(254). This time travel paradox, as Sterling points out, would be impossible to overcome, thus steampunks do not attempt to accurately mimic the past, but instead appropriate elements of the Victorian era that they believe align with their ideals and aesthetics. Sources, such as *Steampunk Magazine,* occasionally publish articles with a political lean, but upon closer inspection, most of these articles advocate only that audiences "readjust [their] relationships with the material world"(Calamity 140). Within the steampunk community, those who seek higher political gains than Professor Calamity's "readjustment" exist only as the minority.

Social groups form a hegemony, Hebdige states, when "a provisional alliance of certain social groups" can exert "'total social authority' over other subordinate groups"(15-16). This cannot be done through force or "by the direct imposition of ruling ideas," but by actually winning, changing, and gaining public opinion. This public opinion "has to be won, reproduced, sustained"(16). A subculture issues challenges to the hegemony through signs; what Hebdige refers to as the "profoundly superficial level of appearances"(17). Steampunk signs appear most commonly in the form of clockwork pieces, specifically gears, but also through goggles, corsets,

bustle skirts, and strange homemade contraptions threaded with brass wires and decorated with strange copper knobs, among other creations. Ideology "thrives *beneath* consciousness," which might be the main reason that scholars and steampunks have so much difficulty pinpointing the purpose of their own movement. Most agree that the subculture rebels against soulless, mass produced modern technology, and that is what most steampunk signs tend to signify. Gears suggest the deconstruction of an object; that an individual can manipulate and change the object themselves. To obtain the steampunk look, one must be willing to do one's own crafting, constructing, and sewing, or turn to individual artisans (and possibly pay large amounts) as no high quality, mainstream outlet exists otherwise to obtain it.

Hebdige does note that "one should not expect the subcultural response to be either unfailingly correct about real relations under capitalism, or even *necessarily* in touch, in any immediate sense, with its material position in the capitalist system"(81). Steampunk becomes in touch through its seeming out of touch quality—its reach backwards through time. The subculture does not necessarily aim to change the entire ideologies of the hegemony, but perhaps through its existence it will help to highlight he problem and offer a new way of thinking for consumers about how they should value the things they buy. "Subcultures represent 'noise' (as opposed to sound): interference in the orderly sequence…a kind of temporary blockage in the system of representation" (Hebdige 90). By merely making "noise" through their neo-Victorian, retrofuturist vision of the world, the steampunks have become one of Hebdige's "spectacular subcultures."

Most steampunks, authors and critics credit much of steampunk's development to authors like H.G. Wells and Jules Verne whose stories envisioned technology far beyond the possibilities of their time period; authors who wrote long before Jeter, Blaylock, and Powers. Jess Nevins, in

his article "The 19th Century Roots of Steampunk," ascribes much of steampunk's development to the Edisonades. These 19th century dime novels featured stories "in which a young American male invents a form of transportation and uses it to travel to uncivilized parts of the American frontier or the world, enrich himself, and punish the enemies of the United states, whether domestic(Native Americans) or foreign"(Nevins 4). While Nevins himself admits that "[f]ew if any of the steampunk writers would have read the Edisonades," his observations of first generation steampunk as an "inversion" of Edisonade ideologies are nevertheless striking. In particular, Nevins notes:

> one of the core assumptions of the Edisonade is that the inventor is larger than his inventions, that man is the master of the machine, that one sufficiently clever and inventive man can conquer, can master, can own. Nothing is beyond the Edisonade inventor's grasp—he has merely to reach for it(9).

Nevins calls "technological optimism" a primary characteristic of the Edisonade, and it is this characteristic that sets them apart from first generation steampunk. "The wearied revelation of steampunk…is that the machinery of society and life is too much for any man to contain or master, and that those who reach too far will have their outstretched arms caught in a metaphorical mangler"(Nevins 9). Even the works of Verne and Wells, despite their forward-looking extraordinary contraptions, tend to be "somewhat cautionary in nature, with a healthy unwillingness to accept 'progress' as always inevitable and good"(VanderMeer 374). Steampunk tends to embrace this somewhat cautionary nature, though no rules are set to say the subgenre or subculture must do so.

No widely accepted definition of steampunk exists, though an abundance of definitions have been proposed. Many of these are insightful, but many are also unnecessarily vague, extremely narrow, ignore elements that commonly appear in the sub-genre, or include elements that rarely appear. Author Cherie Priest calls the genre "an aesthetic movement based around the science fiction of a future that never happened"("Steampunk: What"). *Brave New Worlds: the Oxford Dictionary of Science fiction* similarly describes steampunk as "a genre of science fiction with a historical setting in the nineteenth century characterized by technologies extrapolated from the science of the era, but which were not invented at that time." Priest calls steampunk an "aesthetic" while Prucher claims it is a "genre"; Priest states that the setting takes place in "a future that never happened" while Prucher's definition argues for a "historical…nineteenth century." Adding more definitions to the mix does not help with clarification. Booker and Thomas' *Science Fiction Handbook* defines it as "A form of Science fiction that usually has thematic and stylistic similarities to cyberpunk, but is set in a world where the level of technology is roughly equivalent to the steam-powered technology of the nineteenth century"(331). Steampunk often does have "thematic and stylistic similarities to cyberpunk"; pivotal steampunk works have been written by cyberpunk authors: for example, William Gibson and Bruce Sterling's *The Difference Engine*. The *Science Fiction Handbook* places imprecise emphasis on the connection between cyberpunk and steampunk, "usually", implying that the majority of steampunk works derive from cyberpunk, although many steampunk texts have little or nothing to do with cyberpunk. Booker and Thomas mention that steampunk works are often set in a "version of the nineteenth century", however they make no mention of any sort of advanced technology, and they do not indicate any possibilities of science fictional "future[s] that never happened." The closest Booker and Thomas come to indicating any sort of futuristic

technology in relation to the nineteenth century is when they relate steampunk to terraforming, "[t]he process of using advanced technologies to modify the natural environment of another planet to make it more like that of Earth and thus more hospitable to human habitation and colonization"(331). Rarely do steampunk texts remove themselves from the Earth, although it isn't entirely unheard of—Stephen Hunt's *Jackelian* series which takes place in a fantasy world first comes to mind. Infrequently do they change the entire landscape of the Earth, though this also occasionally happens—Philip Reeve's *Predator Cities* series completely reshapes the Earth's terrain. Istvan Csicsery-Ronay Jr. introduces steampunk as "a covering term for sf implanted in imaginary pasts, in which technological inventions and discoveries that did not happen are imagined to have occurred"(108). He places steampunk in the past, and not the future, setting most steampunk texts "in the nineteenth century, when the new technoscientific phenomena simulate alternative industrial revolutions"(108).

Steampunk authors and editors in recent years have tried to expand the limits of the genre, specifically by moving the sub-genre away from the strictly Victorian London setting so commonly used. Two anthologies come to mind; firstly, editor Ann VanderMeer, in her 2012 anthology *Steampunk III: Steampunk Revolution*, selected "[s]tories that provide a different perspective and help us to see the existing world in a new light as we read about an alternative past, or perhaps a possible yet impossible future"(11) Likewise editors Kelly Link and Gavin J. Grant , in their anthology *Steampunk!*, asked authors to write stories that "explored and expanded their own ideas of what steampunk could be." They filled their collection with stories "set in Canada, New Zealand, Wales, ancient Rome, future Australia, alternate California, and even the postapocalypse—everywhere *except* Victorian London"(IX). These anthologies attempt to break the barriers that many definitions have given to the sub-genre. As Mike Perschon argues,

"Steampunk does not seek to reconstruct the past in literature, art, or fashion, but rather constructs something new by choosing elements from the Victorian and Edwardian past to create a style which evokes those periods"(4). *Steampunk!* and *Steampunk Revolution*, attempt to expand their audiences' notions of what "something new" can consist of. Perschon, in his dissertation, proposes that readers consider steampunk as an aesthetic instead of a genre, thus allowing audiences the "flexibility to discuss its diverse expressions"(5).

Perschon's steampunk aesthetic consists of three components: neo-victorianism, retrofuturism, and technofantasy. He uses these components as a lens to look at texts; they can have varying degrees of the elements, but they must possess them all to be considered steampunk and "to avoid rendering the term meaningless"(5). The first component, "neo-Victorianism", "reveals that Steampunk does not imitate, but rather *evokes* the nineteenth-century as a resonant, not accurate, mimesis…Steampunk utilizes a look and feel *evocative* of the period between 1800 and 1914, unencumbered by a need for rigorous historical accuracy"(6). A text set several hundred years in the future on an alternate world could evoke neo-Victorianism as could one set during the Victorian period in London. Technofantasy, the second component, "allows you to see technology dependent on the abandonment of real-world physics"(9). Steampunk works do not necessarily lack magic, however, as Perschon points out, "steampunk fans seem remiss to admit steampunk's connection to fantasy"(9). Thus "sciences" such as alchemy thaumaturgy, forms of magic that can imitate scientific method, take the place of actual magic, as "[m]ost steampunk gadgets and vehicles require some form of magical impulsion or cohesion to be rendered plausible"(8-9). Technofantasy allows a scientist to combine the cells of a hellbender newt with that of a corpse to produce a living breathing woman-like creature who resembles Queen Victoria. Technofantasy lets steampunk scientists build a wall of clockwork gears that

can power the inventions of an entire school, and to craft automata who seem perfectly human. Retrofuturism, the third and final component, "is the way *the present* imagines the past seeing the future"(10). Perschon notes, "[s]teampunk technology's blend of past and future often ignores the ambitions of late Victorian progressives, less concerned with sky dreadnoughts and phlogiston powered rayguns than with medical advancements and human rights"(10-11). This retrofuturism still comes into play when "characters view the nineteenth-century from a twenty-first century perspective"(11). Feelings of regret and nostalgia are connected to retrofuturism; this element shows how we—the modern reader, steampunk, or scholar—perceive the nineteenth century.

Perschon's steampunk aesthetic allows audiences to look at steampunk in degrees while other definitions ask the audience to simply judge whether a work is or is not steampunk. This fluid approach to studying steampunk, in my opinion, succeeds because of Perschon's adaptable approach. For example, most steampunk readers consider Tim Powers' *The Anubis Gates* steampunk, however, the novel lacks a strong presence of technology, or, as Perschon has proposed, technofantasy. The novel operates largely on magic, not magic disguised as technology. By examining *The Anubis Gates* using Perschon's three components, we can acknowledge that the novel does possess elements of steampunk as it is saturated with both neo-Victorianism and retrofuturism, though it lacks many of the heavier elements of technofantasy that many steampunk texts possess. Though I agree with Perschon's findings I will continue to refer to steampunk literature as a subgenre instead of an aesthetic. My experience as a bookseller and English student leads me to believe that any large group of writing with shared common features that readers, writers, and publishers all acknowledge as classified a certain way

should be considered a genre or subgenre. I will, then, continue to refer to steampunk as a subgenre of science fiction and not an aesthetic.

Steampunk varies greatly from its predecessor cyberpunk because it lacks, as Margaret Killjoy argues, cyberpunk's "hopelessness and nihilism"(396). Bruce Sterling, in his celebrated preface to the 1986 cyberpunk anthology *Mirrorshades*, states,

> Technical culture has gotten out of hand. The advances of the sciences are so deeply radical, so disturbing, upsetting, and revolutionary, that they can no longer be contained. They are surging into culture at large; they are invasive; they are everywhere. The traditional power structure, the traditional institutions, have lost control of the pace of change(x).

Cyberpunk generally confronts this surge by projecting a dystopian future or near future where technology and consumerism are truly "invasive" and "out of hand." In a cyberpunk landscape, technology is inescapable. Mark Bould and Sherryl Vint list cyberpunk clichés as: "direct human interface with computer systems and information networks; a world dominated by multinational corporations rather than national governments; AIs or other networked, sentient systems that rival human hegemony; and young, hip, semi-criminal outsider heroes who regard the body as mere 'meat'"(155). It's easy to see the relationship between cyberpunk and steampunk as they both rebel against a similar idea—though they do so in different ways. Cyberpunk rebels against the invasiveness of technology and consumerism by projecting an over-saturated world where technology and consumerism are inescapable. Steampunk seeks to add value and individuality back to technology; value lost due to modern mass production.

Works, such as Neal Stephenson's *Snow Crash* and William Gibson's *Neuromancer*, are littered with product and company names. The human body loses its value; *Neuromancer*'s Case considers his body to be "meat" and a "prison" of "flesh" once he is stripped of the ability to enter cyberspace and become a virtual body instead of a physical one(6). Y.T.'s mother, a programmer for the Feds in Stephenson's *Snow Crash*, is not permitted a fully personal space at home or at work; the Feds have bugged their house, and consider their employees to be "interchangeable parts"(281). Margaret Killjoy continues his argument by noting that "cyberpunk is perfect for social critique but it isn't a place to offer us much in the way of hope"(396). Steampunk, however, does not look towards an inevitable bleak future as does cyberpunk. It instead "processes the genre's origins: the points at which both the literary form and its technological subject emerge in tandem"(Csicsery-Ronary 108). Through this return to origins, steampunk reverses modern outcomes and offers new solutions. By "deny[ing] historical determinism," steampunk offers participants a world without mass production (Killjoy 396). Highly reminiscent of John Ruskin's essay, "The Nature of Gothic," Killjoy says, "We romanticize an era, perhaps a fictitious one, when individuals and teams built machines with love and attention to detail, sacrificing neither expense nor ornamentation to fill the world with wonders"(397).

Some element of technology is necessary to steampunk, and while every steampunk novel and short story does not involve a mad scientist obsessing over their latest creation, readers will struggle to find a text that does not involve a world changed by newfangled technology. Cherie Preist's novel *Boneshaker* centers on a widow, her son, and the aftereffects of an inventor's work gone awry. The second novel in her Clockwork Century series, *Dreadnought*, follows the adventures of a civil war nurse, Mercy Lynch, as she makes her way cross country by

dirigible, steamboat, and train. Mercy has no specific connection to technology, but it affects every step of her journey from Virginia to Seattle, Washington. Technology and technofantasy flourish in steampunk worlds and take on a multitude of forms. Steampunk's massive hulking machines, such as Babbage's Difference Engine, would probably fall under the category of the sublime. Most commonly, steampunk technology and technofantasy take on the guise of the grotesque.

According to Geoffrey Galt Harpham, the grotesque "nearly always modifies such indeterminate nouns as *monster*, *object* or *thing*"(3). The grotesque violates our "biological and ontological categories"(Carroll 297). According to Shun-Liang Chao, "the grotesque is, first and foremost, physically in-between or *trans*-formal"(8). It appears to be familiar by incorporating known elements, but fits into no category known to its audience or creator. Grotesqueries,

> stand at a margin of consciousness between the known and unknown, the perceived and the unperceived, calling into question the adequacy of our ways of organizing the world, of dividing the continuum of experience into knowable particles…As a noun it implies that an object either occupies multiple categories or that it falls between categories; it implies the collision of other nouns, or the impossibility of finding a synonym(Harpham 3).

The collage-like cover of Paul DiFilippo's *Steampunk Trilogy* illustrates this through the various pieced together figures that it features.

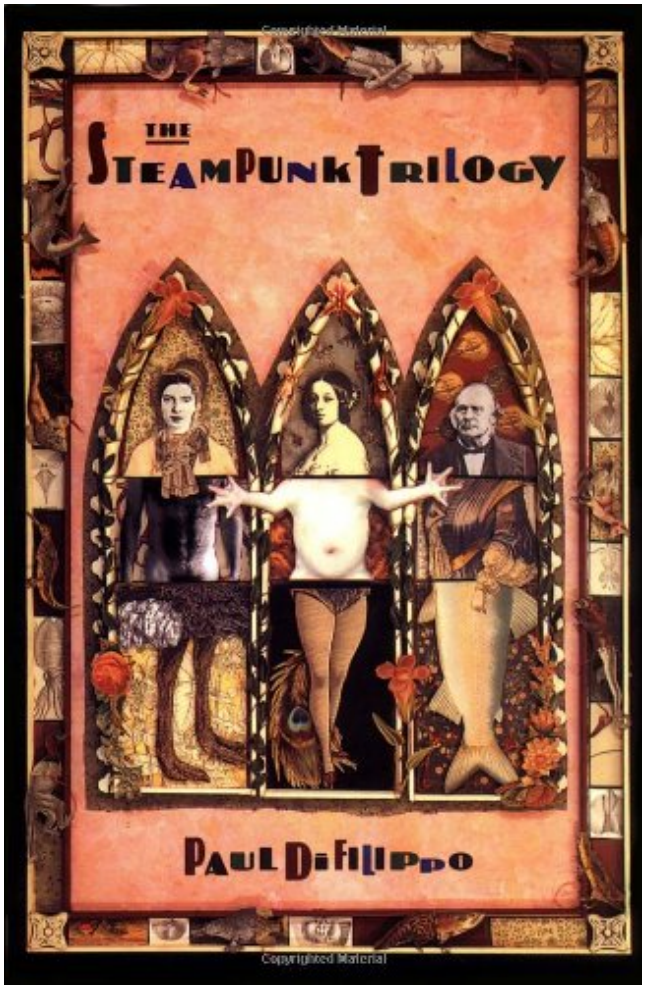

Figure 1. Cover of Paul DiFilippo's ***The Steampunk Trilogy***

The center figure of Queen Victoria features Victoria's head cut off beneath the shoulders to reveal an amphibian torso with arms outstretched. Beneath the amphibian torso are the legs of a burlesque dancer whose costume includes a large peacock feather which resembles a tail. The creatures that crawl along the border are halves of creatures stitched to halves of other creatures: animal heads on fish bodies, amphibian tales on bird bodies. The thread that binds the halves together hangs off as if the creatures were not complete; it leaves viewers with the idea that these creatures could be taken apart once more and reassembled as something different. The pieces are

familiar, however we don't have a name for them as they are reassembled; they have become new, odd, unfamiliar beings. They are grotesque.

Several steampunk sources have tipped their hats to John Ruskin's "The Nature of Gothic" including Jeff VanderMeer and S.J. Chambers' *The Steampunk Bible* and Bruce Sterling's essay, "The User's Guide to Steampunk." VanderMeer and Chambers state, "Just as many Steampunks claim that that subculture arose in part from the dissatisfaction with modern, seamless, antiseptic technology, so too the Arts and Crafts movement occurred as a reaction against the inroads of industrialization"(98). Ruskin felt that value should be placed on a worker's creativity, intelligence, and imperfection; this imperfection signifies both beauty and humanity. For whatever reason, steampunks and scholars have never looked past Ruskin's Arts and Crafts Movement ideals to the six characteristics or moral elements that Ruskin names at the beginning of his essay as fundamental to the Gothic: Savageness (or Rudeness), Changefulness (or Love of Change), Naturalism (or Love of Nature), Grotesqueness (or Disturbed Imagination), Rigidity (or Obstinacy), and Redundance (or Generosity). Of all the elements, he dedicates an entire chapter of his work to the grotesque, a term which did not begin its life as literary term, but instead an architectural one.

The first citation of the word in the OED also describes it as such, "A kind of decorative painting or sculpture, consisting of representations of portions of human and animal forms, fantastically combined and interwoven with foliage and flowers"(1.b). The word itself derives from the Renaissance excavations of Rome, specifically of Nero's Domus Aurea. Artists, antiquarians and their guides would make their way via hazardous tunnels into the ruins to study the frescoes and carvings on the walls and ceilings. These designs were eventually referred to as "grottesche" due to the underground caverns, or "grotto", where they were found(Harpham 27).

These images, as described in the OED, consist of the weird merging and intertwining of various human, animal, and plant forms. Many of the creatures appear almost mythological, and many are un-nameable misshapen things sprouting from vines. Only in a dreamscape could these images be comfortably present, and even then their appearance would be questionable.

Mikhail Bakhtin states, the grotesque "seeks to grasp in its imagery the very act of becoming and growth, the eternal incomplete unfinished nature of being"(52). In the grottesche many aspects suggest this movement from the weaving and intertwining of the figures to the impossible blossoming of human and animal like creatures from foliage and flowers. The "etymological trap of *grotto-esque,*" according to Paulette Singley, is that it "renders a chthonic descent into a myth of eternal return: every time we invoke the grotesque we must return to the cave. In this sense, then, the grotesque is both a stylistic category and the multitude of bizarre fantasies released when exploring architecture's psychological underground"(111). Singley's "myth of eternal return" touches on the ideas of death and rebirth that Bakhtin proposes. Movement and possibility for change suggest life, and the grotesque is a living thing. Noël Carroll proposes that the grotesque is limited to "beings" or "things perceived to be animate, which would include science fiction robots"(297). Carroll argues that inanimate objects can only be considered grotesque as a metaphor. I will consider the grotesque as a living thing throughout my exploration of the steampunk grotesque. While it's easy to see a vivisected monster as a living thing, it may be more difficult to accept a machine as living. Returning to the words of the Catastrophone Orchestra and Arts Collective, "steampunk machines are real, breathing, coughing, struggling and rumbling parts of the world…the hulking manifestations of muscle and mind, the progeny of sweat, blood, tears and delusions. The technology of steampunk is natural; it moves, lives, ages and even dies"(10). By forming living creations, as opposed to non-living

creations, Steampunks add value to their works and ideas. Just as readers express horror at H.G. Wells' Dr. Moreau and his cruel vivisections, so too do readers find themselves emotionally involved in the manipulation of other living forms, even forms that do not involve living flesh. K.W. Jeter's Paganinicon unsettles George Dower, after whom the automaton was modeled, and sexually arouses all women in his vicinity. The killer automata that appear at the end of Lev Ac Rosen's *All Men of Genius* invoke feelings of terror. Steampunks play with the grotesque because of the range of emotion that it can evoke: from joy to confusion to terror. What better way to understand modern relationships with science and technology, than to do so by forging emotional connections with it?

The next three chapters will examine three elements of the grotesque as they appear in steampunk texts: the created (the vivisected creature, odd automata, extreme prosthetic, and other miscellaneous creations that should not truly exist), the creator (the mad inventor/inventress or scientist), and the interval (the moment when the characters in the novel or the audience must figure out what to do with the created). For these chapters I will focus on steampunk literature to examine the way steampunks approach the grotesque—living breathing science and technology—through imaginative landscapes. I will conclude by applying my findings to the real world steampunk subculture via Thomas Willeford's craft book, *Steampunk Gear, Gadgets, and Gizmos*. Willeford's book will help to show the intersection between fictional and real world landscapes, and how these fictional grotesques can be projected into the subculture through fashion and art.

CREATED: THE MONSTER, THE MACHINE, AND THE MONSTER-LIKE MACHINE

Mikhail Bakhtin begins his chapter, "Grotesque Renaissance", by telling readers that "[e]xaggeration, hyperbolism, excessiveness are generally considered fundamental attributes of the grotesque style"(303). A grotesque can move outside the limits of what we think is possible; as Bakhtin explains, "an object can transgress not only its quantitative but also its qualitative limits, that it can outgrow itself and be fused with other objects"(308). The grotesque body, "seeks to grasp in its imagery the very act of becoming"(52). As an "act of becoming," the grotesque implies change and movement; it does not necessarily imply actual change, but the possibility for change. Geoffrey Galt Harpham states, "Grotesque forms place an enormous strain on the marriage of form and content by foregrounding them both, so that they appear not as a partnership, but as a warfare, a struggle"(7). Elements can overcome other elements, or they are perceived as able to overcome other elements. According to Philip Thomson, the grotesque is a "violent clash of opposites"(11). The cover of DiFilippo's *Steampunk Trilogy*, as I've already mentioned, demonstrates this in a literal way, by linking creatures together in a manner counter to natural order, and by doing so in a way that implies that the newly created unnatural order can change.

DiFilippo's novella, "Victoria," similarly demonstrates these concepts through use of vivisection as its technofantastic element. Though readers never fully learn the details of her creation, scientist Cosmo Cowperthwait's newt-Victoria has "a fine slick epidermis that seems to draw one's fascinated touch," and her "long thin flexible, slightly webbed digits" are enough to make a man swoon (9). Her creator, Cowperthwait, calls her both "hauntingly attractive"(9) and "a monster of nature"(10). She eats insects and "larval masses" skimmed from the "many

pestilent pools of standing water scattered throughout the poorer sections of the city"(10). Her skin must be kept moist since "her looks are a result of an admixture of newt and human growth factors. Fresh cadavers—"(15). Hellbender newts, the particular species Cowperthwait used, are a breed of aquatic salamanders that must keep wet because they breathe through their skin; these are not particularly attractive amphibians. The hellbender qualities of newt-Victoria should raise feelings of disgust, however, characters commonly respond to her throughout the text with lust. It isn't until Cowperthwait informs Prime Minister Melbourne that "fresh cadavers" were used in her creation that Melbourne becomes momentarily repulsed by the thought of her, but he easily forgets his momentary repulsion, and replaces the feeling with sexual attraction once again. Newt-Victoria evokes several dueling natures: life and death, human and amphibian. While I will save a discussion of the emotions felt while experiencing the grotesque for my later chapter on the grotesque interval, I would like to briefly note the dueling emotions caused by the grotesque. Her sexuality repulses the reader while attracting the novella characters, and neither response can be fully reconciled. The repulsed reader knows that the characters are sexually attracted to the newt-Victoria, and are therefore conflicted. The sexually attracted characters know that they should be repulsed by the newt-Victoria out of a sense of propriety, and are therefore conflicted.

Other texts similarly fuse creatures together in unnatural ways, sometimes fusing man and metal, other times fusing creature with creature, and occasionally unveiling the slow process of evolution and devolution. Bakhtin states that "[t]he events of the grotesque sphere are always developed on the boundary dividing one body from the other and…their points of intersection"(322). These points of intersection show how a creature was formed and distinguish the creature from the realm of the known. Sometimes these lines are blended, and the seams are invisible to the naked eye, as with the newt-Victoria. Other times they are easier to distinguish,

as is the case with K.W. Jeter's Paganinicon who simply unbuttons his shirt to reveal, "not flesh, but a skin of molded shiny metal." The Paganinicon, as a grotesque, can peel apart even further, "He reached beneath where his bottom ribs would have curved, and lifted upward. I stared in utter amazement. No heart, no bone, no human ligament or vein. Inside a metal cage gears whirred and meshed. Wound springs intertwined with each other, and ticked off the slow measuring of his artificial life"(256). The steampunk grotesque emerges from technofantasy, thus some mad scientist or inventor has assembled the machine/monster by hand. It wasn't born, it was created, therefore if we look closely enough we can see its points of origin. DiFilippo taunts his readers with the newt-Victoria's origins but never actually shows them; we almost learn how she came to be, but as Melbourne silences Cowperthwait in disgust before he can reveal all, we never truly learn how she came to be. We can only recognize some of her sources and try to make sense of her.

Lev Ac Rosen's Professor Herbert Bunburry, from his novel *All Men of Genius*, yearly anticipates his oncoming grotesque change. As the mechanical science professor at Illyria College, he has come to assume that something will go wrong and his body will, once again, change. "Bunburry had long ago given up on supposing there might not be an accident each year"(153). He views this change as a perpetual, yearly event; it is not an intentional change, the results are unpredictable, and it only effects Bunburry, not the other professors or students. Following each accident, or change, Bunburry "fixed himself up", remodifying his body for functionality(154). His list of injuries is both excessive and extensive:

> so far he had lost his eyebrows when an engine burst in to flames,
> broken his leg and foot after a short statured but particularly
> fearsome device had barreled into him at high speed, and broken

> his forearm after an innocently constructed mechanical singing bird plummeted into him and revealed itself to have a shockingly sharp beak. There had also been the year that Curio's new oil substitute had exploded and turned him dark as a Moor for several months, and last year, when Cecily's new chemical adhesive had resulted in his not being able to unclench his left hand from a fist for eight weeks. And of course, there was the first accident: an attempt by a student to make a automatic smithy—a giant forge with arms and legs. That had burned his neck and broken it, making it as fragile as a blade of grass(153-4).

With such a lengthy list of injuries it's no surprise that he anticipates more each year. Each injury has changed and sculpted his body into something new. The grotesque body, according to Bakhtin, "is not a closed, completed unit; it is laid on those parts of the body that are open to the outside world, that is, the parts through which the world enters the body or emerges from it, or through which the body itself goes out to meet the world"(26). The many accidents have singed off hair, changed color, bent and broken, and sculpted Professor Bunburry's body; parts of his body have gone out to "meet the world." In reparation of his body, the world enters in by means of metal and wood.

Bunburry's injuries demonstrate two concepts: the outside world merging with the grotesque body, and the potential for prosthetics to fall under the category of the grotesque. Bunburry does not vivisect himself; he does not use living things to repair his broken body. Instead, he uses metals:

> The mechanical kneecap prototype he had put into himself had since helped many others. The metal plate on his shoulder doubled as a small cabinet in which he kept vital tools, so he was never without them; and while the neck brace did make certain aspects of life—looking down, or up, or, really, anywhere but right in front of him—difficult, it was also oddly soothing, having the cool metal around his neck all day(154).

The metal pieces become a part of Bunburry; they are a second skin to him. "One of the Fundamental tendencies of the grotesque image of the body is to show two bodies in one: the one giving birth and dying, the other conceived, generated, and born"(26). Bakhtin constantly revisits the concept of death and birth in relation to the grotesque. The grotesque constantly becomes something else; it constantly sits on the verge of becoming something else, whether or not this action ever happens. In Bunburry's case it does happen and it continues to happen. He sits on the verge of the death and rebirth of his body because he expects it, and therefore so does the audience. The inescapable accident occurs later in the novel when a metal brake flies off of an experiment and slices off his left buttock. When he awakens in the hospital Bunburry requests of the duke, "'if I were to draw up some plans…for a—well, a replacement for what I am now lacking—would you be able to construct it?'"(328). This signifies that his body will change once more.

Prosthetics, while certainly not usually grotesque, can be grotesque—when they have the potential for perpetual change. Dismembered body parts, according to Bakhtin, "are never stressed unless they replace a leading image"(318). In *All Men of Genius*, for example, we never lose sight of Bunburry's body as a whole. The text only provides one instant when the severed

piece is mentioned. “Wait—was it the right buttock with the star birthmark? Or the left? He looked at the flesh on the ground. It was blank, aside from a few hairs. Bunburry smiled and passed out, his head falling with a clang next to his ass”(327). Rosen briefly, and humorously, mentions the severed piece, and in doing so, “the essential topographical element of the bodily hierarchy turned upside down; the lower stratum replaces the upper stratum”(Bakhtin 309). This instance differs slightly from the one Bakhtin discusses because the stratums do not replace one another, instead buttock—lower stratum—meets head—upper stratum. This meeting of stratums evokes laughter, and the purpose of mentioning Bunburry’s buttock is simply to evoke the comic grotesque. The buttock disappears after this moment, and we never hear of it for the remainder of the text.

Prior to the novel’s event’s, *Boneshaker*’s Lucy O’Gunning had both arms amputated. Her arms weren’t removed via a single operation. The first amputation was done because she had been bitten by a zombie on her thumb. Her hand was initially amputated at the wrist to stop the spread of the infection from the bite. The infection spread and the second amputation was taken from directly above the elbow. The third amputation removed the rest of her arm from her shoulder. Two years later she lost her other arm to an explosion. The mechanical arm which “looked so heavy and weird” to Lucy before it was attached was eventually grafted to her bone by drilling holes in it with a wood bore(262). Focus never falls on the severed pieces as it does momentarily on Bunburry’s missing part, but only on the pieces that are actually attached to her body at any given moment. Priest does not comically reverse the stratums as Rosen does, but instead presents the incident as the terrible grotesque. Lucy’s horrific amputation and prosthetic attachment unnaturally fuse human with metal by means of a wood bore, a tool intended to create holes in wood, not people.

Steampunk takes the concept of prosthetics to excess. Modern prosthetics aim to give the user as natural functionality as possible; to allow them to complete tasks that would be difficult or even impossible without their presence. They aim to look aesthetically pleasing, and to fool the eye into missing the fact that the replacement limb isn't real flesh and blood. Cherie Priest's *Clockwork Century* novels take place around the 1880's and Priest tells us that the Russian's announce their contest awarding 100,000 rubles to the inventor who could "produce or propose a machine that could mine through ice in search of gold"(16). Lucy O'Gunning would begin the process of losing her limbs in the years after 1960 and use of anesthesia first began in the 1840's. The loss of her limb, and the reattachment of her prosthetic cause her to fall under the terrible grotesque because of the horrifying nature of its attachment. Her attitude towards her grotesque changes as time goes on and she is certainly grateful for it, but her situation clearly foils that of Professor Bunburry who, despite his excessive loss of flesh and limb, never experiences the pain that Lucy does. His excessive grotesque falls under the ludicrous. The grotesque "is looking for that which protrudes from the body, all that seeks to go out beyond the body's confines. Special attention is given to the shoots and branches, to all that prolongs the body and links it to other bodies or to the world outside"(316). In Professor Bunburry's extreme circumstances, his body continually seeks to leave its confines, and as a result he excessively adds new parts to himself. Protruding grotesque forms and objects, however, can be effectively approached on a smaller scale.

The grotesque image of the nose, according to Bakhtin, "always symbolizes the phallus", and DiFilippo's Lord Chuting-Payne lost his nose in a duel(316). "Von Schindler, revealing himself as a coward and caitiff, had fired while Chuting-Payne was still turning, blowing off the man's nose"(38). The way the nose was removed, and Lord Chuting-Payne's triumph over the

remover lend credibility to Bakhtin's metaphor. "Immense quantities of blood streaming down his face, Chuting-Payne had then calmly drilled von Schindler through the heart"(38). Lord Chuting-Payne realizes he must prove his masculinity, and calmly dispatches his enemy.

> The jewelry firm of Rundell, Bridge & Rundell…had been employed to melt down some family sterling and fashion a prosthetic silver nose to replace Chuting-Payne's missing flesh one. They had exerted all their skill, and the resulting simulacrum was a marvel to behold. Affixed by gutta-percha adhesive, the nose was said to be capable of exciting the most jaded of women(38).

Chuting-Payne loses a nose, regains a more valuable replacement, and this, in turn, increases his sexuality. The replacement nose, however, is a removable feature, and when Cowperthwait falls on him while dancing at de Mallet's brothel, "[t]he dead tissue and gaping holes in the center of face were revealed before the whole room. Strong men fainted and woman screamed./Chuting-Payne accepted his nose back from Gunputty and stuck it back on his face. Unfortunately, it was upside down"(65). The accident decreases his sexuality, and suggests his impotence. The moment he stands in the brothel missing his nose is enough for both men and women to see him as a thing of horror and disgust. The duel, which happens after the unfortunate accident, does not reaffirm his masculinity as the first duel did. Loss of the silver nose castrates him, emasculates him, and, essentially, exposes him as a villain; while Cowperthwait himself does not manage to shoot him, Prime Minister Melbourne does in response to Chuting-Payne's "treasonous intentions"(72).

The eyes are the only features that rarely appear as grotesque, "the nose and mouth play the most important part in the grotesque image of the body; the head, ear, and nose also acquire a grotesque character when they adopt the animal form or that of inanimate objects. The eyes have no part in these comic images." While Bakhtin does amend his statement to say that the grotesque "is interested only in protruding eyes," he considers the eyes to "express an individual, so to speak, self-sufficient human life, which is not essential to the grotesque"(316). Though Bakhtin says that the "eyes have no part", he means that they *usually* have no part in the grotesque image. The steampunk grotesque frequently makes use of the eyes.

Grotesque eyes in K.W. Jeter's *Infernal Devices* are usually large, protruding and piscine. George first comes across the disfigured visage of one of the citizens of Wetwick in the form of a wax doll.

> The striking aspect was its extraordinary face: a crude parody, as though the maker's rude art had meant to represent some animal other than the human. Sloping forehead, goggling rounded eyes, and protruding lips over a non-existent chin; these features gave a distinctly piscine impression, as if a herring fresh off the fishmonger's slab had been dressed in a plaything's clothes(61).

Both George and his watchmaker friend expected the doll to have a human appearance, and this fishlike creature disgusts them in large part because it doesn't meet this expectation. When George finally stumbles across the path of the people from which the doll was modeled, the citizens of Wetwick, their most striking features are the eyes. "The round protruding eyes gave the man whose shoulder I still grasped a deceptive appearance of stupidity"(105). He continues on to say that the citizens "were all possessed of the same goggling features"(105).

Soon after, George spies a young child who, separated from her parents, started to cry and was wiping tears from her "protuberant eyes"(106). While the citizens of Wetwick with their fishlike bulging eyes might be easily deceived, they are no less intelligent than the average human. They hide intelligence and emotion, or, as Bakhtin suggests, the characteristics that "express an individual."

The citizens of Wetwick are not the only steampunk grotesques with bulging eyes. Steampunk goggles are a common and, some would argue, often overused aspect of steampunk sub-culture fashion. Cherie Priest employs them to advantage in her Clockwork Century novels. "All the workers wore goggles with polarizes lenses. For reasons no one fully understood, such lenses allowed the wearer to see the dreaded blight"(*Boneshaker* 45). The cover of her novel, *Boneshaker*, features a woman's face, presumably belonging to Briar Wilkes, sporting a pair of these goggles. The goggles completely hide her eyes from view, and bulge out of her face inhumanly. Accompanying these goggles are gas masks meant to filter the air into a breathable substance since the air in Seattle is toxic. Jeremiah Swakhammer's mask "gave his face the shape of a horse's head crossed with a squid"(150). Doctor Minnericht's mask gives the appearance that he lacks eyes: Zeke "could have sworn that the man did not have any eyes, but behind the visor of the elaborate mask, two blue lights burned sharply where his pupils ought to be"(325). In her second Clockwork Century novel, *Dreadnought*, Mercy Lynch watches as, "[t]he boys also pulled out masks made of leather and glass, affixing them to their faces until everyone looked insectlike"(389). Mercy, with a little help, affixes her own mask, and we learn that, "her face turned buggy by the contraption she wore"(390). These masks transform their wearers into beings no longer quite human; they change the entire shape of the head. They also

change the wearer's perception of the world, by limiting both vision and breathing. While wearing the mask the wearer no longer functions like a normal human.

In the case of the evil Dr. Minnericht, the grotesque is both his assumed facial features via his mask and goggles, but also his true appearance underneath.

> Dr. Minnericht's mask…made him look less like a mechanical animal than a clockwork corpse, with a steel skull knitted together from tiny pipes and valves. The mask covered everything from the crown of this head to his collarbones. Its faceplate featured a flat pair of goggles that were tinted a deep shade of blue, but illuminated from within so it appeared that his pupils were alight(307).

Occasionally, as is the case with Doctor Minnericht, removing the mask only reveals more grotesqueness: "it was not a whole face. Skin bubbled up in a gruesome scar as big as a handprint from the man's ear to his upper lip, sealing his right nostril shut and tugging at the muscles around his mouth. One of his eyes had difficulty opening and closing because the ruined skin verged on its lid"(331). Though his real eyes don't protrude, the skin from his scar does. It almost entirely closes off one eye, and the bubbling scar tissue rebuilds the landscape of his face by sealing off the nostril and changing the muscle movement around his mouth. Both the gas mask and Minnericht's mutilated face are mechanisms to hide his true identity.

Bakhtin considers the grotesque mouth "the most important of all human features for the grotesque." Other features of the face, the eyes and nose, the ears, cheeks, chin, "are only a frame encasing this wide-open bodily abyss"(317). The grotesque ignores the "closed smooth, and impenetrable surface of the body and retains only its excrescences (sprouts, buds) and

orifices, only that which leads beyond the body's limited space or into the body's depths"(317-18). As an orifice, the mouth marks a place where things can enter the body and be consumed, or leave the body and be vomited out. The gaping mouth "is the open gate leading downward into the bodily underworld"; it is "related to the image of swallowing, this most ancient symbol of death and destruction"(325). The walled city of Seattle from Cherie Priest's *Boneshaker* stands as a metaphor for the grotesque gaping mouth.

The wall, a "marvel of engineering", was erected around the city of Seattle in order to contain blight, a gas that turns humans into zombies—or "rotters", as Priest calls them. It "stands approximately two hundred feet high—depending on the city's diverse georgraphic constraints—and it averages a width of fifteen to twenty feet. It wholly encircles the damaged blocks, containing an area of nearly two square miles"(19). The wall is a massive unmovable structure, and it has swallowed an entire city and its inhabitants. Briar Wilkes first enters the city through the air vents which reach up over the sides of the wall to suck down clean air for the doornails, the living non-zombie inhabitants of the city, to breathe. "As she toppled, a new and separate sound became louder and louder. It was hard to single it out over the clattering calamity of her descent, but there it was, a windy soundy—in, out, in, out—as if some great monster waited openmouthed and breathing at the bottom"(111). These vents lend animation to the walled in city; it doesn't simply stand and collect blight: it breathes.

Open gaping jaws are a "vivid expression of the body as not impenetrable but open"(Bakhtin 339). The open jaws and the wall are one in the same, allowing the city to affect the world and the world to affect the city. "The gaping jaws are a wide entrance leading into the depths of the body, and these characters are accentuated by the fact that an entire inhabited universe is located in…[the] mouth and that people can descend into the stomach as into an

underground mine"(339). Though Bakhtin here describes Pantagruel's mouth, his description also evokes blight stricken Seattle. Early on in *Boneshaker* an earthquake causes the underground tunnels, the main method of entering the city, to collapse. The only way to enter the city after the collapse is over the wall via airship. The bowl-like wall, or, to continue with our metaphor, massive gaping jaw, swallows all who enter. Those who do enter the city venture down into the bowels of the city: the underground tunnels where the doornails live that have been sealed off from the blight and the rotters. Bakhtin says, "[t]he bodily depths are fertile; the old dies in them, and the new is born in abundance"(339). The "bodily depths" of Seattle are fertile in two ways. Firstly, the outside world assumes that no one, besides the living dead, still lives within the city when, in fact, a small population lives and thrives in the cities bowels. Secondly, the city embodies a constant cycle of life and death due to the blight. Those who perish are brought back to life as the living dead.

The grotesque has no set form, only common characteristics, which may be why so few scholars attempt to tackle the particulars of its appearance. Bakhtin's descriptions of the grotesque imply its fluidity. It has no fixed or settled shape. The grotesque usually, though not always, has a creator present, whose intentions influence the changes it makes.

CREATOR: THOSE WHO MAKE OUR MONSTERS AND MODIFY OUR MACHINES

At the beginning of his chapter on John Ruskin entitled, "Art and the Machine," Herbert L. Sussman poses several questions close to the hearts of steampunks and Ruskin himself. One of them reads, "If the machine reproduces one thousand exactly similar carved piano stools, is each a work of art?"(76) Sussman explains that for Ruskin, "In a world properly understood as a living organism rather than as a giant steam engine, machines of iron failed in any way to imitate the beauty of God's world"(77). John Ruskin and the modern steampunk do not live in the same time period and their views on technology are unarguably different. As Bruce Sterling states, "The Industrial Revolution has grown old. So machines that looked satanic to the Romantics now look romantic"(254). Despite the clear differences in attitude between the steampunk movement and the Arts and Crafts movement, both would agree that the mass produced piano stool proposed by Sussman lacks in artistic merit. Both Ruskin and the steampunk movement see value in the work of human hands, and desire that a human creator be included in the creation process. Their ideals split, as Sterling points out, in their separation (or lack of separation) from the Industrial Revolution. Ruskin denies the beauty of the steam engine, but steampunks, who live in a world saturated with technology, see beauty in this massive piece of machinery. Ruskin couldn't fathom the machine-made, impermeable technology of today. The steam engine, for steampunks, is permeable; a man or woman can take tools to and repair or reshape the machine; they can step inside and alter its internal composition. The iphone, alternately, is a small, closed off piece of technology; its creators make and mass produced it with the intention that no one should take it apart to explore its inner workings, and therefore it is not easy to take apart. To steampunks the alterable technology of the past takes on life, because

of its possibility for modification; the possibility that a creator can explore and change the machine.

Steampunk creates a world where these creators can work, meshing a nineteenth century feel with modern sensibilities towards technology. Mad scientists, inventors, and tinkerers are inescapable in steampunk literature, and in many cases they instigate the actions of the story whether they are present in the story or not. Leviticus Blue, for example, never appears in the text, but, without his Boneshaker drill, the events of the text would not have happened. Steampunk literature often positions these characters as leads, however they are not always the main character. Their inventions can also motivate the actions of the story without the scientist or tinker present: Cosmo Cowperthwait and Violet Adams are both inventors, while Briar Wilkes and George Dower are merely affected by the inventions of others—Briar her dead husband and George his dead father. Much of Ruskin's analysis of the grotesque examines intentions of the creator and the effect this has on their creation. Cosmo and Violet control their own fates through their inventions, but Briar and George's futures are propelled by those who came before them and the careless thoughts they put into their inventions.

John Ruskin does not particularly like the grotesque. Of the Renaissance grotesques to which he refers in his chapter, "Grotesque Renaissance", most were made by "self indulgent" minds; minds in which, "There was not strength enough in them to be proud, nor forethought enough to be ambitious." These works are "distinguished by a spirit of brutal mockery and insolent jest, which exhausting itself in deformed and monstrous sculpture, can sometimes be hardly otherwise defined than as the perpetuation in stone of the ribaldries of drunkenness"(113). The grotesque has a multitude of irredeemable qualities, but because it appears, "in the most noble work of the Gothic periods," Ruskin believes that "it becomes, therefore, of the greatest

possible importance to examine into the nature and essence of the Grotesque itself, and to ascertain in what respect it is that the jesting of art in its highest flight, differs from its jesting in its utmost degradation"(114). These different types of jesting occur because of the intentions of the creator. Ruskin argues that it is composed of two elements, the ludicrous and the fearful, and as one of these prevails it then falls into two branches, the sportive and the terrible. Most grotesques are made up of a combination as, "there are few grotesques so utterly playful as to be overcast with no shade of fearfulness, and few so fearful as absolutely to exclude all ideas of jest"(127). The grotesque, whether ludicrous or fearful, is a playful creation.

At first glance, the work of these steampunk creators may not seem like play, but closer examination of them reveals that it is in play that they create what we consider their work. Ruskin reminds us that "a healthy manner of play is necessary in order to a healthy manner of work"(127). Work and play are linked. He continues, "because the choice of our recreation is, in most cases, left to ourselves, while the nature of our work is generally fixed by necessity or authority, it may be well doubted whether more distressful consequences may not have resulted from mistaken choice in play than from mistaken direction in labor"(127). Lev Ac Rosen's Violet Adams, for example, invents and creates because she enjoys it; she simply loves science. Her passion for both her work and play, and the thoughtfulness which she puts into her creations place her as one of "[t]hose who play wisely." Ruskin calls this the "highest and healthiest state" available to "ordinary humanity." She works, "yielding to the impulses of natural delight", but "never without such deep love of God, of truth, and of humanity, as shall make even its slightest words reverent, its idlest fancies profitable, and its keenest satire indulgent"(128). Violet, our protagonist, is an actual "good guy", a heroine. Like all the great superheroes, Violet seeks the greater good; for women to be equal to men. Her initial idea for her final project was a

clockwork engine that never needed winding. She quickly realized that while the idea of the engine might be brilliant, no one will pay it any heed if she fails to display it in an eye-catching way. Professor Bunburry suggests she use the engine to power a dancing girl. While Violet agrees that this would be an easy way to demonstrate her engine's abilities, she does not agree with the actual concept. "What else were women supposed to do other than dancing and bearing children?"(Rosen 132) Violet feels a kinship with the potential dancing girl as she herself was, "painfully binding her gender and trying to prove that she deserved an equal hand in the scientific world"(132). Her final creation takes into consideration "love of God, of truth, and of humanity" through its heartfelt consideration of the human, specifically the female, form. The machine she creates allows the wearer to possess great strength by stepping into a gigantic machine shaped like a woman. "Her machine would be more beautiful than the loveliest mechanical dancing girl, but its purpose would be more beautiful, too. It would make women into a symbol of strength"(160). Because of the consideration Violet put into her machine, the female form successfully conveys her message.

Violet's machine, Pallas, is a grotesque in the most noble of senses. She lacks feet, and instead has wheels hidden by her dress. This both cripples her, and allows her to move faster. More importantly she possesses an extra eye on her chest in the form of a large brooch, and, in true Bakhtinian fashion, this eye displays the soul of the creation. This eye is "really a glass window from which the pilot could see out from", and Violet, our strong woman, becomes the soul and creator of her own machine when she steps inside. Pallas' "hands were out of proportion—incredibly large, and with visible joints, but as she was already made of metal, this bit of inhumanness lent her a powerful air"(423). Her hands, grotesquely enlarged and hugely unfeminine, grant Pallas the powerful air she was intended to have, contrasting all notions that a

woman's hands should be fragile and delicate. Likewise, Pallas imparts this power to her creator, and women in general, through a birthing metaphor. Though Violet creates Pallas, and is therefore both mother and father to Pallas, each time Violet steps inside to operate her machine she is consumed by her creation and impregnates it. Violet is born from Pallas when she steps out of her machine and takes on new characteristics when she steps out. She gains the strength she aims to gain, and Pallas' womb also provides her a place for actual transformation. Within the safety of the mock womb Violet is able to change sexes, from male to female.

The third type of Ruskin's players, the inordinate player, appears more frequently in our texts than the necessary player, the second type, due in large part to circumstance. Any techno-scientific inquiry implies that the players "be more refined and more highly educated than those who only play necessarily; the power of pleasure-seeking implies, in general, fortunate circumstances of life"(135). In the case of our neo-Victorian landscape, the education of the population often mimics the education of the past. Those who are financially well off are much more likely to receive an education than those who are not. Violet has the means to receive this education but her gender prevents her from inordinate play; she must play wisely in order to be allowed to play at all. In comparison to the novel's villain, the inordinate player Malcolm Volio, Violet's type of play puts her at an advantage. Ruskin says of the inordinate player, "that their play will not be so hearty, so simple, or so joyful," and also that the "art through which this temper is expressed will, in all probablility, be refined and sensual—therefore, also, assuredly feeble"(135). Ruskin predicts that the "failure of joyful energy" in the work will result in failure of "its perceptions and its sympathies" and it will ultimately lack "expression of character, and acuteness of thought"(135-6). Violet's wise playing implies that she both works and plays mechanical science. She knows it, understands it, and is willing to accept new ideas and failure

as means to a perfect finished product. Volio, as an inordinate player, assumes he possesses this intelligence and wise-ness without ever taking the time to actually earn these qualities.

On his eleventh birthday, the previous Duke of Illyria presented Volio with a key to Illyria; a key to help him unlock hidden doors and explore the schools secret passages. As time passes, Volio inherits more keys from his brother and father. He begins to consider himself the only "worthy" heir to Illyra, worthier than the late Duke's own son Ernest who inherited the college after his father's passing. He assumes that these give him power and knowledge, and his creations reflect his lack of true knowledge. Volio's creations lack joy, as Ruskin observes of the inordinate player. Volio does not create his automata because he has any true interest in creating them; he creates them as a way to prove the power he already believes he has. He is intelligent, he would not be able to create were he not, but scoffs at the input of other thinkers and lacks the refined skills to tell when something is wrong with his own machinery. He assumes his creations are perfect because he made them. Violet mentions an audible flaw in his machine and Volio responds incredulously. She tells him,

> Yes, you see, the gear on the…elbow, I suppose…it's supposed to be an arm isn't it? Well, if that were the elbow, the gear is far too tight. You can hear it from the way there's a slight high-pitched squeal when it straightens from a bent position. If any pressure were applied to force it back farther, the entire forearm would break off like a twig(300).

Violet's skill allows her to deduce the purpose of the unidentified part and logically point out a major flaw in its design. Despite the sound reasoning behind her argument, Volio haughtily refuses to acknowledge her skill and ignores her suggestions, deeming them brought

out of jealously. By the novel's end, Volio's automata demonstrate their "feebleness" and Volio's lack of "acuteness of thought"; the flaw that Volio refuses to accept is the downfall of his army.

Ruskin states that the inordinate player, "Incapable of true imagination, it will seek to supply its place by exaggerations, incoherencies, and monstrosities; and the form of the grotesque to which it gives rise will be an incongruous chain of hackneyed graces, idly thrown together"(136). This grotesque will be "monstrous without being terrible" and also possess a "weak malice, incapable of expressing its own bitterness, not having grasp enough of truth to become forcible, and exhausting itself in impotent or disgusting caricature"(136). Volio's malice is unwarranted; it grows out of his own narcissism blossomed from the one quick incident as a child when he received the key from the Duke. While Volio's army of automata do frighten Crystal Palace attendees, they are eventually overcome by the flaw Volio ignored. The fear they invoke is exhausted as the machines are destroyed. Other examples of inordinate players are just as likely to self impose ignorance of the truth for their own pride.

Dr. Minnericht, or Joe Foster as he is later revealed, slowly stole the dead Leviticus Blue's inventions believing that he could, in a sense, become Levi. "So he did it slow, stealing another man's life a piece at a time as he took these things—these inventions, toys, and tools. It took him a while to learn how to use them"(373). He assumes a persona and the inventions, work, and play that come along with that persona. His assumed persona, much like Volio's malice, lacks truth, and will, therefore, eventually fail him. His creations aren't enough to confirm his powerfulness and give his actions true meaning and purpose; the "malice" he assumes" can never "grasp enough truth." To Ruskin, this "truth" is ultimately important, because Ruskin does not particularly like the grotesque. He justifies his own examination of the

study by attempting "to distinguish between this base grotesqueness and that magnificent condition of fantastic imagination"(122). Base grotesqueness springs from a lack of purpose behind a creation; the creation has no reasoning or truth it aims to convey. In Minnericht's case, there are two women who can prove that he is not whom he claims to be, that the truth he proclaims isn't a real truth and that his inventiveness is fallible. Similarly, Leviticus Blue, the dead inventor whose life Minnericht steals, delusionally believes his own intelligence far surpasses those around him, and that this will assure his success in any situation. His inventions are self serving, and the truths he fails to see are very human ones. He creates war machines, for example, without consideration for the effects those machines will have on the world and the community he lives in. He lacks normal human connections, never believing, for example, his own wife capable of seeing through his lies and deceits. "I didn't believe it then, and I don't believe it now," Briar tells her son, Zeke(372). As an inordinate player Levi creates for pure monetary value; the purpose of his creations does not matter, and the opinions of those around him do not matter. His purpose is selfish pleasure seeking and he never intends to include Briar in his escape from the blight stricken city. Though Levi's works do not necessarily fall under the category of the grotesque, his creation of the Boneshaker drill directly created the rift in the ground that leaked blight gas and caused the zombification of much of the population of Seattle. Minnericht never believed his true identity could be revealed, Levi never imagined that his wife would shoot him in the head, and Volio couldn't fathom another student having any useful advice to share with him.

Altogether Ruskin describes four types of play: those who play wisely, those who play necessarily, those who play inordinately, and those who do not play at all. While Ruskin neatly separates these four types, real life and literature do not. Qualities of different types of play

often appear within the same character. In steampunk literature, some of these players appear far more frequently than other types. The last two creators I will discuss embody some of these characteristics. I would argue that the necessary player and the non-player do not appear frequently in steampunk literature because their creations, though the non-player rarely if ever creates, do not have a lasting effect.

Of the "men who do not play at all", the non-players, Ruskin states, "those who are so dull or so morose as to be incapable of inventing or enjoying jest, and in whom care, guilt, or pride represses all healthy exhilaration of the fancy; or else men utterly oppressed with labor, and driven too hard by the necessities of the world to be capable of any happy relaxation"(131). Ruskin admits that the non-players are "little likely to find expression in any trivial form of art, except in bitterness of mockery", and this grotesque therefore falls under the category of the terrible grotesque(137). K.W. Jeter's character George Dower inherited his father's business upon his father's death. George admits,

> [h]aving neither my father's inborn genius at the contrivance of the timepieces, clockwork devices, and scientific apparatus by which he established his reputation, nor having received a compensatory education in these matters from him, such trade as I had consisted of the minor servicing and adjustment of these creations that my father's former clientele brought to me(22).

As a character, George embodies the characteristics dull and morose; if it weren't for the actions of his father, and the absurd situations he is forced into he would most likely never create anything of his own volition. Though he complains he never received any training or education to help him run his shop, he also never attempts to gain any knowledge on his own of the wares

he sells. George is not an inspired creator. He will tinker with his father's clockwork if a customer comes in with a broken piece, but admits that "finer adjustments" were "well beyond my scope(23). George has no skill, and has no desire to gain any skill. He simply strives to survive everyday in order to eat, and relies on his father's former assistant, Creff, to instruct him on many of the repairs he makes in his shop.

The only true instance of George creating anything occurs late in the book when George, stranded on a remote island, is forced to help construct a machine to get himself and his two companions off of the island. The final product is a crudely made flying machine with wings covered in sheepskins which were "little more than raw carcasses with the meat and bones hacked away; the matted fleece was still thick on most of them, and blank-eyed heads dangled and swayed with the device's motions"(347). George even notes the flecks of blood that drip from the machine onto him as it flies past. The machine works, but eventually bursts into flames. Onlookers reported of the machine that they saw "the Book of Revelation's Seven – Headed Beast flapping about and dropping flaming sheep carcasses"(18). The flying machine bursts into flames and crash lands, ending its first and only flight. Ruskin notes that the "proper subjects of human fear are twofold; those which have the power of Death, and those which have the nature of Sin"(140). The flying machine invokes both types of fear because its spectators choose to see it as a monstrous creature from the Bible. "The workman of the ignoble grotesque can feel and understand nothing, and mocks at all things with the laughter of the idiot and the cretin"(141). The creators of the hideous flying machine do not intend it to invoke Biblical fear, nor do they truly understand the fear of the spectators who run from the machine. For the creators, the machine is means to their escape from the island; its grotesque appearance stems

entirely from necessity—they used the materials available to them at the time because they have no other option.

The elusive necessary player often appears in steampunk literature disguised as a different player. DiFilippo's inventor, Cosmo Cowperthwait, "raised in an atmosphere of practical invention", inherits his skills from his father. DiFilippo makes a point of noting the family's "practical" inventiveness; Coweperthwait, like his father, invents with a purpose: to increase scientific knowledge, to improve society. He is not, however, a wise player like Violet; his inventions lack underlying meaning, meaning beyond their purpose. His uranium fueled engine that he intended to revolutionize the railroad industry would significantly lower the amount of fuel needed to run a train. As his practical friend Ikky points out shortly before the engine's first test run, "If this works, you're going to put an end to the entire coal-mining industry. I'd watch my back, lest it receive some disgruntled miner's dirty pickax. Or what's even more likely, the silver table-knife of a mine-owner"(21). Cosmo had never fully considered all of the ramifications of his creation, in this case all of the miners left unemployed by his discovery. The engine fails, exploding and killing Cosmo's parents along with all of the spectators gathered for the event and Ikky decides this signals that "the world is not ready for such knowledge, if it ever will be"(24). Cowperthwait creates the newt-Victoria because he "thought himself safe in turning his attentions to biological matters. What harm could come, after all, of experiment with tiny amphibians"(27)? Cosmo is not a working man with "blunt perceptions and rude hands", his skills and knowledge far exceed those of the average man. The catastrophic results of his uranium engine prevent Cowperthwait from inordinate play. He knows that there can be devastating consequences to a mis-created invention, so he chooses his

next big project for its safety rather than its possibility to revolutionize. While newt-Victoria is safe, she lacks the purpose of a grotesque like Violet's Pallas.

Ruskin fails to describe Cowperthwait's particular condition. He notes that the average person will never attain wise play, "[t]hey must, perforce, pass a large part of their lives in employments both irksome and toilsome, demanding an expenditure of energy which exhausts the system, and yet consuming that energy upon subjects incapable of interesting the nobler faculties"(129). Cowperthwait's "expenditure of energy" does not occur because he performs manual labor every day, it instead it occurs because of the day he accidentally killed his entire family. Like the average workman, Cowperthwait possesses "those noble instincts, fancy, imagination, and curiosity" and needs a way to exercise these instincts(129). Ruskin calls this type of play a "stretching of the mental limbs as their fetters fall away,--this leaping and dancing of the heart and intellect, when they are restored to the fresh air of heaven, yet half paralyzed by their captivity, and unable to turn themselves to any earnest purpose"(129). Cowperthwait self imposes his restraints, and these restraints have the same effect as the work imposed restraints of the average man. These restraints "blunt" his perceptions, and he can produce "such as shall be interesting by their character or amusing by their satire"(132). His creations, even through necessary play, are well created and unique, but they lack the scope of Violet's Pallas, or even his own earlier uranium powered engine. The newt-Victoria satirically juxtaposes Queen Victoria through their shared hyper sexuality. Queen Victoria should be a paragon of virtue, and therefore sexually unavailable to all but her future husband, but instead runs away and reemerges in a brothel where she has been working, of her own volition, as a prostitute. Newt-Victoria should be sexually unavailable because of her grotesque nature; she is, however, the most sexually sought after character in the novella. Cowperthwait's creation, intended as a tribute to

the queen, sexually parodies the queen's hypersexuality and the sexuality of the average Victorian woman, whom readers are led to believe should be chaste and possibly stuffy.

Steampunk literature focuses so closely on the idea of the creator because the creator shapes the machine; their own intentions give the invention purpose and shape. If the creator does not have a vision or purpose for his or her own grotesque, then the audience who receives that grotesque may not consider it at all, or may object to it on the grounds of its ill effects unforeseen by its creator. The audience has but a short time to process the grotesque upon first perceiving it. This moment, called the interval, plays a vital part in the life of a grotesque. It consists of the short period during which the audience attempts to make sense of the grotesque, recognize forms within it, and ultimately conclude whether or not it will remain grotesque.

GROTESQUE INTERVAL: COPING WHEN INVENTION BECOMES REALITY

Geoffrey Galt Harpham introduces his idea of the "Grotesque as Interval" by reminding readers that the definition of the grotesque cannot solely rely "upon formal properties, for the elements of understanding and perception, and the factors of prejudice, assumptions, and expectations play such a crucial role in creating the *sense* of the grotesque"(14). The grotesque challenges the audience's perceptions of reality, and, therefore, their perceptions of "formal properties." In steampunk, these formal properties are based upon techno-fantasy, the fantastic scientific elements the author chooses for their text. Techno-fantastic science is commonly based upon sciences that audiences will have some basic understanding of—mechanics, biology, botany—which adds a level of realism by allowing readers to easily suspend their disbelief. The "fantasy" element of technofantasy makes the scientific elements unpredictable. Many of our steampunk creators, for example, despite careful planning and research, cannot predict the outcome of their own experimentation. Harpham states, "[i]t is our interpretation of the form that matters, the degree to which we perceive the principle of unity that binds together the antagonistic parts." The grotesque aims to combine seemingly un-unifiable forms; therefore, the "degree" of "unity" is intentionally never high. "The perception of the grotesque is never a fixed or stable thing, but always a process, a progression," as the elements of the grotesque are constantly at war(Harpham 14). They never appear to be unified or even capable of merging. We assume Oscar the rabbit will embody rabbit-like characteristics—he will be soft, gentle, and quiet—however his ability to curse like a sailor contradicts our perceptions of what should be possible for a rabbit. Creations that violate our expectations in such a shocking manner cause us to question the reality of the creature before us: how was it formed, what was it formed from, why would a creator create such a thing, and how should we react to the creature before us?

The grotesque is not "schematic perfection of the Law." It "occupies a gap or interval; it is the middle of a narrative of emergent comprehension"(15). A majority of steampunk texts are narratives of invention or discovery, or they include subplots that are narratives of invention of discovery; these types of narratives seek "emergent comprehension", new ways to look at the world and the way it works. The interval occurs at the very point at which the audience asks how, what, and why. This audience can include a vast number of people—the creator's peers and countrymen or the audience reading the text—and different audiences can respond differently to the grotesque. Jack creates Oscar, and is pleased yet shocked by the odd result of his experimentation. Violet first reacts to the seemingly innocent "nervous-looking mottled gray-and-white bunny with flopping ears and a twitching nose" by "back[ing] away frowning"(290-1). The Duke meets the rabbit, reaches down to pet what appears to be an adorable little animal and "quickly retract[s] his hand" after Oscar mutters an obscenity(350). They are drawn to the rabbit and then recoil once they are introduced to his second nature. While Oscar may not exhibit the grotesque in the obvious sense—he has no physical deformities—his shocking use of obscene language places him firmly in the grotesque realm in a similar way to Bakhtin's stutterer, though without the physical changes like sweating and the bulging eyes(308-9). Words are violently forced from the stutterer, and they also seem to violently spew from Oscar's mouth. These words are particularly shocking because the nature of his physical body (fuzzy rabbit) and the nature of his language (piratical) are so contradictory. Reactions to Oscar demonstrate conflict regarding the unification of his two halves: the gentle innocent rabbit and his violently cursing parrot voice box. Readers of Rosen's *All Men of Genius* are meant to react to Oscar the rabbit with laughter, while the novel's characters are

startled by him and spend many moments trying to hide Oscar from polite company due to his highly inappropriate language.

Harpham cites nineteenth century author George Santayana whose book, *The Sense of Beauty,* briefly considers two states of confusion caused by a grotesque object: one can "enter a state of confusion at the initial encounter, but then retreat with categories intact" or break through confusion to discovery"(15). According to Santayana, "until the new object impresses its form on our imagination, so that we can grasp its unity and proportion, it appears to us as a jumble and distortion of other forms"(193). Santayana states that "if the confusion is absolute", if the audience cannot recognize forms within the creation, then "the object is simply null; it does not exist aesthetically, except by virtue of its materials." A grotesque form is one of partial confusion, not complete confusion. If we can at least partially identify elements of the object, if "we have an inkling of the unity and character in the midst of the strangeness of the form, then we have the grotesque. It is the half-formed, the perplexed, and the suggestively monstrous"(193-4). We recognize the new object, not necessarily knowing what it is, but searching for familiar forms within it and making "slight adjustments to our working hypothesis about the world." The interval is the moment in which, "although we have recognized a number of different forms in the object, we have not yet developed a clear sense of the dominant principle that defines it and organizes its various elements." We have become aware that the object has significance. The grotesque object resists closure and "impales us on the present moment." So long as the object remains grotesque it will continue to resist closure. "An identical force sustains the knower and the known, for this interval is the temporal analogue of the grotesque object, with its trammeling of energy and feeble or occluded formal

principle"(Harpham 16). The grotesque form gives no indication of when it will cease to be grotesque; this is entirely dependent on the audience's reaction.

For the object to remain grotesque during the interval the audience must not fully recognize the object and the object cannot settle into one fully recognizable form. The mind or minds of the audience must stay confused as, "confused things lead the mind to new invention"(17). Confusion assists the grotesque by causing the imagination to work more freely. Harpham notes that in science, confusion leads to theorizing and experimentation; "the logical rigor necessary for research fosters a hypersensitivity to anomaly or ambiguity, to instances that seem to break the rules"(17). Science allows the audience to flesh out more possibilities. The mind can only discern one image at a time, so, though perceptions of the grotesque may change, the viewer cannot experience multiple perceptions simultaneously. They will experience the change in stages, and will experience the grotesque in a manner that suggests the evolution of the object. Harpham lastly posits that "the more naïve and intense our belief, the more violent will be the transition from one interpretation to another, and the stronger our experience of the grotesque"(17). Istvan Csicsery-Ronay describes the interval as "the shock of detecting different physical processes in the same body, violating the sense of the stability and integrity of things, and revealing unsuspected dimensions that escape direct rational, human control"(185). New encounters with the grotesque may lead to greater or lesser shocks; this is dependent on how familiar the audience finds the grotesque or how much it disturbs their sensibilities.

The audience wants to make sense of the grotesque, whether or not they will actually accomplish their goal. "Eventually we discover the proper place for the new thing, and recognize it not only for what it is like but also for what it is, in itself." Harpham provides the examples of learning to label "mouse birds" as bats and calling "horse-men" centaurs(16). Their

fundamental elements are recognized and they are given a label, making them feel less alien; steampunk texts commonly introduce readers to "machine men", and the readers have learned to call them "automata." George Santayana calls these recognized forms "types," noting that centaurs and satyrs, as common mythological types, no longer fall under the realm of the grotesque(193). Automata do not have the mythological status of satyrs and centaurs because they fall under the realm of possibility. Automata could exist in the real world but are more prevalent in the realm of imagination; audiences understand the principle, that the grotesque they are trying to understand is a machine built to look and function like a man, but they cannot fully comprehend how the automaton came to be or how exactly it would work. Volio's killer automata are controlled by sound, but George Mann's *Affinity Bridge* features autonomous automata which make use of human brains to function—brains infected by a zombie plague, as Mann later reveals.

The name does not signify that all talking rabbits will forevermore be referred to as "Oscar", but it does help the characters who interact with him assimilate the grotesque, Oscar, into daily life. It makes the grotesque appear more commonplace and recognizable, despite the fact that it is not. In the fictional scientific community of Illyria, grotesques like Oscar are considered "experiments." While calling a winged ferret or an invisible cat an "experiment" might leave the mind less conflicted about its existence, it still demonstrates the confusion caused by the grotesque; the name is a placeholder for our incomprehension or a sign of recognition that the grotesque is no longer grotesque. Harpham continues, "although we have recognized a number of different forms in the object, we have not yet developed a clear sense of the dominant principle that defines it and organizes its various elements"(16). Recognizing

Elements—rabbit, bird, ferret, man, machine—leaves us "aware of the presence of significance, or of certain kinds of formal integrity, but unable to decipher the codes"(16).

A wise player can acknowledge this interval and use it to advantage. Violet's Pallas was designed specifically because of this moment; Violet knew that if she had built a predictable dancing girl the genius of her engine would not be seen and the object would be dismissed as the known. Her society could understand the concept of a woman as an object of beauty, but Violet's intentions as a creator were to skew these inherited perceptions and to open minds to a new world view. Some minds rejected her invention entirely. One man asks Violet if her machine dances, commenting, "It's awful big to go about dancin'." Violet responds that her machine does not dance; it works, and can lift a huge amount of weight. The man, who cannot fathom a woman shaped machine doing anything other than dancing, repeats, "So, she doesn't dance?" Violet shakes her head no, and the man does not ask any further questions or watch to see what the machine actually does. He simply shrugs and walks off. Rosen counters this incident with several little girls who have an opposite reaction; they approach Pallas, and stare "wonderingly" at her(428). As Santayana argues, the man cannot comprehend the grotesque he sees before him, and therefore the grotesque becomes null and exists only "by virtue of [her] materials." The little girls see Pallas for her true purpose, to stand as a powerful woman, and they respond with awe.

George Dower experiences two intervals early on in the text in regard to the same misshapen visage. His friend hands him the ugly doll which he then refers to as a "crude parody" and then notes that the sight of it puts him in a dreamlike state(Jeter 61). He eventually makes a connection: the ugly face of the doll also appears on the Saint Monkfish coin. Two appearances of the same horrifying grotesque confirm, for George, that the face is not a parody.

This allows him to accept the grotesque, and simultaneously acknowledge that he does not understand it. “A sudden panic pushed me up from the depths of the chair”(Jeter 62). He experiences both of Satayana’s states of confusion: his first experience confuses him and puts him in a dreamlike state, and the second experience, pulling the coin out of his pocket, breaks through this dreamlike state to the realization that the grotesque may be real. George does not dismiss the grotesque as null, but instead attempts to learn the secrets of it. The grotesque is frightening to him, but he is drawn to it.

Prime Minister Melbourne finds himself sexually drawn to the grotesque, but never develops the sense of curiosity exhibited by George. Melbourne does ask of Cowperthwait, “exactly what is she?”, but he never allows Cowperthwait to fully answer the question. When Cowperthwait tells him that she is part newt, Melbourne counters, “And yet she does not look merely like a gigantic newt. The breasts alone….”(DiFilippo 15). Cowperthwait attempts to explain that he also used fresh cadavers in the creation of newt-Victoria, but Melbourne cuts him off before he gets into specifics with a, “Please, say no more”(15). Melbourne acknowledges that they are, in fact, in a semi-private setting, and that Cowperthwait could continue but, as Melbourne is a “representative of the law”, he probably should not continue. His objection appears to stem more from personal scruples than from legal objections as the Anatomy Act of 1832—“Victoria” takes place in 1838—would have made it possible that Cowperthwait did obtain the body legally. Acknowledging the second nature of newt-Victoria, would, in Melbourne’s mind, probably imply many things, including the fact that he had, in a manner of speaking, had intercourse with not only an amphibian but a corpse as well. The interval places Melbourne in a state of confusion, but he rejects the urge to deconstruct the grotesque because that might cause him to reject the grotesque entirely, and he refuses to reject the grotesque

entirely. Melbourne refuses to change his worldview because he wants to continue having sex with newt-Victoria; he enjoys having sex with newt-Victoria. Should he admit to himself that such a creature could be made out of hellbender newt and corpse he would not consciously be able to continue his sexual escapades with her. Melbourne fears "perceiving what it should not be possible to perceive", and also perceiving that which he does not want to perceive (Csicsery-Ronay 186).

In the interval, "the gap is between the past form of a thing and what it is becoming, its unpredictable evolution"(Csicsery-Ronay 186). Audiences have difficulties accepting the grotesque because of its possibility to change and in most cases it does change again. Pallas is eventually destroyed, and it is learned that the citizens of Wetwick, whose piscine images appear through the hideous face of the doll and the coin George finds, are slowly devolving from what was once an elegant species, a process that cannot be reversed. Istvan Csicsery-Ronay proposes two questions that the interval asks of science fiction, "it asks whether the imaginary changes are possible" and also "what their social and ethical implications might be." He continues, "The first is a matter of plausibility: what the text says about the way the world works. The second is a matter of ethical evaluation: what the text says about the values that guide or emerge from the imaginary alterations"(188). Steampunk proposes its grotesque in a way that they seem possible; technofantasy, though fantasy, must be somehow scientifically linked, and therefore explainable. The most difficult question of the two questions is the ethical evaluation. What effects, if any, can a machine have on women's roles in society? How does the devolution of a species effect the human race, and what should be done about this devolution, if anything? Should certain types of experimentation be banned? Should certain materials in experimentation be banned?

Cheri Priest's grotesques, with the exception of her zombies, tend to be less fantastic than many other grotesques we've explored because they do not necessarily signify actual physical change. Oftentimes characters add bulky armor, gas masks, or goggles that give them a temporary grotesque appearance but are removable. These grotesques do not become null to the viewer though they are easily categorizeable. "The man with the tinny voice was speaking through a helmet that gave his face the shape of a horse's head crossed with a squid"(150). Despite the odd appearance of the man, Briar first and foremost recognizes him as a man and not as a horse-like squid creature with a small resemblance to a man. These grotesques are disorienting and unsettling for the characters that come across them, but the main category adds a level of comfort to the experience. Combined with the fact that the strange looking man/horse/squid creature must certainly be less threatening to Briar than the hungry zombies surrounding her, Briar trusts the creature, and accepts the man half as truth. Steampunk subcultural fashion has a similar effect on the viewer. The viewer understands that the object they are looking at is human and constructed by man. The creation then inspires awe rather than terror at the skills of the creator.

CONCLUSION: THE STEAMPUNK GROTESQUE SPRINGS TO LIFE IN VIBRANT SEPIA

Thomas Willeford's goal as a creator is to make his audience believe what they're looking at is real. The 'about the author' page of his craft book reads, "If upon viewing a piece, you do not ask 'Does that actually work?' Thomas considers the piece a failure"(i). As an artist, Willeford intends to force his viewers into their interval, and causing them to make a decision about the piece they are looking at: is it a grotesque, is it real?

Willeford, owner of Brute Force Studios, has become famous for his contraptions, corsets, and one intricately wrought mechanical arm worn by actor Nathan Fillion on the television show Castle. His craft book, *Steampunk Gear, Gadgets, and Gizmos*, encourages makers to create their own "artifacts." Willeford notes that he has "seen a few big companies try and mass produce, package, market, and sell 'Steampunk'," however, their "results have been almost universally poorly made, aesthetically unpleasing (read Ugly), or more likely both"(xvii). VanderMeer and Chambers call this "dead perfection", and, in accord with Ruskin's ideals, Willeford argues against these mass produced products(99). Instead he prefers the works of individual artists who make "ingenious devices to inspire the mind and please the eye." Willeford does note that their "artifacts can be yours with only the effort of disposing of a substantial bit of that excess income you have about you." He intends his book to be a resource for those looking for a third option, those who want their "ingenious devices" without the added guilt of buying mass produced or spending exorbitant amounts of money(xvii). As one of those individual artists who charge exorbitant amounts of money for their creations, Willeford addresses his intentions in creating a book that, essentially, will allow readers to create the things

he charges so much money for. In doing so, Willeford shows himself to be a noble creator. His two reasons are:

> Firstly, it will keep me from stagnating. If you are all out there making these wonderful things, I will need to come up with a whole new set of ideas to stay in business. Secondly, I like to think that after making some of the projects in this book, you will have a much greater appreciation of the craft and artistry that goes into creating this type of work(xviii).

Willeford's intentions bring his work beyond the realms of "interesting by their character or amusing by their satire" of the necessary player(Ruskin 132). His concerns are to expand his ability and creativity as an artist and to help others appreciate the work that himself and other craftspeople and artists do. Bruce Sterling says that "[I]f you meet a steampunk craftsman and he or she doesn't want to tell you how he or she creates her stuff, that's a poseur who should be avoided. Find the creative ones who want to help you, and don't leave you feeling hollow, drained and betrayed"(255). Willeford wants to give others knowledge of the work and creativity that goes into the pieces he creates; he wants to confirm Sterling's statement. Willeford says, "I can tell you from experience that there is nothing like the feeling you get when someone stares at you, openmouthed and near speechless, as you inform him the piece he has been lusting over was made in your Secret Lair by your own hands"(xvii). He wants to sell an artistic experience.

Willeford's work, though essentially non-fiction, embraces steampunk literary roots. He argues that steampunk creates a "more character-driven world" than, for example, the Gothic subculture because of its "foundation in literary works of the Victorian era"(4). *Gear, Gadgets,*

and Gizmos takes a fictional approach to its non-fictional subject by creating a short storyline for each project. For example, the first project in the book, entitled "Aetheric Ray Deflector Solid Brass Goggles", features what readers are told to be a short snippet from the work "My Life in the Air" by a "Ms. Adelaide Grayson" who is, supposedly, a retired Major from Her Majesty's Aero-Forces. The excerpt tells of the moments before, under her Seargeant's instructions, Ms. Grayson was to jump out of one flying device onto the "gas bag" of what might be a fictional dirigible. The reason Willeford has included this snippet lies in the instructions barked by the story's Sergeant, "I am certain none of you 'ave any questions, so line up be'ind the Corporal 'ere. Goggles down!... On my mark…. Go!"(27). The goggles that readers will learn to construct are the goggles of a fictional landscape, implying that any reader can construct those goggles and imagine themselves into the fictional landscape.

Just as the steampunk subculture can utilize the fiction, steampunk fiction can utilize the subculture. Cheri Priest uses steampunk fashion, non-fiction, to inspire her fiction. In an interview with James Carrott she states, "When it came to steampunk, it just didn't seem to have a mythology to account for all of the minor tropes of it. It was a collection of things that people wore, or a collection of things that people watched or listened to. Like goggles, a gas mask was kind of a big one"(Carrott 76). In a similar manner to Willeford, Priest uses the fashion of the subculture to inspire her steampunk landscape. She continues, "I tried to make technology that was symptomatic of the place, because I didn't want it to be gears on hats. I wanted these people to have things that were going to be practical to them in a very strange environment"(Carrott 76). Priest successfully twists these subcultural fashion icons into something useful and normal for her characters, creating, for example, "[t]he man with the tinny voice [who] was speaking through a helmet that gave his face the shape of a horse's head crossed with a squid"(150). Dick

Hebdige says that “spectacular subcultures express forbidden contents…in forbidden forms”(92). Steampunk performs this expression of forbidden forms and contents by transgressing the laws of reality; crossing the borders between fiction and non-fiction, and bringing the two realms together. Cheri Priest does this by bringing real world fashion into her fiction, and Willeford, alternately, brings fictional characters to life through crafting. Steampunk Band, Abney Park, become fictional airship pirates in their performances and music; they are real people expressing themselves as fictional characters.

The subculture and literature do not, however, always inspire one another; especially to the degree that we see in the works of Priest, Willeford, and Abney Park.. There are, for example, far fewer goggles and gas masks in our earlier texts, *Infernal Devices* and “Victoria”, but the bodies that these texts modify rival Thomas Willeford fully dressed in his “Adventurer’s Compleat Outfit”(vi).

Figure 2. Thomas Willeford's "Adventurer's Compleat Outfit"

The only portion of Willeford's natural body visible in his "Compleat Outfit" is an ear, a few tufts of sideburn and beard, and a single hand which grasps a "Lamp Gun", other wise known as, "Dr. Visbaun's High Voltage Electro-Static Hand Cannon." From head to mid-thigh Willeford has covered himself with his creations. His "Aetheric Ray Deflector Solid Brass Goggles" bulge proudly from his eyes; his "Altitude Mask with Integrated Respiratory

Augmentation as issued to H.M. Royal Aeronautical Corps" disfigures the lower half of his face, completely obscuring his mouth; his "Voortman's Armoured Pith Helmet, from London's Finest Purveyor of Defensive and Deflective Haberdashery" hides the round dome of his head and his large ponytail; and, his most impressive touch, "Dr. Grimmelore's Mark I Superior Replacement Arm with Integrated Gatling Gun Attachmen", forces the viewer to consider him as an automaton, and not simply a man. The pieces are real, and the photograph confirms their reality, however their whimsical names and the stories firmly place them in a fictional landscape and also help to place Willeford himself in that landscape. This fictional air Willeford creates gives his new appearance much of its grotesque effect. It places him, once again, firmly in the interval by confusing audiences with its reality; photographs, after all, can be deceiving. The man in the photograph could be Thomas Willeford, he could be Lord Archibald "Feathers" Featherstone, or he could be the Lieutenant Harper that Colonel I.M. Havelleft offers a position to in the B.O.R.G. 709th(177). The audience has nothing but a two dimensional photograph to decide on the reality of the creation. This forces the audience into the interval; we must decide whether there is a real flesh, bone, and blood arm underneath the mechanical one, what the face looks like underneath the coverings, and whether or not the being concealed under the contraptions is more or less frightening than the grotesque exterior. The grotesque changes that occur on the fictional level are decapitations similar to Professor Bunburry or Lucy O'Gunning; these changes remove chunks of the body and replace them with, generally, inorganic creations. On the real-world level, grotesque changes occur as coverings; they disguise the real body, hiding it from sight. Once the wearer removes the coverings, the real body reemerges, transforming to something new. Replacing the coverings, the mechanical arm, the gas mask, the goggles, re-transforms the

body again; this body has an easy changefulness that keeps it firmly within Bakhtin's "very act of becoming and growth"(52).

Many of the pieces that Willeford uses in his creations are pilfered from other items. He titles a chapter, "Gear Mining—Or, How to Dissect a Cuckoo", dedicating the chapter to "destruction (although some might go so far as to say desecration)"(17). Cuckoo clocks, Willeford notes, tend to have the best gears hidden inside. The materials section of the chapter notes, "This project requires one dead clock. Meet our gear donor, Ken"(18). Willeford metaphorically, and humorously, dissects Ken the cuckoo clock joking, "I have no doubt that rather than slowly deteriorating as a rotting clock corpse, Ken will enjoy an exciting and varied afterlife after he has been reincarnated as all sorts of wondrous gadgets and gizmos"(18). Much of Bakhtin's analysis of the grotesque involves the study of life and death cycles; destruction, in the grotesque, always leads to reincarnation in another form; birth leads to death which is followed by rebirth. Willeford shows this lifecycle before his grotesques have been born, through the parts that he uses. Just as Prime Minister Melbourne expresses shock at Cowperthwait's use of fresh cadavers, Willeford recounts an occasion when, after purchasing a cuckoo clock from an elderly woman at a flea market, he mistakenly announced the fate of that cuckoo clock, a former family heirloom, while still within her presence. The woman gasped and "clutched her chest in shock and horror. Everyone in the area had gone rather quiet"(17). This incident illustrates the way that people often give life to their objects. The broken clock was a family heirloom, and the woman most likely assumed that the purchaser would fix it up and appreciate it in its original form, just as her family had for decades. For that woman, far less humorously than for Willeford, the object has met its actual death. Even though Willeford jokes at his own destruction of the clock by referring to it as a "cadaver", "donor", "carcass", and

"clock corpse", he has a grand respect for the object that he dissects similar to the elderly woman; he just expresses it differently by treating each piece that comes out of the clock as a precious thing(19-23). He instructs his audience to perform their dissection on a towel so that small bits and pieces don't roll off the work surface and get lost. Encouraging his audience to "see if [they] can find a new purpose and a new life for each of Ken's components", Willeford reminds readers that they "don't want to throw anything away", because they never know when a piece will come in handy for another project(21). The entire dissection process tries to not be wasteful, and attempting to use all those parts not only eliminates waste, but encourages the creator to exercise their creativity.

In his essay, "My Machine, My Comrade", Professor Calamity writes, "Steampunk seeks to find a relationship with the world of gears, steel, and steam that allows machines to not only co-inhabit our world but to be partners in our journey"(141). Society, in the past decade, has become more dependent on technology, and Steampunks and scholars alike credit this technological dependence as the cause for the rise of the steampunk subculture starting 2007-2008. The grotesque presents unfinished images still in the act of becoming, and, as expressed through steampunk, this demonstrates uncertainty towards scientific, especially technological, progress. As Professor Calamity recognizes, steampunks accept this technological change as inevitable and choose to embrace it on their own terms. Steampunk literature and subculture fashion fuse seemingly incongruous pieces together into new bodies not because they are dissatisfied with the function of modern technology, but because they cannot connect with the appearance of modern technology.

Figure 3. Sir Reginald Pikedevant Displays a Gear Covered Keyboard

The steampunk community uses the phrase "glue some gears on it and call it steampunk" as a way to mock those who appropriate the steampunk sub-genre for their own financial gain. They create uninspired objects that they have often "steampunked" by, quite literally, gluing on gears as if gears were the necessary aspect to make any object steampunk—and they are, in fact, the most notable signifiers of the subculture. The now offline but once highly popular Regretsy website ran a regular feature called "Not Remotely Steampunk" highlighting mis-lableld, so-called steampunk handcraft and vintage items originally found on the world renowned online marketplace Etsy. Willeford calls this type of creation "cog on a stick" and argues that the "best way to avoid the 'cog on a stick' effect is for things to at least have the illusion of functionality"(5). Glued on gears do not appear to be doing anything or serving any particular purpose. In his song, “Just Glue Some Gears On It(And Call It Steampunk)”, Chap-Hopper, Sir Reginald Pikedevant sings,

Just glue some gears on it, and call it steampunk,

That's the trendy fashion nowadays,

A copper painted chunk of some nineteen-eighties junk,

Will fetch a pretty penny on Ebay.

In the song Pikedevant holds up a computer keyboard with gears carelessly glued to its surface. Pikedevant's keyboard is an intentionally clear example of how not to create steampunk artifacts, and his words echo the appearance of the object he holds. The keyboard demonstrates the ignoble grotesque outside of the direct bodily format we have been examining, the grotesque created by the inordinate and non-player.

In a physical sense, randomly gluing gears onto objects directly represents the grotesque. The grotesque finds expression in the reversal of bodily spheres; earlier we looked at a humorous reversal in Lev Ac Rosen's *All Men of Genius*, Professor Bunburry's head and buttocks, upper and lower stratum, met. The grotesque also emerges as regurgitation, urination, and bleeding. It has on its body unnatural sprouts, branches, and limbs, often in places that these growths do not naturally belong. For a machine, gears are the internal organs. They have a function, and to properly perform that function they are situated inside the machine's casing. One can open the machine and look inside, just as K.W. Jeter's Paganinicon lift's his chestplate to expose his inner workings, but we are always aware that these cogs, gears, and pistons belong inside the machine; they function internally. Nobly created machines can have gears located on the outside, but, as suggested by Willeford, noble creators have purpose to their placement; these pieces often have a function. Gluing gears onto an object, an act akin to wearing one's intestines as a belt and garters, has no purpose, and is often striking in its feeling of wrongness. These gears, like any other confusing attribute of the grotesque, give the appearance of not belonging to the object they are fused to. In polite terms, these creations are tacky, uncreative, and highlight their creator's

lack of skill, intent, and creativity. These creators are the "poseurs" Sterling spoke of, and, by creating as such, they identify themselves as uninvolved with the actual steampunk movement; they are leeches feeding off of the success of the noble creators.

These poseurs have a specific function in the existence and creation of a subculture. Subcultures operate "exclusively in the leisure sphere" and communicate "through commodities even if the meanings attached to those commodities are purposefully distorted or overthrown." Hebdige continues, "[e]ach new subculture establishes new trends, generates new looks and sounds which feed back into the appropriate industries"(95). The appropriation of subcultural "commodities" into mainstream industry is simply part of the life cycle of a subculture. The presence of Serling's "poseurs" within the subculture merely confirms steampunks status as a subculture and forces the subculture to explore new methods of expression, such as authors branching out of the common Victorian London setting in Link and Grant's anthology, *Steampunk!*. Mainstream industry has been, thus far, largely unsuccessful at marketing and mass producing steampunk. This may be due, in large part to the age of the participants in the steampunk subculture compared with those of other subcultures. Hebdige, for example, commonly refers to many subcultures as "youth cultures." Steampunk, however, prides itself on its inclusivity of race, gender, and especially age. It noticeably attracts participants from very young to old to somewhere in between. This inclusivity of all age ranges also allows for a wider range of incomes of participants in the subculture, rather than only the "youth"; or the young and generally broke. Thus, a larger group is able to pay individual artisans large amounts for unique, handcrafted items rather than cheaply made, mass produced ones. A larger age range also allows for more varied levels of experience; many steampunks proudly construct their own steampunk attire. Steampunks also have the advantage of online marketplaces over many of Hebdige's

studied subcultures. Steampunks and are able, as individuals, to easily buy and sell handcrafted steampunk items worldwide which would not have been possible in 1979 when Hebdige first published his study.

If we consider the internal pieces of a machine to be the guts, the internal organs, of a machine, then it is only reasonable to look at other pieces as body parts as well. "Gluing gears" on an object to make it steampunk does not create a new, lasting body, it instead creates a body that will quickly become null or lose its grotesque nature.

Figure 4. Jake Von Slatt's Victorian All-in-One PC

Maker Jake Von Slatt, known for many projects including his Wimshurst Influence Machine, Victorian RV, and Victorian All-in-One PC, commonly uses scavenged pieces, objects that others would probably throw away to create many of his creations. The casing for Von Slatt's All-in-One PC, for example, was built out of a knickknack shelf he rescued from the dump(Carrott 371). Pieces of his machines come from other places, and are repurposed into new

creations, new bodies. Like living grotesques like the newt-Victoria or Professor Bunburry, Von Slatt's creations are hybrids. His All-in-One PC may not have living body parts fused to it, but it is made of other creations, other machines, the metaphorical body parts of other artifacts, old and new. Fused together thanks to the skilled handiwork of Jake Von Slatt, the computer and keyboard embody the spirit of the noble grotesque. Von Slatt admittedly built the computer out of a "sense of play." He creates new yet vintage technology because the audience can "know how it works. It feels good to know how it works"(Carrott 374-5). The large physicality of the object, and the steampunk veneer allow the audience to with the audience without dismissing it as no longer grotesque. They see it for its beauty, understand it as a computer, but cannot come to terms with it because of its neo-Victorianism. This computer, despite its beauty, is not and cannot become comfortable in any era.

Author Cory Doctorow argues that "Steampunk makes us remember just how miraculous technology can be"(Carrott 63). Willeford's mechanical arm, for example, exemplifies the miraculousness that Doctorow describes because it is not a simple sleek refined prosthetic; Willefords creations are bulging, glittering, fabulous pieces that make viewers stare in awe. Similarly, Jake Von Slatt's Victorian All-in-One PC uses neo-Victorianism to both awe audiences and users and throw them into an interval as they attempt to make sense of a machine that seems to belong in no time or place. Rebecca Onion notes, "Steampunks seek…to re-access what they see as the affective value of the material world of the nineteenth century"(139). Willeford creates affective value through awe and amazement at his products; he deliberately invokes the grotesque interval in his audiences, causing them to have an emotional reaction. The action of gluing gears on an object has the opposite effect. Carelessly created objects do not give the audience pause to contemplate the reality of an object. They do not experience marvel at the

object, but a feeling closer to disgust before the object, most likely, becomes null. Its pieces can be picked apart, the objects identified. A nobly constructed real-world grotesque can stay grotesque, but it is unlikely that an ignobly constructed grotesque will remain so.

The fictional grotesques that I have examined act similarly, often much more dramatically, within their texts. Though Cowperthwait is certainly no Doctor Moreau, his newt-Victoria invokes questions about the morality of vivisection and whether there should be limits on experimentation with living things. *Infernal Devices* calls to mind questions about evolution, and whether scientists should create autonomous machines or experiment, without permission, on the cells of unwilling subjects. *Boneshaker* raises questions about the creator: who should be allowed to make our machines, who should be allowed to control our machines, and how much should the individual be involved with their own technology. *All Men of Genius* contains both creations used for good and creations used for evil which invoke feelings of hope, happiness, fear, and despair. Lev Ac Rosen's novel also demonstrates the possibility of creation without purpose, creation for the sheer joy of creating, which, I believe, truly demonstrates the steampunk attitude towards creation: to create for no other reason than the love of creating, and to create beautiful interesting things.

Cherie Priest compares the "flat and inscrutable" design of modern technology to that of the Victorians: "They thought if you were going to make a giant death ray killing machine, it should fill an entire room and it should be gorgeous and it should have a million levers and buttons that don't even do anything they just look cool, but it should look like a giant death ray killing machine"(Carrott 84). Steampunk invention does not have to be as substantial as Priest's suggested "giant death ray killing machine", but it generally appears to be capable of doing something. In *Gear, Gadgets, and Gizmos*, Thomas Willeford provides instructions for

"Calibrated Indicator Guages" that can be attached to many of his projects. Willeford asks, "How frequently have you read or watched some story wherein the hero or heroine is in a race against time to complete some task before the gauge indicates some infernal device has reached a critical stage"(50)? He intends the gauges to give a sense of reality to his creations, and suggests makers place their indicator in the red danger zone of the gauge because this "gives the impression that something serious is happening, it creates a level of tension (no matter how small or insignificant), and frankly it just looks kinda cool)"(62). These gauges add a level of functionality to the object, and, appearance-wise, they stretch out from the object creating another reaching limb on the blemished grotesque body. Placing the gauge on the danger zone implies further change to the body.

The seams on a grotesque body are important to the steampunk grotesque. They indicate the history of an object, whether that history shows us nuts and bolts or the dissection of a cuckoo clock. James Carrott and Brian David Johnson conclude from their *Vintage Tomorrows* project that "people's relationship with technology is changing and that people want their technology to have a sense of humor, a sense of history, and a sense of humanity"(374). Sense of history and humanity both emerge from the seams of the created. Looking back through time, the metal gears, now firmly attached to the created, were harvested from the cuckoo clock which was purchased from the elderly woman whose grandfather brought it back from the war. The humanity of the object comes from the creator's ability to change the object, and the potential sense of satisfaction achieved by the creator. An object's "humanity", I believe, derives from the audience or creator's potential understanding of the object. Seamless, perfectly sealed technology lacks this quality because the creator cannot take it apart to try and understand how it

works. If audiences can see the place where the incompatible objects intersect to form the grotesque, then they can more fully understand the grotesque itself.

In his short story "La Valse", K.W. Jeter imagines a world where the greedy and powerful aristocracy strap themselves into clockwork skeletons, as their New Years tradition, and dance the night away. The skeleton frames propel them into motion, forcing their aged bodies to dance in ways that they would otherwise be incapable of dancing. Dressed in their very finest and freely strapped into the skeletal mechanisms, the aristocrats become a horrific human puppet show as they dance, without having to exert any of their own energy, around the ballroom. Jeter uses this image to juxtapose the situation of the lower classes, many of whom are literally chained in their servitude and others metaphorically chained to their bleak lives' servitude. The story concludes with a turning of the tables, the lower classes exact revenge by dancing their torturers to a bloody death in the very same contraptions that serve as their symbols of power. A moral to take from "La Valse" is to not let technology control our lives completely. Audiences view Willeford's mechanical arm as clever, Lucy O'Gunning's mechanical arm as tragic, and Professor Bunburry's many replacements as humorous, but none of these grotesque bodily changes remove the power from the human underneath; when we go back through the grotesque's history and look at the changes, we can eventually find the man or woman present when the changes began. Creations like Oscar the Rabbit and the newt-Victoria similarly show some human control over the grotesque. Any unpredictability of their nature stems from the grotesque, and this unpredictability of the grotesque is what makes audiences laugh, stare awestruck, or shy away in terror. "La Valse" shows technology at its worst, used for an ignoble purpose: to keep people from completing a joyful act—dancing—on their own. Steampunk, according to Cherie Priest, is "embracing the idea that your technology should be beautiful and

its beauty should match its capacity for power or interest"(Carrott 84). Though the grotesque may not be the most beautiful form of expression, its hyperbolic nature makes it a perfect foil to the sleek mass produced perfection that steampunk rebels against.

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