

Ayn Rand and the Posthuman

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The Mind-Made Future



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To my mum, Mai—I hope this is sharp enough and my dad, Des—who wanted his own copy

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Introduction: A Posthuman Objective

CHAPTER 1

Ayn Rand is one of the most divisive icons in America's divided cultural and political landscape. Ask a politically interested person from the United States what he or she thinks of Ayn Rand, and you will discover where on the ideological spectrum they sit. The Russian-American novelist and philosopher is fêted on the right for her exposition of what she called the morality of capitalism, while on the left she is vilified and satirized for the same.

Rand, born in St Petersburg in 1905, immigrated to the United States at the age of 21, and went on to write four novels, plus a series of non-fiction books. Rand's fiction is a vessel for the delivery of her theories, and her nonfiction references her fiction to demonstrate its points. Rand developed a philosophy she called Objectivism, which holds that reality is fixed outside of us, "objective," and knowable through investigation. Objectivism venerates productivity: the turning of the physical material of the world into products useful for humanity. The role of the human mind is to transform physical reality. Rand's celebration of productivity, and her belief that every person is an end in themselves—her individualism—made her a major supporter of capitalism, and thus a celebrant of America, at the height of the Cold War.¹

For a body of work developed over some half a century, between the 1920s and 1970s, Rand's corpus is remarkably thematically consistent. All her works are to a greater or lesser extent about what she termed the "virtue of selfishness," and the evils of altruism. Selfishness, for Rand, was a way of life centered on the rational achievement of one's goals.

Altruism was negation of the self in favor of a mythical and unachievable "common good." Almost akin to a Tolkien, Rand manufactures an internally consistent secondary world, a world of absolutes, morally divided between heroic producers and the evil unproductive. In Rand's reality, businessmen, industry captains, self-created individuals, are valorized, while anyone who works for the interests of others or is seen not to be thinking for him- or herself is condemned.

Whatever one thinks of her politics or her fiction, Rand is surely one of the most influential writers of the twentieth century. In 1991, in a survey supported by the Library of Congress, American readers listed her 1957 magnum opus, *Atlas Shrugged*, as the second most influential book in their lives, the first being the Bible (Heller 2009, p. xii). Historian Jennifer Burns sees Rand as a principal figure in the modern American libertarian movement. Rand's reach goes deeper still: she has entered the heart of the political mainstream. In 1987, Maureen Dowd of the *New York Times* dubbed her the "novelist laureate" of the Reagan administration (Burns 2009, pp. 255, 258, 279). Sociologist Niamh Hourigan names Rand as one of the three main influences on the dominant economic policymakers of the 1980s and 1990s, the others being Milton Friedman and Friedrich Hayek (Hourigan 2012).

Those who admit to being inspired by Rand include Alan Greenspan, chairman of the United States Federal Reserve for 19 years, until 2006; Paul Ryan, vice presidential nominee of the Republican Party in the 2012 election, who became Speaker of the House of Representatives in 2015; and Steve Jobs, co-founder and former CEO of one of Silicon Valley's most powerful corporations. Rand has also inspired makers of art and literature, and especially popular culture—including Steve Ditko, co-creator of Marvel Comics' Spider-Man, and the progressive rock band Rush, who acknowledge "the genus [sic] of Ayn Rand" in the liner notes to 2112 (1976). The extent of Rand's direct influence on business leaders and creators of public policy, however, is perhaps unequaled by any other twentieth-century novelist.

In recent decades, Rand's sales have only grown. In the early 2010s, average annual sales stood at three quarters of a million (Mayhew 2012, p. ix). More than 30 million copies of her books have been sold in total.² And, though primarily an American phenomenon, her popularity is not confined to the United States. The *Economist* reports that, in India, Rand's sales outstrip those of Karl Marx by 16 to one, while online searches for Randian topics are high, and businessmen, Bollywood stars,

and architects name her as an inspiration. The Swedish enterprise minister from 2011 to 2014, Annie Lööf, hailed Rand as "one of the greatest thinkers of the twentieth century" (*Economist* 2012). When Rand was alive, individualists traveled to the US from as far away as Africa to hear her speak (Heller 2009, p. 320).

A 2012 article for the *Chronicle of Higher Education* succinctly expressed what we might call the traditional academic view of Ayn Rand. Outlining why we should spend little or no time studying her work, Alan Wolfe, professor of political science at Boston College, declared: "In the academy, she is a nonperson. Her theories are works of fiction. Her works of fiction are theories, and bad ones at that" (Wolfe 2012). The problem with Wolfe's dismissal is that it overlooks a key element which must be central to the study of any writer: the influence of the writer on readers and on the wider culture. There can be no doubt that Rand delivered her ideas in a manner that has had enduring appeal and impact, both in the private sphere of readers' lives and the public spheres of culture and politics. This makes her a subject worthy of examination.

Rand's nonperson status within academia has been changing over the last several years. Two articles in the Journal of Ayn Rand Studies aptly highlight the growth in academic focus on Rand since her death in 1982. Mimi Reisel Gladstein makes a valid point when she notes that "the trajectory of Rand's critical reputation is not that different from many writers who challenge the mores and thinking of their times." She cites the early shunning of Faulkner, Hemingway, and Steinbeck as menaces to the community. Gladstein sees the turn of the millennium as a breakthrough period for literary scholarship on Rand, with the publication of the first book-length studies on each of her major novels, Douglas J. Den Uyl's "The Fountainhead": An American Novel (Twayne, 1999) and Gladstein's own "Atlas Shrugged": Manifesto of the Mind (Twayne, 2000). The year 1999 also saw the release of the critically important Feminist Interpretations of Ayn Rand (edited by Gladstein and Sciabarra, Pennsylvania State University Press) and the founding of the Journal of Ayn Rand Studies (Gladstein 2003, pp. 376-77, 384-85, 388). Chris Matthew Sciabarra notes the increasing frequency of scholarly references to Rand, and the diversity of publications in which she is mentioned: everything from College English to the Harvard Journal of Law & Public Policy to Germano-Slavica, a Canadian Journal of Germanic and Slavic comparative and interdisciplinary studies (Sciabarra 2004, p. 2). The number of essay collections devoted to Rand, and the number

of important scholarly articles on her work, has continued to grow throughout the 2000s. Another waypoint was reached in 2016, with the publication of Allan Gotthelf and Gregory Salmieri's *A Companion to Ayn Rand* (Wiley-Blackwell), an academic primer on Objectivist philosophical concepts that takes account of Rand's entire corpus.

Despite this, for someone with her level of influence, Ayn Rand remains understudied. While references to Rand pervade American popular culture, and journalism both promoting and excoriating her ideas abounds, most scholarship has been done by committed partisans. There is a single independent journal devoted to Rand, the Journal of Ayn Rand Studies. In 2009, Jennifer Burns of Stanford University broke new ground with a nonpartisan monograph covering Rand's influence on the American right, Goddess of the Market, published by Oxford University Press. The book included a call for further investigation of Rand's impact on cyber and computer culture, which has been "strikingly libertarian from the beginning" (Burns 2009, pp. 263, 339n48). This study responds to that call to a certain extent, by considering Rand's relationship with those operating in technological spheres, while also covering other ground. My book addresses the relationship between Rand's work and one of the major theories of twenty-first-century subjectivity, posthumanism. The essential question is this: Does Rand's philosophy support a posthuman vision—that is, a vision of man existing beyond the "naturally produced" organic body?3 Through an analysis of Rand's work itself, and an exploration of her influence on those who create, theorize, and speculate on technological progress, I argue that it does.

Posthuman Beginnings

The novel which truly made Rand famous was her third, 1943's *The Fountainhead*. Its hero is an uncompromising red-haired architect, Howard Roark. The story charts his career from his college expulsion until he becomes master of all he surveys. He will not design with others, will only design buildings in his own inimitable style. At the end, during a lengthy speech on the rights of man, individual, and the wrongs of men, collective, Roark polemicizes: "Every great new invention was denounced. The first motor was considered foolish. The airplane was considered impossible. The power loom was considered vicious. Anesthesia was considered sinful. But the men of unborrowed vision

went ahead The creator's concern is the conquest of nature" (*The Fountainhead*, pp. 710–12).⁴

Roark is a conduit for Rand's philosophy. Roark's, and Rand's, viewpoint, raises a question which can only now be explored in its full implications—and perhaps not even yet. If the concern of the creative mind "is the conquest of nature," why not build a technological body, a human frame better than biology?

The posthuman is a concept of subjectivity, driven by a belief that the self is not limited to the individual organic human body. Philosophical posthumanism can take many forms, from ontological kinship with animals and the environment, to incorporating nonhuman facets into ideas of the self—whether it be an iPhone or a bionic limb. Posthumanism encompasses philosophical ideas about modern and emerging technology, as they relate to the human: artificial intelligence, genetically engineered bodies, cloning technology, potential machine bodies into which our minds could be placed (cyborgs). These are possibilities found in both science fiction (SF) and increasingly in scientific reality. How does the existence of these possibilities alter what it means to be human, alter how we think about ourselves as human beings? This is perhaps the central question of posthumanism.

Proponents of the "posthuman" futures I write about here, broadly speaking, seek to improve upon the organic human body, either by engineering it at the genetic level, or by fusing elements of the organic with mechanical and digital technology. The philosophy which advocates improving the human by substituting the technological for the organic is also known as transhumanism. The differences between the broader discourse of posthumanism and the specific field of transhumanism are commented upon further below.

The cyborg may be on the verge of becoming real. Scientists—the primary creators of posthuman futures, just as SF authors are the primary imaginers of them—have long been experimenting with technology's ability to improve our bodies. Kevin Warwick, professor of cybernetics, has been involved in a number of cyborgian experiments. One of the most significant occurred in the early 2000s, when he had a 100-electrode array implanted into the median nerve fibers of his left arm, with which—via the Internet—he could operate a robotic hand that was located over 3,000 miles away (Warwick was in Columbia University, New York and the hand in Reading University, UK). The array was also used to send

neural signals, via the Internet, to electrodes implanted in his wife's arm, resulting in stimulation of her nervous system (Warwick et al. 2004, pp. 186–88). The implications of these fledgling cyborgian movements continue to echo today. Warwick has said: "I, for one, am looking forward to upgrading my own capabilities. ... I want to have all sorts of different senses fed directly into my brain and to be able to communicate by thought signals alone"; "it's a cyborg life for me!" (Warwick 2001, pp. 43–44) The cyborg is the posthuman par excellence, the fusion of human will and manmade limbs.

It is important to note that the posthuman does not necessarily entail a world devoid of humans. It implies the survival of something human, albeit in a revised form. N. Katherine Hayles writes that "the posthuman should not be depicted as an apocalyptic break with the past. Rather, it exists in a relation of overlapping innovation and replication Technology as a strategy of survival and evolutionary fitness cannot be alien to the human" (Hayles 2003, p. 134). The "post-" in posthumanism can be treated in the same manner as Jean-François Lyotard treats the prefix in postmodernism. The "post-" does not signify a simple division with modernism. Lyotard writes that the postmodern should be understood as a development beyond, but also something that comes from within, the modern; it is a process of "anamorphosis" (Lyotard 1993, pp. 47–48, 50). The posthuman can be understood in the same way.

Overlapping circles can be drawn between Objectivism and posthumanist thought. Much of the twentieth century's ideological and real conflict begins with arguments over the interests of society as against the interests of the self—with Rand at the vanguard of those promoting self-interest. In the twenty-first century, the philosophical ground is shifting to the battle of the self versus technology. Technology is increasingly the force which binds human society, by setting and expanding the limits of human connectedness, as well as expanding individual lifespan and capability. Posthuman theory will therefore become an ever-more important way of analyzing twenty-first-century culture and subjectivity. Objectivism and posthumanism are far from a perfect fit philosophically; there is tension, especially considering the Randian notion of man as heroic in himself (that is, without technological augmentation) and the democratic aspirations of much posthumanist thought (set against Rand's individual-alone). However, the strains are linked through facets such as a belief in the primacy of the mind, as well as a veneration of progress through technological advancement, a faith in a Nietzschean Superman, and a belief in the comparative dystopia of now. According to any directive philosophy for living, the future is a comparative utopia when the edicts of that particular philosophy are followed.

In Rand, the role of the mind as man's key asset—indeed, essence—is foregrounded. In *Atlas Shrugged*, her heroic protagonist, John Galt, reverses Descartes's famous assertion, declaring: "I am, therefore I'll think" (*Atlas Shrugged*, p. 1058). For Rand, thinking was not the first proof of existence. Rather, one existed, therefore thinking was needed to survive, and reasoned thought was a conscious choice. The creator is distinguished by his or her superior mental faculties; physical labor is secondary.

A similar belief in the mind as human essence underlies much posthumanist thought. As Hayles, one of the primary theorists of the posthuman, has pointed out, one of the first philosophical steps on the road to posthuman conception, is a grading of the body as subordinate to the will, ideas, and thoughts of the mind. The organic body becomes, for posthumanists, mankind's "original prosthesis." It is therefore desirable to replace the organic body with a better prosthesis, one more able to fulfill the mind's wishes (Hayles 1999, p. 3).

Rand's belief system is marked at its core by an intellectual investment in technology, an assertion that man's progress is indicated by technological development; moreover, that technological progression is at the heart of humanity's worth. Rand's descriptions of technological creations as the physical embodiments of human thought—we could say its "offspring"—foreshadow Hans Moravec's concept of "mind children." Moravec, a robotics expert and transhumanist, writes of mind children as the technological creations of man's mind, which may come to take on lives of their own (Moravec 1988).

Such descriptions by Rand come to the fore in her 1938 novella *Anthem*, a creation myth which conflates technological creation with the liberation of the individual. Set in a future dystopia where humankind has technologically regressed, its hero is Equality 7-2521, a rebel who rediscovers electricity. When Equality brings his creation, a lightbulb, to the World Council of Scholars, he appeals to them that "the future of mankind" lies with electricity (*Anthem*, p. 70). Instead of praising Equality, however, the scholars condemn him, vowing to suppress his invention so as not to make the candle-makers jobless.

From the standpoint of posthumanism, and how Rand buttresses a posthumanist philosophy, it is important to note that in *Anthem*, as

elsewhere in Rand, human invention is framed as the conquest of nature: man's mind over the matter of the earth. Equality 7-2521's discovery of electricity is described as "[t]he power of the sky ... made to do men's bidding"; it is "the key to the earth"—technology is that which "ease[s] the toil of men," and that is good (*Anthem*, pp. 60, 71). There is no dividing line between the invention and the inventor; the invention is as much an extension of the inventor as his own body. Equality speaks of his creation, saying, "this wire is as a part of our body, as a vein torn from us, glowing with our blood. Are we proud of this thread of metal, or of our hands which made it, or is there a line to divide these two?" The technological creation is endowed with the features of organic life; it is "a living heart that gives us strength" (*Anthem*, pp. 61, 76).

In Rand, the self is integrated with the product of self. The implication everywhere is that the self is not limited to the organic. Technology and invention become extensions of the mind and body, just as the body itself is an agent of the ego.

INVESTING IN TECHNOLOGY

At the end of *Anthem*, Equality renames himself Prometheus, after "he [who] taught men to be gods." Prometheus vows to re-establish civilization by having children with another rebel, Liberty 5-3000, whom he renames Gaea, as she is "to be the mother of a new kind of gods" (*Anthem*, p. 99).

Frankenstein, of course, was the Modern Prometheus, while technologies today which challenge our assumptions about life or manipulate the boundaries of life are frequently compared to the work of Mary Shelley's fictional life-creator. Rand, however, takes only a positive view of technological advancement and scientific experimentation, when in the hands of the individual and not the collective. Men should be gods, according to her, for their minds are creative.

In his book *The Fourth Discontinuity*, Bruce Mazlish makes the case for the "co-evolution" of humans and machines. Humans have always used tools, and machines have developed as we have developed; indeed, they have been key to our development and vice versa. Humans and machines belong to the same cycle of life. Humans are not simply products of evolution but also agents of it; as Mazlish states, in Darwinian terms, machine evolution is closer to domestic than natural selection. We are bringing the artificial to the point of sentience; whether machines will

soon evolve independent of humans is "a pressing issue" (Mazlish 1993, pp. 4–8). In this scenario, men are gods of sorts, as Rand imagined.

Since the Industrial Revolution, according to Mazlish, human evolution has seemed to point in a new direction. This is "where humans pass, or begin to pass, the boundary between the animal and the mechanical. ... Humans themselves become more mechanical." And why wouldn't we? Integration of machines into our lives extends our capacity exponentially; technological development is very much linked to our ability to be all we can be (Mazlish 1993, pp. 10, 12). Rand likewise identifies the Industrial Revolution as man's breaking point with his primitive past. It represents the ushering in of a new order based on progress and technological advancement, paving the way for the triumph of reason and, ultimately, Objectivism. At least in this sense, posthumanist theorists and Objectivists view human historical trajectories in a similar manner.

As the above narrative suggests, Rand's work itself provides a backdrop for technological futures and in turn posthumanism. A significant part of my case for the overlapping circles between Objectivism and posthumanism, however, is Rand's real-world influence on the innovators who are forging our technological destiny, whose works constitute precursors to posthuman futures. Rand's intellectual investment in technology has undoubtedly aided the acceptance of her ideas among technology entrepreneurs and libertarian transhumanists. Internet innovators such as PayPal co-founder Peter Thiel and Wikipedia co-founder Jimmy Wales count Rand as an inspiration. Transhumanism's libertarian element owes much to Rand. The founding principles of the libertarian-transhumanist Extropian movement stem in part from the writings of Rand and Hayek. The Extropians advocate "extropy," the opposite of entropy. Their principles call for "a rational, action-based optimism" combined with a transcendence of natural limits through "intelligent technology" (Max More, "Extropian Principles," qtd. in Hughes 2004, p. 166). Patri Friedman, Milton Friedman's grandson, Rand fan, and a well-known transhumanist, is co-founder of the Seasteading Institute, an organization with the aim of establishing floating cities on the oceans. These would be locations where innovators could experiment with new methods of social relations and new technologies, free from the obstruction of existing governments. In Atlas Shrugged, the productive vanish from society to establish their own "Atlantis," as Rand calls it, a pure-capitalist community hidden in a valley dubbed Galt's Gulch. The similarities between seasteads and Galt's Gulch have not gone unnoticed.

Seasteading and the Extropians are two examples which are further investigated through an Objectivist-posthumanist lens in this book.

Nietzsche's Superman, as I mentioned, informs both Rand's ideal man and the posthuman; this connection is explored below. The specter of another Nietzschean concept hangs over Rand and posthumanism, however: the will to nothingness. Given that our current historical trajectory suggests that man may one day be superseded by his technological creations, does Rand's intellectual investment in technology constitute an ultimate will to nothing for humanity? Can Rand's work be considered a negation of the true organic self? This question is too large to be given much attention in this volume, but the specter of it remains present.

Objectivists, of course, would say that Rand's philosophy does the opposite of negate the human; Objectivism exposes the true human self: the thinking individual mind. Yet, for all her valorization of man, Rand herself was not always so sure that the human was the best form of life that there could be on earth. She wrote in her journal, on July 18, 1945: "Perhaps we are really in the process of evolving from apes to Supermen—and the rational faculty is the dominant characteristic of the better species, the Superman" (Journals, p. 285). If Supermen are to be made real on earth, they will likely be men of steel, technological bodies, posthumans. The future awaits, and it begins with Ayn Rand.

CHAPTER BREAKDOWN

This book is an introduction to the overlaps between the work of Ayn Rand and the sphere of the posthuman. It is an argument for Rand's presence within the context of the posthuman. More widely conceived, it is also about ways of thinking about Objectivism and posthumanism together, relating the two fields to each other. The book is in many ways something quite inchoate: an evidentiary statement, perhaps; an account of certain links and an elaboration upon them. My hope is that it may be a spur for future thought.

My study is not simply a study of Rand's fiction as a product unto itself. It is as much or more about where the fiction goes. By this I mean: I consider the nature of the impetus Rand has provided to so many, and how her ideas have contributed toward certain ends. My method combines close textual analysis of Rand's work with an examination of other sources and contextual factors. Comparison between Rand's fiction and other fiction illuminates much of my argument. Chapters 2 and 3 are primarily about the inspiration Rand has provided in the real-world fields of the posthuman. Chapters 4–6 look at the relationship between Rand and posthumanist science fiction, and how her work has been put to use here.

Chapter 2 may be considered an extension of the introduction. If this introduction offers a teaser, Chapter 2 is designed to provide a more complete overview of the field of posthumanism, and Rand's relationship to it. The chapter summarizes our current technological moment, and Rand's place among those who have brought us to this point. Are we really headed toward a time in which human and machine merge, or where we are altered fundamentally by artificial genetic reconfiguration? To some who hold such a vision, of biology integrated withor supplanted by-technology, Rand's work is part of the fire burning beneath the dream. Rand's views on technology are undoubtedly part of the reason she has provided this particular inspiration. This chapter exposits those views, which I believe lead toward posthuman conception. Two facets of the Randian worldview are described: (i) man conquering nature is good, it is a true expression of man's unique value; and (ii) technology is an extension of human will and as such has immense value. These views are wrapped up in Rand's broader belief that the individual mind is the core of productivity, and that capitalism is the only economic system commensurate with free minds.

Chapter 3 goes deeper into the philosophical relationships between Objectivism and posthumanism. It considers the two major strains of posthumanist thought, as identified by Jeanine Thweatt-Bates in her useful book on the subject, Cyborg Selves (2012), and overviews their philosophical relationship to Rand: (i) Donna Haraway's cyborg, and (ii) the transhuman. Transhumanism is part of the broad discourse of posthumanism, but it also has a separate and more concrete meaning. The posthuman is a concept of subjectivity, and posthumanism a diverse philosophical field ruminating on the nature of modern and future life. While the posthuman can mean an enhanced human being, such as a cyborg, it is also more generally about the relationship between the human and the non-human (the machine). Hayles, for instance, writes that, because of how technology and new fields of science have changed how we think about ourselves, "even a biologically unaltered Homo sapiens counts as posthuman" (Hayles 1999, p. 4). If the posthuman is a concept of subjectivity, the transhuman is a specific

being-an enhancement over the "ordinary" biological human-and transhumanism is a movement with definitive aims: life extension, immortality, expanded ability through genetic and technological augmentation. Transhumanism has far more in common with Rand than other philosophies of posthumanity. This fact is demonstrated by exploring the similar relationship Objectivism and transhumanism hold with Nietzsche, as well as covering how transhumanism and Objectivism themselves interact.

In Chapter 4, the analysis of Rand in the context of the trans-/ posthuman turns to fiction. I delineate the relationship between Rand's work and two discrete forms of posthumanist science fiction; what I call Rand noir vs. Rand incorporated. "Classic" posthumanist SF—the mold of cyberpunk—depends upon the existence of a Randian precursor, high capitalism; these texts have their origin in a time when Randian views were clearly at work within US policy circles: the 1980s. However, unlike Rand's utopian vision of pure capitalism, cyberpunk's capitalist apex is distinctly dystopian. I therefore call it Rand noir. The relationship of this work to Rand is indirect. The last few decades, however, have also seen the advent of a number of works depicting transhumanism and posthumanism which interact directly with Rand's fiction. These include Andromeda (2000–2005), a television series developed from notes left behind by Star Trek creator Gene Roddenberry; the videogame BioShock (2007), developed by 2K Games; and The Transhumanist Wager (2013), a novel by Zoltan Istvan. In contrast to earlier posthumanist SF—which is marked by postmodern ambivalence—these texts take up a position, and put forward an argument, with regard to the issues they are airing: issues of the human future, man in relation to machine, and the nature of Objectivism itself. As they address or incorporate Rand's vision, this position-taking is a logical result. The absolutism of Rand demands an argument in response—not ambivalence. I call these works Rand incorporated, since this describes what they do: incorporate Ayn Rand directly into their themes and plots.

Chapters 4-6 together may be considered an extended case study, comparing classic Rand noir works of posthumanist science fiction with works that interact directly with Ayn Rand. All of this analysis speaks to Rand's presence within the sphere of posthumanism. Chapter 4 looks at three "Rand noir" texts—Ridley Scott's 1982 film Blade Runner, Mamoru Oshii's 1995 anime Ghost in the Shell, and William Gibson's 1984 novel *Neuromancer*—and examines how they fulfill the definition of Rand noir. The chapter thereby explores, through the three examples, Rand's relationship with a particular strain of posthumanist SF. By way of contrast, the chapter closes by looking at the first of the three "Rand incorporated" texts mentioned above: *Gene Roddenberry's Andromeda*. We will see how Rand incorporated, unlike Rand noir, responds directly to Rand's work, and does not offer ambivalence, but definitive statements.

Chapters 5 and 6, respectively, delve into *BioShock* and *The Transhumanist Wager*, as these require more unpacking in terms of their connection to Rand, and are each deserving of a chapter unto themselves. *BioShock* is set in an alternate-history 1960, and consciously depicts a post-Objectivist dystopia. In the real world, this was the period of Objectivism's gaining flight, after the publication of *Atlas Shrugged*. The game's action is played out in an underwater city, the mind child of megalomaniac Andrew Ryan—a near-homonym of "Ayn Rand." In *BioShock*'s plot, Randian morals and ethics have resulted in a rigid class system and led to civil war; into the mix are thrown biotechnology and mechanical technology with the power to bestow superhuman capabilities. *BioShock* thus exemplifies the implicit and evident links between Ayn Rand and posthumanism. My analysis dwells on how the game uses Objectivism itself and posthumanism to interrogate Rand's capitalist ideal.

The Transhumanist Wager, like BioShock, is a very conscious recreation of certain Randian elements. The novel is in many respects a rewriting of Atlas Shrugged. Where Rand promoted capitalism, Istvan promotes transhumanism. Istvan is upfront in claiming Rand as not only an influence but a precursor. Chapter 6 of my book demonstrates exactly how Istvan has used Rand's work as a template in creating his own philosophical thriller. In Istvan's novel, a Randian figure named Jethro Knights vows to transform the existing social order. As Rand's John Galt does in Atlas, Knights courts the innovative elite. Knights brings them to a modern version of Galt's Gulch, where they enact a radical vision of humans improving themselves through interfacing with technology. By the end of Atlas, Galt has brought about the implosion of the novel's socialistic American dystopia. At the end of Wager, thanks to the incredible technology Knights has developed, the hero overthrows all the planet's existing governments, and establishes a new technolibertarian global

polity. Wager-along with the other examples discussed in Chapters 4-6—embodies the argument of this book: the evident continuum between the work of Ayn Rand and the posthuman.

Notes

- 1. A note on my use of the term "Objectivism" throughout the book. I use it to refer both to the ideas found in Rand's novels, and the philosophical system she formulated—out of the ideas in her novels—later in life. The fiction represents the best portrayal of Rand's philosophy in action; the two are intrinsically related. Though the word Objectivism does not appear anywhere in the main text of the novels, when she came to systematize it as a way of life, in her nonfiction, Rand frequently referred back to the fiction. I have capitalized "Objectivism" throughout, including in quotes from third parties where it may not have been capitalized in the original. Following Rand biographer Jennifer Burns, I use "Objectivist" to refer not only to those who see themselves as advocates of everything Rand taught, but also "loosely to encompass a range of persons who identified Rand as an important influence in their thought" (Burns 2009, p. 4).
- 2. One note of caution: This sales figure includes an impressive operation by the Ayn Rand Institute—the organization co-established by Rand's heir, which houses her papers—whereby it bulk-purchases copies of Rand's books to distribute free to schools. Four million books have been given out under the "Free Books for Teachers" program (Ayn Rand Institute 2018). However, the "over 30 million" sales figure does not include non-English-language editions of Rand's works, of which there have been "at least" 100, in at least 26 languages (Salmieri 2016, pp. 3, 15n1).
- 3. Rand insisted on "man"—with its rugged individualist connotations—to denote the human species or a generic member thereof, in contrast to the impersonal "the human," or "humanity," with its collectivist implications.
- 4. For citing works by Rand herself, I have broken from the usual referencing convention of this book (author-date), in favor of the title (sometimes abbreviated) followed by the page number(s). This is because the versions of Rand's books I cite are recent editions, often published in the same year, and so titles are likely to provide greater clarity for the reader.

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Points of Entry

America has ended—and it is about to be reborn. The setting is Mulligan's Valley, a small community in the mountains of Colorado. For years, the great creators have been gathering here: the entrepreneurs, the inventors, the best artists. Buckling under the weight of taxes, and constrained by regulation, one by one they chose to drop out of the American economy: to go on strike. Unable to sustain itself without brilliant men and women, the economy has collapsed, and with it the body politic. Chaos reigns.

But the time has come once more for order. The old world has consumed itself with its failure; the great creators are ready to return and shape the earth to their meaning. By lamplight at a table in his library, a judge of Mulligan's Valley marks and crosses out the contradictions in the statements of the Constitution of the United States. He adds a new clause: "Congress shall make no law abridging the freedom of production and trade." Across the valley, high on a mountain ledge, the leader of the striking entrepreneurs, John Galt, looks out upon the ruined landscape. "We are going back to the world," he announces. He raises his hand and, over the scorched earth, traces in space the sign of the dollar (*Atlas Shrugged*, pp. 1167–68).

This ominous scene forms the conclusion to Ayn Rand's 1,200-page, 1957 magnum opus, *Atlas Shrugged*. Rand believed that civilization was kept moving by a distinct elite. Not a racial elite, or patriarchy, or a highborn elite along traditional aristocratic lines—but an elite of the mind. In any one generation, there will be only a few who have the ideas that truly

revolutionize human existence. In Rand's lifetime, Thomas Edison and Robert Oppenheimer would have fitted the bill; in ours perhaps Steve Jobs. In *Atlas*, the author suggests that as few as 1,000 individual creators could collapse the American economy, and hence the global economy—collapse civilization as we know it—simply by refusing to apply their genius (Cookinham 2005, p. 157). One thousand Atlases holding aloft the world, and the rest of us the beneficiaries of their labor. Rand's elitism should not be taken to mean that she didn't want her work to have appeal to the man in the street. Her philosophy, Objectivism, venerates productivity. Everyone can be productive. It's just that some will produce more of objective value than others.

The above is the endgame: society implodes, and the strikers return to the world at large. For the majority of *Atlas*'s text, however, Mulligan's Valley and its inhabitants are defined in opposition to "the world at large." The valley—more commonly called by its nickname, Galt's Gulch—is a fascinating fictional construct: a Randian paradise running counter to the socialistic implosion of America. Rand understandably refers to it in explicitly mythical terms, as "Atlantis." It is the shining city beneath the hills, the city only of heroes; Rand's most complete expression of her ideal society, put into fictional action. The author herself calls the gulch a utopia. Objectivist scholar Shoshana Milgrim is forthright in describing it as a "genuine utopia" (Milgrim 2005, p. 163).

Only the worthy may enter Utopia. Kirsti Minsaas explains that the "key of admission" to Mulligan's Valley "is that one has grasped the code of rational egoism, cleansed of all altruistic impurities" (Minsaas 2007, p. 148). In other words, one must have bought Rand's philosophy hook, line, and sinker. The inhabitants of the valley live entirely in accordance with Objectivist principles. In the America outside, the government is applying new constraints on business with alarming continuity, and consequently the economy only contracts. But in Galt's Gulch, individual freedom—in an absolute capitalist sense—reigns supreme. Rand emphasizes that it is not truly a "community" at all, but a series of private properties: "It was not a town, only a cluster of houses scattered at random." At dinner, people do not gather together at a table but sit around the room on their own chairs with their own trays. This non-community nevertheless possesses a defining monument: supported on a granite column, a three-foot-tall solid gold dollar sign, the town's "coat-of-arms, its trademark, its beacon" (Atlas Shrugged, pp. 705-6, 736).

Here, the dollar is almighty. Everything must be paid for. In one passage, Galt wishes to rent Midas Mulligan's car-Mulligan is the banker to whom the valley owes its name. A new arrival to the valley, Dagny Taggart, is initially surprised that Mulligan, who is worth \$200 million, would not simply allow Galt to borrow the car as a courtesy, rather than have him rent it at 25 cents a day. Galt explains: "[W]e have no laws in this valley, no rules, no formal organization of any kind. We come here because we want to rest. But we have certain customs, which we all observe, because they pertain to the things we need to rest from. So I'll warn you now that there is one word which is forbidden in this valley: the word 'give.'" Galt subsequently informs Dagny that he will be charging her 50 cents a day for room and board, since "it is against our rules to provide the unearned sustenance of another human being." Dagny offers to work as Galt's housekeeper in lieu of paying rent, and Galt agrees. Elsewhere in the novel, Rand's views on trade and money are succinctly expressed. Galt tells us: "[T]he moral symbol of respect for human beings, is the trader. ... A trader is a man who earns what he gets and does not give or take the undeserved." Another heroic character, Francisco d'Anconia, declares that "money is the root of all good"; "[m] oney is made—before it can be looted or mooched—made by the effort of every honest man, each to the extent of his is ability. An honest man is one who knows that he can't consume more than he has produced" (Atlas Shrugged, pp. 411, 415, 715, 760, 1022, emphases in original).

In the valley, ruthless competition in trade is encouraged and venerated. Andrew Stockton of Stockton Foundry remarks that he had to "ruin a competitor" before reaching his current position in the market-place. The competitor is now making a grand living in a new profession: sculpture. Being put out of business allowed him to follow his true calling, since he could never have done "the kind of job" that Stockton does (*Atlas Shrugged*, pp. 723–24). This scenario exemplifies Rand's dubious principle that there are no conflicts of interest among rational beings (*The Virtue of Selfishness*, p. 57). Two people are running the same type of business; one of them gains a greater market share than the other. According to the Randian view, the losing competitor—in a free market—could never have had that share, since his service is inferior. Because one could never have had what the other has, there is no conflict of interest.

Ayn Rand is a utopian because she constructs a complete philosophical system which claims to resolve all contradictions and compromises in human action. More than this, every action taken in accordance with

Objectivist beliefs has an ultimate end in mind: a world resembling, in essence, Galt's Gulch. Any real-world Ayn Rand utopia would have to take this place as its blueprint. And indeed, many have been persuaded by Atlas Shrugged to work toward a future which resembles Rand's vision of Galt's Gulch, as we will see. The whole Randian worldview of the individual, the economy, and society—expressed most succinctly in the idea of Mulligan's Valley, but consistent across her work—has cast a long shadow over American political and cultural discourse. This is where we turn to first in this chapter.

This chapter of my monograph may be considered as an extension of the introduction. To begin with below, I summarize Rand's ongoing influence on politics and on business, and overview the high-tech reality of our current moment in history. This is essential background to considering Rand specifically in the context of the posthuman. The aim of my analysis is to suggest that Rand's work has helped lead us to a point from which posthuman futures can emerge. Rand's impact on technology entrepreneurs is a key fact here.

The author's views on technology are undoubtedly part of the reason she has provided the particular inspiration she has. Thus, from briefly summarizing Rand's effect on the political environment and technologycreation—taking account of her documented influence, and the statements of those who claim to have been inspired by her—I move to my main motivation with this chapter, which is to show that, on the level of the text itself, Rand's writing buttresses posthuman conception. Two facets of Rand's worldview are described: (i) man conquering nature is good, it is a true expression of man's unique value; and (ii) technology is an extension of human will and as such has immense value. Given these aspects, it should not surprise us that advocates for high technology and for posthuman futures have made use of Rand for their own purposes.

Finally, having proffered some aspects of Rand's writing that lean toward the posthuman, the chapter introduces a more thorough discussion on the meaning of posthumanism itself. Two distinct strains are identified. In Chapter 3, Rand's relationship with each is delved into in greater detail.

FROM EDGE TO CENTER

During the 2012 election cycle, the president of the United States was asked if he had ever read Ayn Rand. "Sure," Barack Obama told Rolling Stone. The Democratic president went on:

Ayn Rand is one of those things that a lot of us, when we were 17 or 18 and feeling misunderstood, we'd pick up. Then, as we get older, we realize that a world in which we're only thinking about ourselves and not thinking about anybody else, in which we're considering the entire project of developing ourselves as more important than our relationships to other people and making sure that everybody else has opportunity—that that's a pretty narrow vision. It's not one that, I think, describes what's best in America. (qtd. in Brinkley 2012)

Rand had been brought front and center in the campaign for president, thanks to Paul Ryan's presence on the Republican ticket. Ryan had uttered in the past many complimentary things about the controversial Russian-American novelist. In 2005, in a speech hosted by a Rand advocacy organization, the Atlas Society, the Wisconsin congressman and future vice presidential nominee had said:

I grew up reading Ayn Rand and it taught me quite a bit about who I am and what my value systems are, and what my beliefs are. It's inspired me so much that it's required reading in my office for all my interns and my staff. ... [T]he reason I got involved in public service, by and large, if I had to credit one thinker, one person, it would be Ayn Rand. And the fight we are in here, make no mistake about it, is a fight of individualism versus collectivism. (qtd. in Atlas Society 2012)

In these two revealing quotes, the fault lines of American politics are exposed, through opposing views of Rand's work. But the most significant thing about these juxtaposed quotes is that, taken together—and quite apart from espoused ideologies—they demonstrate that Rand is a normal part of the American experience, and particularly the American adolescent experience. Since *The Fountainhead*, Rand has been read avidly by teenagers and college students especially; those whose identities are forming. Though she was absent from literary canons, throughout the twentieth century, the novelist remained part of what Burns calls "the underground curriculum of American adolescence" (Burns 2009, p. 282). Today, Rand is read in many formal educational settings, thanks to the Ayn Rand Institute's (ARI's) books-to-schools program.

Rand died in 1982—but her death marks only the beginning of the story of her fiction. In terms of influence, her afterlife has been more successful than her life. Slavoj Žižek writes: "Rand fits into the line of 'overconformist' authors who undermine the ruling ideological edifice

by their very excessive identification with it" (Žižek 2002, p. 215). This is wishful thinking on the part of the Marxist critic. Rand's foundational impact on right-wing politics and on business over the last several decades is documented in books by Anne Heller (*Ayn Rand and the World She Made*, 2009), Jennifer Burns (*Goddess of the Market*, 2009), and Gary Weiss (*Ayn Rand Nation*, 2012), among others. Heller and Burns, in particular, have gained a reputation as definitive sources—and are used as such throughout this study.

Rand published four novels during her lifetime: We the Living (1936), Anthem (1938), The Fountainhead (1943), and Atlas Shrugged (1957). All deal with similar issues, despite diverse settings. The events of Rand's first book come closest in her fiction to the events of her own life. We the Living is set in St. Petersburg/Petrograd/Leningrad in the years after the Bolshevik Revolution, and depicts the efforts of a young heroine to realize her dreams and finally to escape Russia. Anthem, a novella, is often compared to Huxley's Brave New World and Orwell's Nineteen Eighty-Four. It is a parable set in a future collectivist dystopia in which the concept of individuality has been eliminated. The Fountainhead offers Rand's first complete portrait of her ideal man: Howard Roark, an uncompromising architect, who fights all his life to build buildings the way he wants them built. Rand's final novel is her longest, her most complex, and most controversial. Atlas Shrugged is set in an alternate America, and centers around a mysterious "strike" by the world's great entrepreneurs, artists, and thinkers; slowly the absence of these individuals from productive life is bringing "the motor of the world" to a halt.

It was only in the last part of her career that Rand came to explicitly call herself a philosopher, and to systematize the ideas found in the novels into "a philosophy for living on earth" (*Philosophy: Who Needs It*, p. 10). A number of nonfiction books by Rand, all published later in her career, adapt and codify the ideas in the novels. These include elucidations of her ethical vision (*The Virtue of Selfishness*, 1964; including articles by Nathaniel Branden), her economic views (*Capitalism: The Unknown Ideal*, 1966; including articles by Branden, Alan Greenspan, and Robert Hessen), and her literary philosophy (*The Romantic Manifesto*, 1969). During the last two decades of her life, Rand gained fame as a public speaker, giving invited talks on university campuses and at other public fora. Her most complex theoretical work appeared some 20 years after her last novel: *Introduction to Objectivist Epistemology* (1979).

Rand honed her style as she progressed as a writer, and so her ideals, of heroic beings and capitalist economics, find their fullest expression in *Atlas*. Her fiction as a whole, however, conveys a consistent set of ideas about humanity and reality: the right of the individual to pursue happiness, divorced from obligation to others' needs; man's reasoning mind as the core of his existence; and the idea that man should be celebrated because he creates new things and pushes physical boundaries. These aspects of greatness are worthy of "worship," a word Rand uses in relation to venerating human beings and their achievements, rather than glorifying anything mystical (Rand was a staunch atheist, as are her fictional avatars). The consistency of Rand's vision, its representation of a complete view of the world that can be "lived," has undoubtedly helped cement her political impact. It is not that readers necessarily followed her every edict, but she presented a world that seemed to many as the world should be.

Unusually for someone whose major works are novels, Rand's primary impact has not been literary or esthetic. Her primary impact, as Burns points out, has been as a political philosopher (Burns 2009, p. 4). But Rand wrote page-turner fiction, the plots of which "proved" her philosophical points; she did not engage in esoteric scholarship which could only be understood by experts. Rand's novels bear many of the tenets of Ken Gelder's seminal definition of popular fiction, which he contrasts with Literature with a capital L. Her work is straightforward in terms of narrative structure, "exaggerated" and "exciting" (Gelder 2004, pp. 19-20), with plots including an architect who blows up his own work when he doesn't get his way (Howard Roark), a future where the word "I" has ceased to exist (Anthem), and a hidden valley that holds the key to saving the world (Atlas Shrugged). The breadth of Rand's impact as a political philosopher has surely been aided by the fact that she was a popular novelist. The fact that her dogma came in the form of page-turners allowed her to reach audiences not usually receptive to hardcore philosophical or political argument. Though, she reached the political hardcore as well.

By the 1980s, those who had come of age reading *The Fountainhead* and *Atlas Shrugged* were first coming to power in Washington.¹ Burns summarizes:

[In 1981], George Gilder ... recognized Rand as an important influence in Wealth and Poverty, a book soon known as the bible of the Reagan

administration. Two years after her death another of her admirers, Charles Murray, would light the conservative world aflame with his attack on welfare, *Losing Ground*. Along with *A Time for Truth*, written by former Treasury Secretary William Simon and former [member of Rand's inner circle] Edith Efron, these books suggested that Rand's influence was just beginning to be felt in policy circles. The *New York Times* would even dub Rand the "novelist laureate" of the Reagan administration, citing her influence on Alan Greenspan, [senior economic advisor] Martin Anderson, and several others. (Burns 2009, p. 279)

Greenspan, chairman of the US Federal Reserve from 1987 to 2006—and one of the foremost enactors of what has come to be called neo-liberalism—was a protégé and friend of Rand. He contributed to her nonfiction book *Capitalism: The Unknown Ideal* (1966), and frequently cited Rand as turning him toward the *morality* of capitalism, above and beyond its simple efficacy. He described her argument in *Atlas* as "radiantly exact," and compelling enough to persuade anyone who was intellectually honest (Heller 2009, pp. 275–76). Rand's work was part of the fire burning beneath the rise of laissez-faire in the 1980s, just as much as that of economists Milton Friedman and Friedrich Hayek. The new consensus in favor of free markets was not altered under the presidency of centrist Democrat Bill Clinton, during which Greenspan continued as Fed chairman. Indeed, the political left was pulled to the right throughout America and Europe in the 1990s, after the fall of the Soviet Union and the evident victory of laissez-faire.

Since 2008 and the financial crash, there have been several attempts to lay blame for it at Rand's door. The basic argument is that Greenspan learned his ways from Rand; he and like-minded individuals were responsible for the economy, and what they did created the crisis. Therefore, Rand is the root. Weiss makes such an argument, as does Adam Weiner in the unsubtly titled *How Bad Writing Destroyed the World: Ayn Rand and the Literary Origins of the Financial Crisis* (2016). There is even a volume which makes the argument in the form of comic-book art, Darryl Cunningham's *The Age of Selfishness: Ayn Rand, Morality, and the Financial Crisis* (2015).

The post-2008 world, however, far from diminishing Rand's star, has only made it brighter. The Great Recession coincided with the largest sales ever for *Atlas Shruaged*—with 2009, 2011, and 2012 (in that order) being the top three years for sales of the book up to that point, since its publication in 1957.² The *Economist* reports: "Whenever governments intervene

in the markets, in short, readers rush to buy Rand's book" (Economist 2009). Since 2010, the electoral success of Republican Party candidates in America has been undergirded by the Tea Party, a right-wing movement which—as Weiss writes at length in Ayn Rand Nation—claims significant allegiance to Rand. The nomination of Donald Trump as the Republican presidential candidate in 2016, and his subsequent election, were in many ways a culmination of the Tea Party narrative: that the country was headed in the absolute wrong direction, and needed a return to supposedly more fundamentally American values. Trump is a self-described fan of Rand, and especially of The Fountainhead and its great shaper of real estate, Howard Roark. During the 2016 campaign, Trump told Kirsten Powers for USA Today that Rand's 1943 novel, "relates to business (and) beauty (and) life and inner emotions. That book relates to ... everything" (Powers 2016, ellipsis and parentheses in original). Other Rand fans were named members of Trump's cabinet, including Rex Tillerson, his first Secretary of State, who once listed Atlas Shrugged as his favorite book; and Mike Pompeo, Trump's first CIA Director and second Secretary of State, who says Atlas "really had an impact" on him (Hohmann 2016). Many more prominent Republican politicians are also still very much in Rand's corner, including the aforementioned Paul Ryan. Mark Sanford, a South Carolina congressman and former governor, wrote an article for Newsweek in 2009 praising Rand; Ron Johnson, the senior senator from Wisconsin, calls Atlas his "foundational book"; Kentucky senator Rand Paul has been known to quote Rand "at length" (Daily Beast 2012).

There is a small industry of Objectivist intellectuals at work today, applying Rand's ideas to modern issues, with tomes like Yaron Brook and Don Watkins's *In Pursuit of Wealth: The Moral Case for Finance* (2017), Peter Schwartz's *In Defence of Selfishness* (2015), and Alex Epstein's *The Moral Case for Fossil Fuels* (2014). The ARI, the think tank co-founded by Rand's legal heir, Leonard Peikoff, is in the business of influence, with a 100- to 120-year plan to make Objectivism "the dominant secular philosophy in the United States," in the words of its chairman (Yaron Brook, qtd. in Weiss 2013, p. 247).

The ARI embraced the Tea Party interest in Rand, promoting heavily to those already receptive, Rand's views on individual freedom and restricted government. Chairman of the Board Yaron Brook has explicitly taken the view that, even if Christian Tea Partiers aren't going to follow Rand's atheistic philosophy wholesale, absorbing some Rand is better than none (Weiss 2013, pp. 66–67, 97, 245). That said, there is often

a disconnect between the keepers of the pure Randian flame in the ARI, and the sparks of Rand we may perceive in government policy through the years, or that blaze in the form of personalities influenced by her. From their absolutist position, for instance, the ARI's Brook and Watkins argue that Greenspan as Fed chairman never pursued Randian policies. Indeed, Rand disagreed with the very existence of a federal reserve; she blamed all economic breakdowns on government involvement—on government attempts to shape or influence or otherwise interfere with what should be a totally free market (Brook and Watkins 2012, p. 229n1; Wallace 1959). The ARI is steadfast in its ultimate defense of Rand's absolutism—pointing out, for instance, that she did not vote for the president sometimes seen as her avatar, Ronald Reagan, since too much of his agenda was influenced by religion; and arguing that she would have despised Donald Trump as president, because of his anti-intellectualism and overt authoritarianism (Ghate 2017).

Perhaps the simplest and most important evidence of Rand's ongoing impact is that she continues to sell books. There are few better indications of popularity and profitability than posthumous publications, and over the years Rand has had several.4 Ideal, a previously unpublished novel from the 1930s, was released in July 2015, amidst the waves of Tea Party interest. Rand biographer Anne C. Heller reviewed the novella for Time. Left "appalled" by its fanaticism, Heller wrote: "Rand hated ordinary people with a vengeance" (Heller 2015, p. 46). By contrast, Heller ended her balanced 2009 biography of Rand on a soaring note, praising the author's "extraordinary achievement," which has lasted far beyond the collapse of the Soviet Union "she so abhorred." That achievement "still informs our thoughts about the competing values of liberty and safety, individual rights and the social contract, ownership and equity, and the sometimes flickering light of freedom" (Heller 2009, p. 410). The sentiment could not be more different. However, Heller's statement in the review that Rand hated ordinary people has validity. Rand valorized titanic achievement, worshipped heroes and greatness, and saw greatness in industry leaders and innovators. There is a place for those of us who are not titans. To live a moral life, one does not have to be capable of greatness. Rather, "[t]he moral man is ... the one who independently exercises such intelligence as he has" (Journals, p. 281). That said, under Objectivism, the moral man must worship greatness, look up toward it. Rand's is a conception of the human world, of capitalism, in line with how historian Fernand Braudel describes this economic system; it is about activities "carried on at the summit, or that are striving for the summit" (qtd. in Cheyette 1980, p. 107).

Is this not the philosophy our economies and societies are run by today? We are told that we must all work better, smarter, harder, be entrepreneurial and innovative in whatever field we are in. Competition and meritocracy are the goal in all things. In the words of economist Tyler Cowen, Average Is Over. Notwithstanding the backlash against globalization, individuals and societies continue to face said pressures, in large part due to how technology is changing the workforce. With technology capable of doing more and more of the work previously done by humans, the social contract has changed; we are continuing toward a society in which "people are expected to fend for themselves much more than they do now" (Cowen 2013, p. 229). The new, technologyfacilitated world of work, where micro-entrepreneurs engage directly with service-users for very short-term jobs—think Uber or Airbnb reflects Rand's vision of an "atomistic," sole-trader economy, where relationships span "only the length of any given transaction" (Burns 2009, p. 209). Rand influenced some of the major policymakers in America in the last two decades of the twentieth century. She helped set the agenda for globalized high capitalism. Beyond simple influence, however, Rand put her finger on much of what has come to drive the modern world. Rand "cherished Wall Street": the center of the rise of what Weiss calls the philosophy of "market supremacy" (Weiss 2013, pp. 3, 15). Now, the locus of capitalism has shifted from Wall Street to Silicon Valleywhere Rand is still to be found.

In 2011, filmmaker Adam Curtis focused attention on Rand with his BBC documentary *All Watched Over by Machines of Loving Grace*. He described the author's influence on Silicon Valley entrepreneurs, whose innovations are responsible for the way we live now. His thesis is supported by Burns, when she writes in *Goddess of the Market* that Rand was "one of the first American writers to celebrate the creative possibilities of modern capitalism"; hence, "her vision has resonated with the knowledge workers of the new economy" (Burns 2009, p. 3). The venerable Christopher Hitchens has written about the "allegiance" to Rand shown by many in the tech sector; he references Rand's optimism about capitalism and her promotion of the heroic as key factors. The postmodern turn-of-the-century world had declared heroes dead, but "this pulse can never quite be stilled," and Rand was filling the void for CEOs who wanted to be world movers (Hitchens 2001, p. 129).

Paulina Borsook, in her book *CyberSelfish*, also makes much of the libertarian inclinations of digital economy workers. Rand, along with authors like Robert A. Heinlein and William Gibson, offered models of heroic independence, which innovators in the digital age latched onto. These workers broke with the New Deal consensus of strong public and private sectors, psychologically aligning freedom with unregulated markets. "Technolibertarianism," for Borsook, is the "dangerously naive and, at its worst, downright scary," belief that human freedom consists of independent technological experts operating in a laissez-faire system. Rand is a key cultural figure in this turn (Borsook 2000, pp. 4–5, 18, 245).

Curtis interviews Rand's one-time closest associates Nathaniel and Barbara Branden; he says entrepreneurs in the new technology sectors of the late twentieth century were the people "most inspired" by Rand. They set up reading groups to spread her ideas, named their children and their companies after her. Those influenced included "some of the most powerful" entrepreneurs, such as Larry Ellison, co-founder of Oracle. Curtis features interviews with digital innovators. John McCaskey tells the filmmaker: "I really did feel like an Ayn Rand hero. I was one. ... I was building the products. I was thinking independently. I was being rational. I was taking pride in what I did. ... I wasn't in the book—but I was an Ayn Rand hero" (qtd. in Curtis 2011).

Curtis's thesis is ambitious, but he nonetheless makes it plausible, by laying out the evidence. The innovations of the Silicon Valley entrepreneurs he discusses, are responsible for the computer systems underpinning financial markets since the 1980s. Curtis asserts that the late-twentieth-century belief that a stable world could be created through machines, can be traced back to Ayn Rand. With Greenspan as Fed chairman, and through the influence of Silicon Valley and Wall Street, the political–economic consensus became that cycles of boom and bust could be brought to an end, thanks to the power of computers to negate human error in the arena of financial trading. This market ideal not only has Rand at its root; its whole nature is distinctly Randian. Humans create technology, an extension of their will, which allows for the fulfillment of an ordered world, through the principle of a rational creation and exchange of wealth.

The list of Silicon Valley innovators who claim to have been inspired by Rand, who work in accordance with her edicts, or reference her as a touchstone, is long—and includes numerous household names. Indeed, it could be the work of a whole other book to take the statements of all such individuals, investigate on a case-by-case basis which aspects of Rand most impacted their lives, and detail the exact traces of Rand in each entrepreneur's work. Such a study is beyond the scope of this book—and is unnecessary here. I only wish to demonstrate that Rand is a significant figure within the tech sector; this forms a backdrop to considering her work in the context of the posthuman.

Beyond those mentioned by Curtis, other Rand followers and admirers in Silicon Valley include Apple co-founder and leading light Steve Jobs; Wikipedia co-founder Jimmy Wales; Craigslist founder Craig Newmark; PayPal co-founder, and major early Facebook investor, Peter Thiel; Uber co-founder and former CEO Travis Kalanick; Tesla co-founder/CEO and SpaceX founder/CEO Elon Musk; and Mark Cuban, co-creator of Broadcast.com, who has a net worth of \$2.5 billion and a yacht named *Fountainhead* (Bilton 2016; Freedland 2017; Dowd 2017; Agent4Stars.com 2011).⁵

According to Apple co-founder Steve Wozniak, a longtime friend of Jobs, *Atlas Shrugged* was one of Jobs's "guides in life as to how you make a difference in the world." Wozniak says, in an interview with Bloomberg, that Jobs—"the greatest technical leader we've seen in our lifetimes"—"wanted to be an important person in the world. And he wanted to do it by having a company that was successful and made money." Wozniak casts Apple's success in Randian terms of value: "I would say, how good a company is, it's right—it's fair—to measure it by its profitability" (qtd. in Bloomberg, n.d.).

Wales, for his part, describes himself as "very much an Objectivist to the core" (qtd. in Sirius 2007). Burns comments on the irony of Rand's impact on Internet entrepreneurs "who are pioneering new forms of community." She notes that Wikipedia combines an "emphasis on individual empowerment" with "trust in the wisdom of crowds" (Burns 2009, p. 284). And yet, to take the words of its creator at face value, there is still something very individualist and even Objectivist about the open-source encyclopedia:

If you've ever seen the film 12 Angry Men; it's the story of a jury that's trying to decide in a murder case. And there's one guy who disagrees with everyone else. He thinks that the evidence does not prove that the defendant is guilty. He argues for two hours, and one by one he slowly convinces people that there are holes in the evidence. And in the end, they acquit. Well, that's what happens sometimes in a really great Wikipedia debate.

You may have eleven people on one side and one on the other. But if that one person is reasonable and thoughtful and deals with the criticisms one-by-one, people will actually change their minds and we end up with a strong product. That can't really be described as the wisdom of crowds, in the way most people use it. So, I'm a little skeptical of that rhetoric. (qtd. in Sirius 2007)

Though he cites 12 Angry Men, Wales's formulation recalls another moment in fiction: Howard Roark in The Fountainhead—on trial for destroying his own work—persuading a jury of his not-quite peers of the ultimate truth of his position. In any case, the impact of this Rand-fired idea on the world cannot be gainsaid: Wikipedia has changed the way knowledge is accessed.

Peter Thiel is a controversial and contrarian figure, who has been in the news much in recent years. It would be reductive in relation to his politics and his worldview to simply call him a Randian. Nevertheless, Rand was an important touchstone in his intellectual development, and his rhetoric is distinctly Randian at times (Packer 2011). In an article for the Cato Institute, shortly after the financial crash, Thiel wrote:

For those of us who are libertarian in 2009, our education culminates with the knowledge that the broader education of the body politic has become a fool's errand. ... In our time, the great task for libertarians is to find an escape from politics in all its forms—from the totalitarian and fundamentalist catastrophes to the unthinking demos that guides so-called "social democracy." ... I suspect that the mode for escape must involve some sort of new and hitherto untried process that leads us to some undiscovered country; and for this reason I have focused my efforts on new technologies that may create a new space for freedom. (Thiel 2009)

This could have been written by John Galt, calling on like-minded capitalists to abandon the world as it is and establish their own land safe for radical innovation and wealth creation. More is said about Thiel's efforts later in the book.

Perhaps the purest example we have of a John Galt figure in the world today is Elon Musk. I refer to the primary reason for Galt's existence: as an entrepreneur who revolutionizes the world with what he creates. Galt is the greatest entrepreneur of *Atlas*'s fictional world, as Musk has been called the greatest entrepreneur of our time. Historian Niall Ferguson refers to Musk as the "boldest entrepreneur of our time"

(Ferguson 2017). Musk co-founded PayPal with Thiel. His electric car company, Tesla, has changed the motor industry, and been valued higher than Ford or GM (Ferris 2017). Musk is also founder of SpaceX, Space Exploration Technologies Corporation, which in 2012 became the first private company to fly a spacecraft to the International Space Station, and has an ongoing contract with NASA for cargo supply missions to the ISS. The company has been listed as a potential supplier to Mars One, a not-for-profit foundation which aims to establish a permanent human settlement on Mars (Mars One, n.d.). Musk is crystal clear about his ambition to take humans to Mars. In a video on the SpaceX YouTube channel, he presents his case for "making life multi-planetary," describing it as the next major step in evolution (Musk 2013). This notion of humankind taking control of its own evolution, via technology, is also a central idea underpinning posthuman philosophy.

There is something of an Internet meme branding Musk as an Ayn Rand hero (Murphy 2012; Baruth 2013; Case 2013). When journalist Maureen Dowd put it to him that he comes across like one, Musk smiled, and praised Rand for making "some good points," even if her views are "extreme" (Dowd 2017). It is in any case no surprise that Objectivists are great supporters of the aims of SpaceX. At the Atlas Summit in 2012, a conference for Rand fans in Washington, DC, there was a presentation by Steve Davis, a SpaceX engineer, entitled "SpaceX and the Future of Space Flight." Tim Murphy, writing for the leftwing Mother Jones, reports: "Davis isn't pitching his company, so much as he's hawking an ethic—one shared by the gathering of Objectivists and embodied by Elon: Don't wait for someone else to solve a problem because they probably won't. Winners set benchmarks and take the initiative; bureaucracies take your money and run" (Murphy 2012). Davis was appointed to the Atlas Society's board of advisors later that year (PRWeb 2012). Murphy also reported a fascinating exchange from the post-presentation Q&A at the Atlas Summit. One college-age attendee asks whether Musk is familiar with Rand and Objectivism. Davis responds that he knows the SpaceX CEO has read Atlas Shrugged, but "the most political thing" he's ever heard from Musk is "Look here, Davis, get this done!" This happens to exemplify, Davis implies, the attitude of Atlas's heroes, in relation to politics presumably as much as anything else: Produce what I am asking you to produce or I will find someone who will (Murphy 2012).

The star status of Rand among the Silicon Valley "world movers" (the Atlases or John Galts of this generation, as Rand herself might say) has been rising in public consciousness in recent years, with increased media commentary on the fact, especially since the broadcast of All Watched Over. Vanity Fair has concluded that Rand is "[p]erhaps the most influential figure in the industry" (Bilton 2016). A 2017 article in the Guardian again covered the topic, and made the important point that Rand's influence among the tech titans is evidenced not so much in party political terms, but in a single-minded adherence to one's own "pure vision": "No wonder the tech companies don't mind destroying, say, the taxi business or the traditional news media. Such concerns are beneath the young, powerful men at the top; even to listen to such concerns ... would be to break Rand's golden rule, by which the visionary must never sacrifice himself to others" (Freedland 2017). Like heroic Prometheus in Anthem—it is not the concern of the creator of the electric lightbulb, that his invention will make the candle-makers jobless.

At the same time, the tech-inventing elite does have an interest in wider societal issues. However, its approach to these issues can also take a Randian, laissez-faire form: allow technological progress to happen, and the general welfare will ultimately be lifted. Gregory Ferenstein describes this attitude very well in the *Daily Beast*: "First and foremost, Thiel thinks innovation is the key to mankind's ills. ... Perhaps the best way to understand Thiel's ethos (and, perhaps the tech elite's) is that they care more about progress than they do about our current crises. Political skirmishes over inequality are to him the historical equivalent of fighting over how doctors should be distributing leeches to the poor" (Ferenstein 2014).

So, we have seen that Rand has had a significant impact on politics and on business in the latter twentieth and early twenty-first centuries. It is out of an environment which Rand helped inaugurate that post-humanism emerges. It is not so big a leap from better, smarter, faster *Homo oeconomicus*—made possible via technology—to ... I want to be something more than human altogether. Mark Zuckerberg, co-founder, chairman, and CEO of Facebook, imagines telepathy is on the way, "send[ing] full rich thoughts to each other directly using technology" (qtd. in *Time* 2015, p. 14). Eric Schmidt, former Google CEO and then executive chairman, has said that we will have implants, "where if you just think about a fact, it will give you the answer" (qtd. in O'Connell 2017, Chapter 1; it is not possible to identify page numbers

in this Kindle edition). The same company's director of engineering, Ray Kurzweil, thinks that we will be able to fully upload our minds into computers and replace our body parts with superior machines by the end of the century (Woollaston 2013). Indeed, there are many embedded in the technology sector who believe that our future is as immortal "posthuman" beings. In real ways, Rand rejected human society completely. Her heroes can be, as Heller posits, "most alive" when "[a]lone and in command of a powerful machine" (Heller 2009, p. 212). It is not a stretch to suggest that Randian images of power through technology aided among Silicon Valley-types a sense of their own heroism, as they sat alone with their machines, the devices that have remade the human world: computers. Many entrepreneurs and knowledge-economy workers responsible for the rise of Silicon Valley were Rand readers and admirers; they helped set the tone of the culture. Silicon Valley is, among its facets, the womb of the posthuman. It gave birth to factions such as Extropianism, and the technologies of a future posthumanity are those emerging from this place and its equivalents.

BETTER, SMARTER, FASTER

It is impossible to talk about the posthuman without talking about the present. The question of the posthuman arises because of our present period in history, because of where we are, as human beings, in the course of our development as a species, economically and spiritually. By "economically and spiritually," I mean in the broadest senses.

We live in an age of high technology. The engines of today's economy depend upon technology; it is integrated into our daily lives as it never has been. Posthumanism is not the same as having high technology, but it is a way of thought that emerges out of and depends upon technological development. To read the newspapers today is to know that we live in interesting times, technologically. Sentient technology does not exist, but artificial intelligence is getting more powerful all the time—whether it be Amazon making purchase recommendations, Netflix suggesting what you should watch, or Facebook putting news that you will "like" before your eyes. For two decades, artificial intelligences have been winning chess games against the best human players; AIs are expected to be doing many more of the jobs currently done by humans—including writing books—in the coming decades (Gibbs 2017; Economist 2017). The singularity, the fabled point at which the artificial becomes the highest

sentience on earth, may be some distance away, or it may never happen, but it is an event whose possibility looms large in the imagined future.

At the same time as machines are making the human future uncertain, we rely on them for more and more. Robots are integral to industries from car-making to medicine. A restaurant where all the staff are robots opened in Harbin, China in 2012 (Smallman 2012, p. 3). Sex with robots may soon become commonplace (Humphreys 2017). Meanwhile, 3D printers are revolutionizing manufacturing—devices which have been used to make everything from necklaces to cancer tumors (Davis 2014; Koebler 2014). On the more day-to-day level, so many of us now carry powerful computers with us on our person at all times: in the form of the smartphone, a device which has become ubiquitous quicker than any technology in memory. Even in the poorest parts of the world, the cellphone is a possession which is central to how people live. The next wave is wearable technology, like Google Glass. It is only a short jump to bringing digital technology within the body itself, getting it under our skins.

On that note, prosthetic devices are improving constantly. The US Food and Drug Administration has approved an artificial retina, "a sheet of electrodes" implanted into the eye, which recreates the world in light patterns; it can give a formerly blind person a certain sense of sight (Hodge and Belluck 2013). Robotic legs and arms have been created that are operated by users' thoughts (Check Hayden 2013; *New York Times* 2015).

Biotechnology and genetics are also undergoing a persistent (r)evolution. An increasing proportion of the world's food supply is coming from organisms altered by science, GMOs (Khush 2012; Sullivan 2017). In the lab, it's possible to grow human noses and vaginas (Solon 2014; Duhaime-Ross 2014). Genetic screening of embryos and fetuses is already used to detect diseases. The editor-in-chief of the *Journal of Medical Ethics*, Oxford professor Julian Savulescu, argues that there is a "moral obligation to select ethically better children" by "screening out personality flaws, such as potential alcoholism, psychopathy and disposition to violence": "Surely trying to ensure that your children have the best, or a good enough, opportunity for a great life is responsible parenting?" (qtd. in Alleyne 2012). Matthew Liao, director of New York University's Bioethics Program, has suggested engineering shorter humans who are disinclined to eat meat, as a solution to climate change;

their carbon footprint would be far less than current humanity's (Swain 2014). Drafting ethical frameworks for the future of human development has never been a more urgent project.

The legacies of the Enlightenment, of Romanticism, and of humanist philosophy, have left us with an understanding of autonomous selfhood: the liberal individual subject—the laissez-faire actor, confined within the limits of body and mind, but able to define him- or herself by his or her own choices, in the context of the world, in the context of a connected economy. The "posthuman" has profound implications for this subject—but exactly what implications depend on whose posthumanism we are talking about.

As a philosophy of life that emerges out of the possibilities of currently developed and developing technology, posthumanism can perhaps allow us to "improve" our bodies, privileging the choices of the mind in the definition of selfhood. If the choice of the mind is to live without illness, to have three arms instead of two to accomplish more tasks, or to have a brain with greater capacity for memory, then we can make a mechanical body, or a genetically engineered body, to achieve these things. This conception of the posthuman is continuous with liberal subjectivity.

Or—posthumanism may allow us to escape liberal subjectivity entirely. Divisions of gender and race can be eliminated by technological bodies; questions of choice and of individual agency can be negated by making every being a node in a network subject to automatic control, rather than individual selves acting in their own interests. In Huxley's *Brave New World*—an archetype of a posthuman planet, for many—people are produced for roles in the system, they are not meant to be beings unto themselves. Gender and race still exist, but this is because the existence of these divisions serves the system; society's genetic engineering could presumably breed them out if such breeding fitted its purposes.

At the heart of the posthuman question, then, is an issue of divergence: posthumanism is either an extension of the liberal individual subject as it has come to be defined since the Age of Romanticism, or a flight from that subject. Clearly, the posthuman has implications for the human. The notion of what is essentially human is thus integral to posthumanism, and should be addressed before we go any further. It is of course not a solvable puzzle; here can only be offered perspectives which relate to my theme.

THE HUMAN, THE INNOVATOR

Ayn Rand viewed evolution as a theory, the truth or otherwise of which did not affect her philosophy (Philosophy: Who Needs It, p. 45). Indeed, on the "nature" or "nurture" question, Rand is a denier, in effect, of both genetics and environment as determinants of human identity. Man's own conscious choices are what determine who he is, for her: "Man is born with an emotional mechanism, just as he is born with a cognitive mechanism; but, at birth, both are 'tabula rasa.' It is man's cognitive faculty, his mind, that determines the content of both" (The Virtue of Selfishness, p. 30, emphasis in original). That said, Rand clearly believed individuals were born with different levels of potential, different sizes of blank slates on which to write their futures. There is something in-born that helps make a hero. Eddie Willers-competent assistant to railroad vice president Dagny Taggart in Atlas Shrugged—is "an average person with good premises but no special gifts" (Heller 2009, p. 345). An Eddie can live up to his potential by making good choices, but he can never have the potential of a Dagny.

The poverty of the nature versus nurture debate is that it suggests there can be a winner: our identities are formed by either one or the other. It is a division shackled to political agendas. To many on the right side of the political spectrum, including Rand, our individual potentials are unequally divided at birth, and our fates are tied to these.⁷ To many on the left, we are determined by the place of our bodies in the social structure. Recent findings in neuroscience highlight the fallacy of the purely "nurture" perspective—but at the same time support the selfevident truth that identity is shaped in part by interactions with the world. Simply put, humans have genes which determine identity, but how an overall genetic makeup is expressed and activated depends on external factors. In evolutionary history, what appears to differentiate Homo sapiens from our nearest relatives, such as Neanderthals, is the innately innovative aspect of our minds: our unique ability to shape the world to our needs. According to Ajit Varki, professor of cellular and molecular medicine at the University of California (San Diego), and co-director of a research center studying what makes us human, this capacity for shaping our environment is what made early humanity so successful, in evolutionary terms. Neanderthals may have made tools and cared for the sick, but they did not innovate the way humans did (Semeniuk 2014).

The findings of Varki and others support the definition of humanity given by Kenan Malik in his essay "What Is It to Be Human? What

Science Can and Cannot Tell Us," a clarion call for a return to philosophical humanism. For Malik, humans are unique on earth because we are both objects of nature and subjects who can transcend it:

The paleo-anthropologist Paul Mellar has eloquently dubbed the moment of transformation "the human revolution." It was a revolution that gave rise to the first cave paintings, the beginnings of ritual behaviour, the use of new sophisticated tools such as fishhooks, harpoons and bows and arrows, and the first intimations of long distance trade. But the most extraordinary change was that ... [h]umans began learning from previous generations, improving upon their work, and establishing a momentum to human life and culture that has taken us from cave art to quantum physics and the conquest of space. It is this capacity for constant innovation that distinguishes humans from all other animals. (Malik 2001, p. 15)

The Industrial Revolution, the birth of the assembly line and mass production, have been blamed for the mechanization of man-turning him into an automaton who is alienated from his own labor because he does not enjoy its fruits, as Marx would have it. However, the origins of posthuman conception are really to be found in the twentieth century, when our tools, our machines, become complex enough that we begin to think of ourselves as like the machines, in a positive way. Malik, writing in 2001, refers to "[r]ecent advances" in "neuroscience, genetics, and artificial intelligence" which have made it possible to think of humans as "sophisticated machines" (Malik 2001, p. 12). Rand joined in the twentiethcentury vogue for technological explanations of the human. Among the author's least celebrated theories is her contribution to psychology. She writes, contra Freud, that the human subconscious is "like a computer more complex a computer than men can build," which is programed by the conscious mind. Rand also describes ethics as the "technology" of philosophy—that is, the tools for putting one's philosophy into practice (Philosophy: Who Needs It, pp. 3, 5-6); and she calls art the "technology of the soul"—in other words, it fulfills nonmaterial needs where other technology helps fulfill material needs (*The Romantic Manifesto*, p. 162).

Gods of Chrome

The chief literary friendship of Rand's mid-career years was with the libertarian political philosopher Isabel Paterson. Paterson contributed significantly to the course of Rand's writing, as both Heller and Burns

illuminate in their biographies of Rand, and as Stephen Cox summarizes in his important biography of Paterson, The Woman and the Dynamo (2004). According to Heller, Paterson was Rand's "first and only living mentor" (Heller 2009, p. 136). She can be credited with turning Rand from a mere supporter of individualism into to a full-fledged encourager of capitalism. When Rand first met Paterson in the early 1940s, Cox writes, she "was emphatically an individualist, but she knew relatively little about American traditions of individualism and was not well educated in political and economic theory. She eagerly embraced Paterson's ideas, dissenting only—though very definitely—from her belief in God" (Cox 2007, p. 352). Paterson's major account of capitalism, The God of the Machine, was published in the same year as The Fountainhead, and greatly affected Rand's intellectual development. Rand called the monograph "the first complete statement of the philosophy of individualism as a political and economic system. It is the basic document of capitalism" (Letters, p. 102). Heller elaborates: "Much of what Rand learned from Paterson would find its way into ... the last two-thirds of The Fountainhead, and, in the use of energy circuits, motors, and power as metaphors for human action and achievement, into the structural motifs of Atlas Shrugged" (Heller 2009, pp. 135–36).

The God of the Machine uses an elaborate technological metaphor to explain how capitalism creates wealth via a "long circuit" of exchange between individuals across distances. "A man can think and work effectively only for himself," Paterson writes (Paterson 1943, pp. 17, 31). It is by means of self-interested trade that the long circuit of an ultimately global capitalist economy comes into being, and the general welfare is lifted. The god of the machine, then, is the individual human mind: that which thinks up technology, and thereby enables the production of goods and services that in turn creates wealth. This view of an atomistic, intellect-driven economy is the same as Rand's—as we can see by turning to a passage from Howard Roark, Rand's mouthpiece in The Fountainhead: "We inherit the products of the thought of other men. We inherit the wheel. We make a cart. The cart becomes an automobile. The automobile becomes an airplane. But all through the process what we receive from others is only the end product of their thinking. The moving force is the creative faculty which takes the product as material, uses it and originates the next step. This creative faculty cannot be given or received, shared or borrowed. It belongs to single, individual men" (The Fountainhead, p. 711). The Fountainhead is primarily focused on individualism as a moral goal to be achieved within oneself; *Atlas Shrugged* expands this into a portrayal of individualism as the source of all wealth and progress, on a societal scale. The latter novel, then, is a portrait in fiction of what Paterson argues in the nonfiction of *The God of the Machine*: "Paterson identified the individual mind as the dynamo of American history; in *Atlas*, Rand embodied that idea in John Galt" (Cox 2004, p. 303). Cox goes so far as to say, "*Atlas Shrugged* can be considered a Patersonian novel, in roughly the same sense in which *Les Misérables* can be called a Christian novel" (Cox 2007, p. 351).

The metaphor at the heart of *The God of the Machine* is emblematic of a twentieth-century concern with technological explanations of human behavior. This is an understandable trend: as machines become more sophisticated, man sees himself in the image of his creation. Rand too makes use of technological metaphors for the human. For her, as for Paterson, however, the machine is lifeless without the agency of the individual human mind. Man's emotional mechanism is a computer "programed" by his consciousness (*The Virtue of Selfishness*, p. 30). The mind is the "god" of the machine. During his speech outlining Objectivism at the end of *Atlas*, John Galt says that views of the human which privilege the body or the soul in the religious sense, but not the reasoning mind, turn man into "the passively ravaged victim of a battle between a robot and a dictaphone" (*Atlas Shrugged*, p. 1027). The autonomy of the self in Western thought cannot allow independent agency to machines—this is one of the fears underlying the posthuman (Hayles 1999, p. 4).

It is interesting that Rand references Descartes as being responsible for a foundational error in modern thought: "I think, therefore I am." Galt reverses this assertion, declaring, "I am, therefore I'll think." For Rand, existence is self-evident; as the central Objectivist maxim goes: existence exists (Atlas Shrugged, pp. 1015, 1058). Thinking is not, therefore, the first proof of existence; thinking is a choice needed in order to survive. Unlike other animals, man has no talons or fangs to help him acquire food; he must make tools to hunt or plant crops, both of which require thought (The Fountainhead, p. 712). The Randian view of the human is "man the innovator" writ large. The human as innovator, the mind as the sine qua non of innovation: these are placed at the heart of the Randian worldview. Man extends his capabilities in the physical world by using his brain to create. Tools, be they of the simplest variety or the most sophisticated machines, are extensions and expansions of human ability. We could say, then, that—in the Randian view—any human

invention or production is a manifestation in physical reality of human essence: the creative capacity of the mind. Man reshapes the physical world according to his mental image. Hovels, skyscrapers, spears, airplanes: these are all facets of a world that is human.

The formulation of tools, devices, and technology as extensions of the will, is evident from Rand's first professional work. In her 1932 film treatment Red Pawn, as heroic rogue Communist Karayev flees the prison on Stastnoy Island, the boat he is driving is described as an extension of his mental will, used to conquer nature in the form of the sea:

The waves rose slowly and hung over the boat, motionless as walls of black, polished glass. Then a white foam burst on their crest, as if a cork had popped, and roared down the black side, throwing the boat up, out of the water, to land on the boiling crest of another mountain.

Commandant Karayev bent over the wheel. His eyebrows made one straight line across his face and his eyes held one straight line ahead, into the darkness. He could feel every muscle of his body tensed to the will of his fingers that clutched the wheel like claws. The loops of his bent arms worked as the wings, as the nerves of the boat. (Red Pawn, in The Early Ayn Rand, p. 149)

The vessel—a human invention—becomes an extension of the will and thus of the body itself.

Such descriptions by Rand come to the fore in Anthem. When Equality 7-2521 rediscovers electricity and reinvents the lightbulb, his invention is framed as an extension of his unique self, of his mind and body—and as an exemplar of the human ability to master the natural world. The device is "a box of glass, devised to give forth the power of the sky": "For the first time we do care about our body. For this wire is as a part of our body, as a vein torn from us, glowing with our blood. Are we proud of this thread of metal, or of our hands which made it, or is there a line to divide these two?" (Anthem, pp. 59, 61; Equality has not yet learned how to say "I," living as he does in a society where the only pronouns are plural, but when he says "we," he means "I.") In The Fountainhead, Rand states: "[M]an's work should be a higher step, an improvement on nature." Consequently, the glow of electricity is named "the most beautiful light on earth" (The Fountainhead, p. 700). Man, as innovator, and extender of his will over the natural order, is godlike and properly so, for Rand.

For Rand, the individual mind is the nucleus of the world of human creation. Creation by the individual mind is what makes the human world possible. Our existence is necessarily technological, since technology is our means of survival. But creation—technology—also enables us to do more than survive against the elements. Creation, innovation, improving on what went before—living longer, traveling faster, doing what once could not be done—this is what it means to be human. This is one of the basic messages of Rand's fiction. The Soviet Union stifled the individual mind and thus prevented an existence that was essentially human—that is the theme of Rand's first, autobiographical, novel, We the Living. Anthem's thesis is the centrality of the individual creator: those who innovate make the human world a human world, a world worth living in as a human being, where technologies such as electricity make life easier and grease the wheels of the pursuit of happiness. The Fountainhead's setting within the architectural profession, allows a focus on a form of creation which is crucial to survival, and to the look of the human world; to our continuation as a species, and to how we choose to portray ourselves. The structures we build and elect to live in, are stories we tell about what we are as a species. Rand's adoration of the skyscraper comes about because of what it symbolizes: man, reaching for the sky, and making a world his own. At one point in the novel, Roark departs New York by train, and looks back at the skyline: "The single shafts stood immeasurably tall, out of scale to the rest of the earth. They were of their own world, and they held up to the sky the statement of what man had conceived and made possible. ... [M]an had come so far; he could go farther. The city on the edge of the sky held a question—and a promise" (The Fountainhead, p. 199).

Atlas Shrugged represents the apotheosis of Rand's view of technology and futurity. The tome presents two views of civilization. Or, perhaps, one view of civilization—and its opposite. A society that privileges the individual mind, standing alone, equals a world of technological creation, progress, and civilization. A society that does not do this, equals the absence of technology, and hence the absence of human life qua human life. Everywhere in the book, the mind is at the center of a world of human technology, which makes the human world a good thing. The veneration of science and civilization can be found in the simplest examples. Dagny Taggart, for instance, enjoying the pleasures of indoor heating and a coffee in a "slum diner." The human world is one of chrome, warmth, and light: "She glanced around her and thought, in habitual

professional calculation, how wonderful it was that one could buy so much for a dime. Her eyes moved from the stainless steel cylinder of the coffee boiler to the cast-iron griddle, to the glass shelves, to the enameled sink, to the chromium blades of a mixer. The owner was making toast. She found pleasure in watching the ingenuity of an open belt that moved slowly, carrying slices of bread past glowing electric coils" (*Atlas Shrugged*, pp. 176–77). This is also, of course, a classic 1950s American scene: from the diner setting to the idea that life is enhanced through simple, "domestic" technological conveniences.

Much of Atlas's plot has to do with innovation versus stagnation within the locomotive industry, and the motion of trains often serves as a metaphor for civilizational progress. Rail lines cutting through forest represent man's proper relationship to nature—as its conqueror. Dagny feels an "arrogant pleasure" at their presence; rail track "did not belong in the midst of ancient trees ... but there it was. The two steel lines were brilliant in the sun." Rail lines epitomize the technological progress of civilization, which is caused by heroic individuals like Dagny, Hank Rearden, and John Galt; they make life easier for all, but the average man or woman takes them for granted: "Strings of tank cars went radiating in all directions from the Wyatt oil fields to industries in distant states. No one spoke about them. To the knowledge of the public, the tank trains moved as silently as rays and, as rays, they were noticed only when they became the light of electric lamps, the heat of furnaces, the movement of motors; but as such, they were not noticed, they were taken for granted" (Atlas Shrugged, pp. 50, 227).

This view of the glory of technological progress is contrasted with an anti-technology mindset that Rand conflates with all her bêtes noires. Those who oppose technology oppose individuality, since technological creation is a manner of individual expression. Opposing technology means opposing capitalism, which means opposing progress and human happiness. In effect, those who are anti-technology are anti-human-life; they are nihilists. Views such as the following are voiced by Rand's villains—in this case, by Balph Eubank, a darling of the literary establishment: "Machines have destroyed man's humanity, taken him away from the soil, robbed him of his natural arts, killed his soul and turned him into an insensitive robot. [Dagny Taggart is] an example of it—a woman who runs a railroad, instead of practicing the beautiful craft of the handloom and bearing children" (*Atlas Shrunged*, p. 138). Individuality and technology are liberators, in *Atlas*, all else has the potential for oppression.

When something new is brought into the world, some new technology, this has the descriptive force of a creation myth, in *Atlas*. The best example is the pouring of the first order of Rearden Metal, Hank Rearden's powerful new alloy that will serve Dagny's rails:

[T]he first break of the liquid metal into the open came as a shocking sensation of morning. The narrow streak pouring through space had the pure white colour of sunlight. Black coils of steam were boiling upward, streaked with violent red. Fountains of sparks shot in beating spasms, as from broken arteries. The air seemed torn to rags, reflecting a raging flame that was not there, red blotches whirling and running through space, as if not to be contained But the liquid metal had no aspect of violence. It was a long white curve with the texture of satin and the friendly radiance of a smile. It flowed obediently through a spout of clay ... it fell through twenty feet of space, down into a ladle that held two hundred tons. A flow of stars hung above the stream, leaping out of its placid smoothness, looking delicate as lace and innocent as children's sparklers. (*Atlas Shrugged*, p. 28)

This passage ineluctably calls to mind Rand's joyous response to the launch of the *Apollo 11* rocket: "How great is man and how safe is nature when he conquers it!" ("Moon Launch Was Man's Shining Hour") In Rand, the man-made is superior to the natural. Innumerable writers have bestowed poetry upon the workings of nature; Rand uses a language which graces man's commercial creations with a character of the sublime.

Rand's writing promotes heavily the advantages of technology, and the view of man as a being linked to his creation of technology. Rand's writing supports a posthuman conception, because posthumanism emerges out of the technological vista which she promotes—because her promotion of technology as intrinsic to human life, and as a means of human betterment, overlaps significantly with posthumanism.

A Split Posthumanity

The human is a creature who acts in the world, a being of this earth—but *humanism* is a product of human minds, a philosophy, a way of conceptualizing the human. The Renaissance and the Enlightenment fostered these ideas, and they have been carried into the modern era by philosophers, novelists, economists, men and women of innumerable origins and talents. A dictionary definition will serve us better than that of any individual author, since it is intended to capture a consensus. Humanism

is "any system or mode of thought or action in which human interests, values, and dignity predominate"; "a variety of ethical theory and practice that emphasizes reason, scientific enquiry, and human fulfillment in the natural world and often rejects the importance of belief in God" ("humanism," dictionary.com, accessed February 11, 2018). Rand's anthropocentrism and atheism, her emphasis on reason and her love of the scientific method, clearly mark her in this tradition.

Just as the posthuman is related to the human, posthumanism has a relationship with philosophical humanism—and a contested one at that. The first hurdle which must be overcome before proceeding, is the ambiguity surrounding the terms "posthuman" and "posthumanist" themselves. The words became current during the 1990s and are now used in multiple strands of philosophical and cultural discourse and assumed to have a variety of meanings. Cary Wolfe, for one, attempts to mark a distinction between the "posthuman" and "posthumanism." The posthuman is a being that escapes the limitations of biological human embodiment. Posthumanism, as Wolfe engages it, is something entirely different: a philosophical discourse which seeks to move away from anthropocentrism, to recognize the agency and rights of animals and other non-human actors. Posthumanism in this context is a kind of anti-humanism, if humanism is understood as a philosophy of anthropocentrism; by contrast, anthropocentrism is key to the possible existence of the "posthuman" being (Wolfe 2010, Introduction; it is not possible to identify page numbers in this Kindle edition). However, Wolfe's distinction is not in wide use and does not reflect the totality of the ways in which the two terms are employed (Thweatt-Bates 2012, pp. 4–5). The posthuman can be a function of posthumanism, and posthumanism that which emerges from considering the posthuman.

The confusion of terminology—or rather, the diversity of meanings—can be attributed in part to two separate paths of origin. Wolfe writes that one strain of posthumanism can be traced back to at least the 1960s, and work such as Foucault's *The Order of Things: An Archaeology of the Human* (1966). Therein, the French theorist argues that the concept of "man," as a creature distinct and special, "is an invention of recent date. And one perhaps nearing its end" (qtd. in Wolfe 2010, Introduction). Posthumanism also has an origin in the 1946–1953 Macy conferences on cybernetics, and the invention of systems theory. Here, "figures from a range of fields ... converged on a new theoretical model for biological,

mechanical, and communicational processes that removed the human and *Homo sapiens* from any particularly privileged position in relation to matters of meaning, information, and cognition" (Wolfe 2010, Introduction).

The cybernetics line is what drives N. Katherine Hayles's understanding of the posthuman. For Hayles, posthumanism marks a philosophical shift in how we as humans live, and how we think about our lives and selves. Technology is now integrated so widely into our existence, our lifestyles depend so much upon it—and it has made such an impression on how we think about the human—that we have entered a posthuman period: a period where the self is no longer simply invested in the fact of the organic body. Whether or not technology is integrated with the body itself is incidental: "[T]he construction of the posthuman does not require the subject to be a literal cyborg. ... [N]ew models of subjectivity emerging from such fields as cognitive science and artificial life imply that even a biologically unaltered *Homo sapiens* counts as posthuman. The defining characteristics involve the construction of subjectivity, not the presence of nonbiological components" (Hayles 1999, p. 4). The fact that we may feel somehow less "whole," or disconnected from normal life, without a smartphone; the fact that aspects of our identities are accessible over social media, through computers, almost anywhere in the world, perhaps even after our death; the continuing presence of humanized robots and cyborgs in popular media, with which we can identify... These are all trends which feed into Hayles's thesis.

For Hayles, we are already posthuman. Others posit that we are not in a period of posthumanism—indeed, that we cannot yet know what the posthuman would be, since it is a form of life so radically different from humans today, still largely confined to their individual organic bodies. The futurist F. M. Esfandiary originated the term transhuman to mean "transitional human" (Thweatt-Bates 2012, p. 4). The global movement in favor of "transhumanism" advocates it as a phase between the human and the posthuman: we should improve our bodies and our minds through the implantation of technology, through interfacing with machines, and/or through methods of genetic enhancement. Then, one day, truly posthuman life may exist. However, transhumanism and posthumanism are conflated in much discussion of the subject; attempts to mark this distinction are also far from universally followed. As Wolfe summarizes, "this sense of posthumanism derives directly from ideals of

human perfectibility, rationality, and agency inherited from renaissance humanism and the Enlightenment," in contrast to strains that turn away from this legacy (Wolfe 2010, Introduction).

There is little specific, therefore, that can be gleaned from the terms posthuman and posthumanism. Rather, they are indicative of a sensibility: that the organic human is not the highest point or the endpoint of life on earth. It is high technology which in particular has led us to this sensibility now. Wrapped up in it are a host of possible futures. Technology may enable us to take control of our own evolution, to engineer better bodies with more capabilities. Or, we may be superseded by our technology; artificial intelligence may emerge from it to threaten the very existence of the human. Or—perhaps the most utopian scenario of all—humans may form a new communion with all life on earth, as Wolfe hopes, such that "human rights" are no longer placed above the nonhuman.

One of the most enlightening books on the topic of posthumanism is Jeanine Thweatt-Bates's (2012) study, Cyborg Selves. Therein, she identifies two broad, major strands in the field. The central philosophical issue of posthumanism is the posthuman's continuity, or not, with the humanist tradition of the liberal individual subject. One strain of posthumanism aligns itself with the humanist legacy, while the other repudiates it. The latter trend begins with feminist Donna Haraway's "A Cyborg Manifesto," initially published in 1985 in The Socialist Review: "The ensuing body of literature commenting [on] and critiquing that original essay, and subsequent works by Haraway, constitute one distinct posthuman discourse, in which the hybrid embodiment of the cyborg serves as a symbol for the ontological kinship of the human with the nonhuman." The second major strain of posthumanist thought is categorized by Thweatt-Bates as "humanism, plus." This involves those who advocate an enhanced version of the liberal individual self, via technology: the "desirable but still theoretical possibility for shedding the problematic biological body for a virtual existence or a more durable artificial body" (Thweatt-Bates 2012, p. 5).

The acceptance or rejection of what I have called above the laissez-faire actor, naturally sets the stage for two wildly different posthumanist discourses: one concerned with socialist-feminism, democratic equality, and environmentalism; the other with free-market economics, individual rights, and victory over nature. "Humanism, plus" has far more in

common with the philosophy of Ayn Rand than does Haraway's cyborg. One could say that Haraway represents nearly the perfect opposite of everything Rand believed. When I have said that Rand's work supports posthumanist conception, it is not the Harawayan concept that I am thinking of. Haraway and her successors, however, provide the primary model of the posthuman at use within the humanities, and any concentric discussion of Ayn Rand and posthumanism cannot overlook this. It is therefore worth going back to "A Cyborg Manifesto" in order to demonstrate its categorical difference from Rand, before moving forward. My next chapter begins here.

Notes

- 1. This paragraph, and the subsequent three paragraphs, include some elements, wording, and source quotations also used by me in my article, "Now is a Dystopia: Ayn Rand and the Right-Wing Appropriation of The Hunger Games," published in the Journal of Popular Culture, volume 51, number 2, April 2018.
- 2. "Ayn Rand Hits a Million ... Again!," Ayn Rand Institute press release (email received by author), May 14, 2013. The press release also highlights how average annual sales of Atlas Shrugged have risen in each of the last four decades, from 74,300 per year in the 1980s to 303,523 per year in the 2010s. Atlas sold 2.25 million copies in the six years from 2009 to 2014, almost double what it sold in the six years after it was first published (Salmieri 2016, p. 3). However, these sales figures include copies bought by the Ayn Rand Institute to distribute free (on request) to teachers, for use in schools. The institute has a formidable books-to-schools program. Of the 30-million-plus volumes Rand has sold, more than 10% of "sales" are attributable to this, according to the above sources. The success of the program in itself is indicative of both strong interest in Rand and astute organization by the keepers of her legacy.
- 3. Yaron Brook's title and leadership role at the ARI have evolved over the years; he became executive director in 2000, and was named chairman of the board in 2017. He remains, however, the ARI's most prominent voice and public figure.
- 4. A note on the posthumous publications bearing Rand's name, as some are used to support arguments in this book. The philosopher's intellectual heirs have spent the time since her death collecting together material from her archives. Volumes of letters, journals, early unprinted fiction, and a compilation of question-and-answer sessions from various events, have all

been published posthumously; so have two informal courses Rand gave to associates on the art of writing fiction and nonfiction, and other material. Burns cautions that the scholar must be wary in relation to these, since the desire of the editors to produce clear narratives often means significant edits are made to what Rand actually wrote or said at the time (Burns 2009, pp. 291–93). I can certainly understand how this makes the sources highly problematic from an historian's point of view. However, the fact that they are intended to reflect a "definitive Ayn Rand line" is useful in its own way. Since the focus of my book is Rand's legacy, I believe judicious citation is justified, and have used these books to support certain points where appropriate.

- 5. Cuban says of Rand's novel: "It was incredibly motivating to me. It encouraged me to think as an individual, take risks to reach my goals, and responsibility for my successes and failures. I loved it" (Agent4Stars.com). Thiel, like so many, discovered Rand early in life and is an admirer (Packer 2011; Bilton 2016). Kalanick has in the past proudly displayed admiration for Rand, using the cover of *The Fountainhead* as his Twitter avatar (Bilton 2016; Freedland 2017). Burns notes of Wales and Newmark that they "built on Rand's ideas but married them to a very different theory of human nature, one in which community and connection are paramount" (Burns 2009, p. 284).
- 6. The smartphone reached 50+ percent penetration of US households in a shorter timeframe than technologies including the telephone, the radio, color television, the microwave, the VCR, and the Internet (Dediu 2012). "Researchers in Kenya ... find that people will skip a meal ... so that they can keep their phone in credit ... in the hope of making a call or sending an SMS that would enable them to put more food on the table later." Notably, "[a]lmost half of those surveyed were using internet-enabled smart or 'feature' phones" (*Economist* 2012).
- 7. Interestingly, while accepting that people may have different levels of overall potential, Rand denied that individuals were born with "natural talents," as such—innate tendencies toward one field or another. One's particular applications were all chosen, for her. She maintained, for example, that she could have been a successful musician or economist, rather than a writer, had she chosen either field (Burns 2009, p. 219).

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CHAPTER 3

The Posthuman and the Objectivist

This chapter looks at the two major strains of posthumanist thought, as identified by Jeanine Thweatt-Bates, in relation to Rand: Donna Haraway's cyborg, and the transhuman. While Haraway's cyborg is a socialist construction, a reverie of communion between the human and non-human, the transhuman—a theory and a practice put forward by Max More, Nick Bostrom, and many others—hews to the legacy of individualism. I briefly demonstrate Rand's difference from the Harawayan concept of the posthuman, in order to subsequently highlight, at some length, her similarities with the opposing strain. One of the major debates within the transhumanist movement is over the applicability of Nietzsche's Superman to the transhuman. Since the Übermensch also informs the Ayn Rand hero, a fruitful discussion can be had on this point. Rand's veneration of the productive individual and of capitalism strongly impacted the earliest organized transhumanist movement, the Extropians. Thus, Rand's work possesses philosophical similarities with transhumanism, and she has also directly influenced transhumanist thought. Both of these actualities are discussed. The transhuman holds far more commonalities with Rand than other forms of posthumanity. This should be evident by the end of the chapter.

GENDER TROUBLE

Haraway's cyborg is a being of hitherto unachieved benevolence: a way of life disconnected from the Western legacy of oppressing women—of oppressing non-whites, the poor, and nature—in the name of Christianity, in the name of conquest, of capitalism, and of progress. "A Cyborg Manifesto" begins with a call to blasphemy—to irony and a rejection of absolutism: "Blasphemy protects one from the moral majority within, while still insisting on the need for community. ... Irony is about contradictions that do not resolve into larger wholes, even dialectically, about the tension of holding incompatible things together because both or all are necessary and true. Irony ... is also a rhetorical strategy and a political method, one I would like to see more honoured within social-ist-feminism." The cyborg, "a hybrid of machine and organism, a creature of social reality as well as a creature of fiction," serves as metaphor for and embodiment of Haraway's new model of being (Haraway 1991, p. 149).

Haraway excoriates "the traditions of 'Western' science and politics the tradition of racist, male-dominated capitalism; the tradition of progress; the tradition of the appropriation of nature as a resource for the production of culture; the tradition of reproduction of the self from the reflections of the other." She excoriates, then, so much of what Rand celebrates. For Haraway, as a socialist-feminist, the existence of gender is an originator of oppression. The division of the world into Men and Women, into Self (man) and Other (woman) allows the oppression of all kinds of others by the self—the appropriation of others into the desires of the self-in the name of self-determination. Thus, Haraway sees her manifesto "in the utopian tradition of imagining a world without gender." Cyborg ontology, she writes, makes such a world possible. The cyborg enables the transcendence of culture and of biology, the imagining of radically new cultures and biologies: "The cyborg would not recognize the Garden of Eden." Cyborg ontology enables escape from the very facts of human embodiment, the usual instantiation as either man or woman: "Cyborg replication is uncoupled from organic reproduction"; "[c]yborg 'sex' restores some of the lovely replicative baroque of ferns and invertebrates (such nice organic prophylactics against heterosexism)." Haraway summarizes: "[M]y cyborg myth is about transgressed boundaries, potent fusions, and dangerous possibilities which progressive people might explore as part of needed political work." It is Haraway's sincere hope that modern developments in robotics, genetic engineering, and such like—"the illegitimate offspring of militarism and patriarchal capitalism"—will prove "exceedingly unfaithful to their origins," and ultimately bring about a socialist-feminist revolution in ways of living on earth (Haraway 1991, pp. 150–54). Modern technology, and the cyborg ontology it entails, are the spur for a radical new conception of continuity between the human, animals, flora, and technology.

Attempts have been made to call Rand a feminist—if she is, she is a very different kind of feminist to Haraway. Though she created strong, unconquered and unconquerable women in her fiction, and became an influential and thus a powerful woman herself, Rand felt no affinity with the twentieth-century feminist movement. Without doubt, the socialism of much of its discourse put Rand off; the movement's conscious alignment of itself with a broader agenda of creating equality across society. But, on a more fundamental level, Rand was suspicious of any kind of collective identification. Feminism smacked of identifying with a group—women—before identifying oneself as an autonomous being. Feminists also, for Rand, perpetuated the idea of women's weakness, by demanding "unearned success, to be enforced by government quotas and regulations" (Burns 2009, pp. 263–64).

Rand was labeled "a traitor to her sex" and a promoter of "the male ideology of rape" by Susan Brownmiller in her book *Against Our Will: Men, Women, and Rape* (1975). Brownmiller focused in particular on the rape scene in *The Fountainhead*, in which Roark forcefully takes Dominique, arguing that it constituted a dangerous romanticization of sexual violence (qtd. in Burns 2009, p. 264).

The relationship between feminism and Objectivism is somewhat more complex than a reading of Rand's own views would initially suggest. Rand's periodical, the *Objectivist Newsletter*, under her editorship, produced a highly positive review of Betty Friedan's *The Feminine Mystique* (1963), with reviewer Edith Efron describing it as "brilliant ... and culturally explosive" (qtd. in Burns 2009, p. 195). According to Mimi Riesel Gladstein, Rand's work and feminism form "an unlikely alliance." Making a case for the inclusion of *Atlas Shrugged* in Women's Studies courses, Gladstein writes: "collectivism can stifle self-actualization by emphasizing reaction rather than encouraging positive self-determination." While bonds of common identity "may indeed give a movement its initial energy, that energy will dissipate without attention to individual development." Reading Rand can inspire self-realization, regardless of one's gender. Rand's exhortations against self-sacrifice are particularly applicable to

women, writes Gladstein, since it is women who "have been socialized to feel guilty if they fail to carry out the practice of sacrificing their careers for the advancement of others, whether it be husband, family or simply a matter of vacating a position to a more needy male" (Gladstein 1978, pp. 682–83). Gladstein makes a compelling case. However, such attempts to incorporate Rand within an individualist feminism only serve to demonstrate her distance from the radical feminism of Haraway. Haraway's ideal is *the abolition of gender*, not empowerment of women *as* women.

Rand's humanism is central to her ideology: the human is a higher being, and each human is contained within his or her own body and mind. Haraway rejects both these tenets: the human is not in a privileged position apart from nature; all creation is interdependent. Rand's atomistic view of society—a world composed of independent units—is the diametric opposite of Haraway's vision of connectedness through transgressed boundaries.

There are frayed patches of overlap between Rand's and Haraway's philosophies. Both Rand and Haraway are atheists, and both their visions have an atheistic root. Rand's insistence is that her philosophy is one for "living on earth" (Philosophy: Who Needs It, p. 10); Haraway's concern is with life on earth: "We must cast our lot with some ways of life on this planet, and not with other ways" (Haraway 1997, p. 51). For both, the implication that there is no Heaven means that the earth must be a place where life is worth living; we must make it so. Haraway's call for identities not riveted to set groupings, be they sexual or racial or class-based, is in one sense similar to Rand. The authors represent in two different forms the denial of imposed identity. For Rand, one's belonging to a particular gender, class, or race does not determine who one is as an individual; for Haraway, gender and race are deleterious cultural constructions which must be transgressed and transcended in order for people to find liberation. Both conceptions undermine monolithic collectivized categories of human identity. Both valorize active construction of the self, though their ideas about how this should be achieved are radically different.

Haraway's cyborg is a figure made possible by—and which *makes possible*—new choices. The essence of Randian identity is the choices of the mind. In defiance of Freud, Rand does not even take the subconscious as a given: the subconscious for Rand is an entity programed by one's own choices. Rand sees laissez-faire capitalism as the ultimate arena

of liberated identity-construction, where all relationships are voluntary and one's options for work are as wide as one's mind. For Haraway, capitalism is a deleterious determinant of given identities—because of class-based oppression and patriarchal modes of operation—and must be subverted for the possibility of new identities. Haraway is in favor of open identity construction; for Rand, this is what happens in capitalism. Technology is at the center of both conceptions. For Haraway, the modern technological moment is what makes her imagining possible; for Rand, technology, which advances under capitalism, is humanity's "greatest benefactor" (*Return of the Primitive*, p. 146).

Haraway and Rand are both utopians. Haraway makes a specific appeal to Utopia—the world that could be, the ideal world. So does Rand; Rand's adherence is to an ideal—the ideal type of person and the ideal conditions in which he or she can flourish. She was upfront in stating: "The motive and purpose of my writing is the projection of an ideal man" (The Romantic Manifesto, p. 155, emphasis in original): "Since man acts among and deals with other men, I had to present the kind of social system that makes it possible for ideal men to exist and to function—a free, productive, rational system which demands and rewards the best in every man, and which is, obviously, laissez-faire capitalism" (Introduction, The Fountainhead, p. ix). Rand's ideal society in Atlas Shrugged—the small community of high achievers that make up Galt's Gulch—is explicitly called by her "Atlantis" and "The Utopia of Greed," the names of the two chapters in which we are introduced to this Objectivist paradise. One of the primary and most effective critiques of Rand is that she is a utopian. As Alan Clardy puts it, Rand's model is not repeatable in reality, and is certainly not viable as a model for a large-scale civilization, in substantial part due to how the author "grossly caricatures and distorts the full range of human diversity" (Clardy 2012, pp. 238, 259). The individuals in Atlas are grouped into three broad types: the productive geniuses who are oppressed by the tax-and-redistribute structure of the world as it is; the malevolent forces who, consciously or not, seek to destroy the best in human life by dragging everyone to a common denominator; and the ungifted masses who will go along with whatever social order is prevalent—or, as Clardy calls them, "Supermen, looters, and sheep." Rand's ideal is that everyone will adopt her "rational ethics" and then all conflict will dissolve: "[U]nlike Hobbes's version of primeval human nature, where the existence of others meant a competition for power and

resources that required a state to bring about order, for Rand, individuals would naturally balance into order and peace by the miracle of economic transactions." Rand is unconcerned with facts of life that would impinge on her fantasy: the potential for economic (and hence political) power to accumulate in the hands of a few; the reality of class conflict developing from that; the fact that the diversity of human psychology and ways of living cannot be reduced to a singular ethics that benefits each individual such that they are content (Clardy 2012, pp. 246, 255, 259).

Utopia is the province of radicals. Utopia is a realm for imaginings, for those who imagine ways of living very different from what we have now, be they Randian "radicals for (unrestrained) capitalism," or advocates of a world without gender. Rand constructs a utopia in *Atlas Shrugged*, in the form of Galt's Gulch. The socialist-feminist cyborg is a utopian construction, every bit as much as Galt's Gulch: both are vehicles for thinking about new kinds of society.

I would contend that both Galt's Gulch and the feminist cyborg fit John Gray's definition of utopian projects. Gray, a powerfully anti-utopian thinker, argues that a project is utopian "if there are no circumstances under which it can be realized." It is the "pursuit of a condition of harmony" that "defines utopian thought"—but such a condition is an actual impossibility: "Conflict is a universal feature of human life. It seems to be natural for human beings to want incompatible things—excitement and a quiet life, freedom and security, truth and a picture of the world that flatters their sense of self-importance" (Gray 2007, pp. 17, 20). Rand portrays in Galt's Gulch a world where individuals "naturally balance into order and peace by the miracle of economic transactions." The feminist cyborg is also marked by a pursuit of harmony. Haraway's promotion of irony and blasphemy, "contradictions that do not resolve," "the tension of holding incompatible things together"—this seems initially to be singularly inharmonious. However, Haraway's thesis is about a radical form of equality, in which difference between living beings can no longer be used to foster opposition, and this is where its unrealistic pursuit of harmony lies. Haraway's fantasy is about the leveling potential of technology: the potential of the cyborg to level the legacy of Western history. Haraway herself later saw the cyborg's political usefulness as having come and gone (Thweatt-Bates 2012, pp. 15, 38). The socialist-feminist cyborgian moment has passed and its possibilities remain unrealized. The politics of Avn Rand and the politics of Donna Haraway have little in common except their impossibility.

A HISTORY OF TRANSHUMANISM

Unlike the Harawayan cyborg, transhumanism, broadly speaking, does not represent a hoped-for break with the past, but rather an extension of Western individual-subjectivity. If Haraway represents a reverie, a dream of another way of relating humans to each other and to the earth, the philosophy of transhumanism is far more grounded in the actualities of scientific discourse and the progress of technology. The transhuman entails both transcendence and transition (Thweatt-Bates 2012, p. 44). Transcendence of the biological human condition, through our own actions, not anything divine. A transitional state between the human and whatever comes after: truly posthuman beings, originating in our science, whose abilities we can now only imagine. That said, as I've already noted, transhumanism and posthumanism are conflated in much discussion of the subject; the transhuman can be understood as a branch of posthumanist thought.

The basic idea of transhumanism is perhaps best summed up by an oft-repeated phrase in the mission statement of the organization Humanity+; the goal is to become "better than well" (Humanity+, "Mission," n.d.). Modern and developing technologies, from computing, robotics, and artificial intelligence, to cryonics, cloning, and genetic engineering, offer radical opportunities to human beings to enhance their abilities. It is possible, indeed, to imagine the mind existing in a substrate beyond the biological body it is born with. In the following passage, Nick Bostrom describes the hypothetical operation of the transhuman "upload," "the transfer of a human mind to a computer":

This would involve the following steps: First, create a sufficiently detailed scan of a particular human brain, perhaps by deconstructing it with nanobots or by feeding thin slices of brain tissues into powerful microscopes for automatic image analysis. Second, from this scan, reconstruct the neural network that the brain implemented, and combine this with computational models of the different types of neurons. Third, emulate the whole computational structure on a powerful supercomputer. If successful, the procedure would result in the original mind, with memory and personality intact, being transferred to the computer where it could then exist as software; and it could either inhabit a robot body or live in a virtual reality. (Bostrom 2005)

Transhumanist technologies obviously have radical implications not only for how humanity is conceived, but for its very embodiment. Bostrom urges us to take very seriously the prospect of superintelligence, or uploading a mind to a machine, or reshaping our molecules through nanotech, since the impact on the human condition would be so profound. Integrating technology with the physical self, or improving the physical self via genetic science—substituting the "man-made" for the natural, in other words—these are transhuman imperatives. One ultimate goal of transhumanism is to achieve effective immortality; if the "mind" can exist in another form, the death of the biological body is not death. The "self" continues in another substrate. Death itself is no longer inevitable. This is the ultimate conquering of nature.

Bostrom is director of the Future of Humanity Institute at Oxford University. His "A History of Transhumanist Thought" is worth tracing here, in order to ground ourselves in the discourse. Bostrom begins with a very Randian vista, while arguing that the human will to innovate, to seek wellness and happiness, is natural if not innate: "We have always sought to expand the boundaries of our existence There is a tendency in at least some individuals always to search for a way around every obstacle and limitation to human life and happiness" (Bostrom 2005; all subsequent quotations in this paragraph are from this article). Ideas about life-extension and immortality are to be found in myriad cultures across millennia, from Gilgamesh seeking to live forever, to Prometheus bringing fire so that man can be more, to the quest for the Fountain of Youth. Bostrom sees these fantasies as part of the same drive that gives rise to scientific transhumanism. Through the Enlightenment, and the work of Bacon, Newton, Hobbes, Locke, and others, the use of "science to achieve mastery over nature in order to improve the living condition of human beings" became paramount. In the eighteenth and nineteenth centuries, the idea emerges that humans themselves could be developed and improved through science. This was taken to horrifying extremes in the eugenics movements of the twentieth century. But, for Bostrom and fellow transhumanists, these appalling vistas must not cause us to revert to a conservative conviction that the naturally born human should never be improved upon via science and technology. Bostrom points out, as would an Objectivist, no doubt, that the eugenics programs that were implemented throughout the West were all "state-sponsored" and involved "various degrees of infringement of individual rights." In no case did they involve individuals freely choosing to upgrade their own abilities, as is the goal of transhumanism. The principles of the Enlightenment, of rational humanism, of individual rights and democracy, must guide our way as we embrace the posthuman, Bostrom argues. He is explicit in stating: "Transhumanism has roots in rational humanism," and in the notion of the self-made self. Hence the tendency among transhumanists for choosing their own names and setting aside their given names: F. M. Esfandiary became FM-2030; Max T. O'Connor chose Max More; Tom Bell—an advocate of Extropianism along with More—became Tom Morrow; Natasha Vita-More, current chair of Humanity+, was born Nancie Clark. The same tendency existed within Objectivism, another movement all about the self-made self, the chosen identity and identifier: Ayn Rand was born Alissa Rosenbaum; her one-time heir Nathaniel Branden was Nathan Blumenthal.² Choosing the attributes of the body and mind is the next step.

Bostrom is clear that the transhuman agenda does not depend solely on the development of such "radical" possibilities as that of uploading a mind to a computer. IVF, genetic screening, genetic engineering, gender reassignment surgery, robotics, prosthetics, performance-enhancing drugs, virtual reality ... All of these things are about using technology to improve upon the organic human experience, which is the essence of transhumanity.

The term "transhumanism" in the sense it is now understood was first defined by Max More. More was unaware of a prior use by Julian Huxley, brother of *Brave New World* author Aldous (More 2010). Huxley used the term in *Religion Without Revelation* (1927) in reference to the human species transcending itself. "Transhuman" was also used by F. M. Esfandiary in the title and content of his 1989 book, *Are You a Transhuman*?, to refer to those embracing technological progress and transformation, and thus at the vanguard of social and cultural change. More would define a transhuman as "[s]omeone in the transition stage from human to biologically, neurologically, and genetically posthuman. One who orients his/her thinking towards the future to prepare for coming changes and who seeks out and takes advantage of opportunities for self-advancement" (More 1993). "Transhumanism" came to be widely adopted and to encapsulate a movement focused on encouraging biological modification as the future of humanity.

One sensibility that echoes loudly from transhumanism, which is also true of Objectivism, is the notion that ideas matter; that discussing and clarifying the enormous questions, about the origins, nature, and future of the human race, is a vital exercise. Burns writes that "Rand understood society as simply a function of its dominant ideas"; whereas the

political left "tended to see injustice as firmly embedded in the material world, be it racism, sexism, militarism, or class oppression ... Rand and her followers identified the ills of the world in purely philosophical terms" (Burns 2009, pp. 219, 220). This is still the attitude of Objectivists today, as we see when Yaron Brook, board chairman of the Ayn Rand Institute (ARI)—the advocacy organization which guards her legacy—argues that the future is "completely dependent on the ideas that people have, the beliefs people have, and the philosophy that's being held by the culture" (Brook 2013a). While the same absolutism is not intrinsic to transhumanism, it is true that transhumanism, like Objectivism, is firstly about philosophical (r)evolution: When we have a certain set of ideas about how humanity should be, then we can steadily follow a path of progress. Hence the importance of academic endeavor to transhumanists, as to Objectivists; the importance of institutes and scholarly articles and intellectual advocates who can influence policy and the broader cultural attitude toward an improved version of the self.

The first developed transhumanist philosophy was Extropianism, spearheaded by Tom Morrow and especially Max More. The Extropians advocated "extropy" as the opposite of entropy; if entropy meant decay, extropy meant unlimited growth. A British native, More "became interested in futurist ideas and life extension technologies" while at Oxford; in the 1980s, he was "one of the pioneers of cryonics in England" (Hughes 2004, p. 164). More found America more conducive to his vision than Britain; he studied for a Ph.D. at the University of Southern California, and it was there that he met Morrow. In 1988 the pair set up the journal Extropy in order to air and explore their ideas, and in 1992 they founded the Extropy Institute, with three main aims: "(1) develop an elegant, focused philosophy for transhumanism ... the philosophy of 'Extropy'; (2) encourage discussions and debates on improving the human condition"; and (3) "develop a culture for activists, energized and devoted to bringing these ideas to the public" (Vita-More, n.d.). Transhumanism today does not have an explicit political ideology that goes with it; the movement has become too diverse. Broadly speaking, it is atheist and liberal-democratic; in other words, distinctly humanist. Its origins on the Extropian side, however, are manifestly libertarian and Rand lies at the root, as we will see later in this chapter. Bostrom, along with David Pearce, founded the World Transhumanist Association (WTA) in 1998, in part in order to move transhumanism away from the perceived libertarian exclusivity of the Extropy Institute, "to provide a general organizational basis for all transhumanist groups and interests, across the political spectrum" (Bostrom 2005). The WTA is now known as Humanity+, and has 6,000 "followers," including members and newsletter subscribers, from over 100 countries (Humanity+, "About," n.d.). The Extropy Institute closed in 2006, its main aims having been achieved, according to its website (Vita-More, n.d.). It could be said that the integration of extropy into a wider human-improvement agenda, is reflective of the general transition of transhumanism: from a libertarian fringe movement in part influenced by Rand, to a broader-based liberal-democratic coalition. More will be said about this as the chapter progresses.

How widespread or influential are transhumanist ideas today? Far more than may initially seem to be the case. "Transhumanism" has featured by name in popular television/web series such as *Marvel's Agents of S.H.I.E.L.D.* (season 3, episode 18, "The Singularity") and *H+: The Digital Series.* The relatively small number of people declaring themselves part of a movement called "transhumanism," understates the broad and deep impact of ideas and technologies that may generally be described as in sync with transhumanist aims. As Bostrom makes clear, some of the most life-changing recent developments from various scientific fields, can be seen to fall under the transhumanist rubric.

Another indicator of transhumanism's influence is the fact that some of its strongest adherents are members of what we might call the techno-capitalist elite. Its aims are supported by individuals at a high level in industries that are responsible for so much of economic and social life today. Mark O'Connell describes this situation perfectly in his 2017 book on the phenomenon of transhumanism, To Be a Machine, which offers first-hand journalistic insights. Transhumanism's influence is evident in, amongst other examples, Peter Thiel's "funding of various life extension projects ... and in Google's establishment of its biotech subsidiary Calico, aimed at generating solutions to the problem of human aging ... not to mention Google's instatement of Ray Kurzweil, the high priest of the Technological Singularity, as its director of engineering" (O'Connell 2017, Chapter 1; it is not possible to identify page numbers in this Kindle edition). Google's CEO Sundar Pichai says that the impact on humanity of artificial intelligence has the potential to be more profound than that of "electricity or fire" (Goode 2018). Elon Musk—a harsh critic of attempts to develop machine superintelligence has argued that one reason humans must colonize Mars is so that we

have a sanctuary should AI take over the earth (Dowd 2017). AI and life extension are two major priorities for Silicon Valley. Alexandra Sifferlin in Time writes that, "[r]ather than wait years for treatments to be approved by federal officials," Silicon Valley entrepreneurs "are testing ways to modify human biology that fall somewhere on the spectrum between science and entrepreneurialism. It's called biohacking" (Sifferlin 2017, p. 62). The hacks include various pharmaceuticals and genetic research. Sifferlin mentions Oracle co-founder Larry Ellison's funding of research into aging, and Thiel's investment of millions into life-prolonging therapies. These innovators and many others pursue or are concerned with the aims of transhumanism, even if their work is outside that of official transhumanist organizations. Of course, these are some of the same people who have gained inspiration from, and expressed admiration for, Ayn Rand. And the Randian "world mover" ego can be seen as one of the drives behind their transhumanist aims. As bioethicist Ezekiel Emanuel puts it, in attempting to explain the desire of "Silicon Valley types" to "live forever": "Obviously they believe the world can't possibly survive without their existence, and so they think their immortality is so critical to the survival of the world" (qtd. in Oaklander 2017). It might not be that—it might simply be a Randian love of their own lives and abilities, and thus a desire to extend themselves for as long as possible. Ultimately, however, given their power in the economy, we are all affected by what these companies and these individuals do, these Rand admirers pursuing posthuman goals.

INITIAL LINKS

In addition to Rand's views on technology, described at some length in the last chapter, other elements of the author's worldview are consistent with posthumanity in its transhumanist form—including her views on the essence of human survival and expansion, and her atheism. In her philosophy, Rand identified the primary moral choice as whether to live or not to live: "My morality, the morality of reason, is contained in a single axiom: existence exists—and in a single choice: to live. The rest proceeds from these." She argues that morality is not social but a matter of individual survival, giving the example of a man alone on a desert island. He would have to choose whether or not to live, and the only method of survival would be productive work enabled by a thinking mind: building shelter, hunting for food, and so on (*Atlas Shrugged*, pp. 1018–22).

This primitive prerequisite forms the basis of Rand's "survival of the productive" morality—and it is also behind her technology-fetishism. Man is an innovator; our earliest hunting tools were among our first innovations: "[L]ife in nature, without technology, is wholesale death" (Return of the Primitive, p. 283). As civilization grows, technological development progresses. High capitalism becomes, for Rand, the ideal environment in which man-as-innovator is liberated to conquer and control nature in heretofore unforeseen ways. The next step from where we are now is surely technology's integration with the human body itself, or using technology to remold the body: overcoming all the limitations of nature, including those of the organic human form. Rand's atheistic concept of "man-worship" affords to man-the-creator qualities usually reserved for divinity; she urges us to exalt in the heroic achievements of human beings, and not to be concerned with a supernatural realm that does not exist (Introduction, The Fountainhead, p. xi). There should be no problem with man playing God—including to the point of creating posthuman technologies. There is no God and man is his own god.

A comparable belief in the innovative mind as human essence underscores posthumanist thought, especially in its transhumanist incarnation. The organic body here becomes, in the words of Hayles, mankind's "original prosthesis" (Hayles 1999, p. 3). The body is therefore replaceable by other, better, prostheses—which of course are created by the mind-as-innovator. If the body is only a vessel, then, with available technology, it is philosophically acceptable for it to become malleable, implantable, constructed and reconstructed depending on the needs and desires of the human mind.

Rand claimed to reject Cartesian dualism, the idea of a separation between a material body and a nonmaterial mind; for Rand, there should be no conflict between mind and body. In Galt's speech, she writes: "They have cut man in two, setting one half against the other. They have taught him that ... his soul belongs to a supernatural realm, but his body is an evil prison holding it in bondage to this earth." On the face of it, Rand's rejection of a mind–body split would seem to undermine the case that her views feed into the transhuman, which relies on Cartesian dualism for a foundational basis: the notion that the mind is independent of the body and could therefore exist within another form. However, Rand rejected mind–body dualism precisely because she thought it undermined the value of the mind. Galt goes on: "Do you observe what human faculty that doctrine [dualism] was designed

to ignore? It was man's mind that had to be negated in order to make him fall apart. Once he surrendered reason, he was left at the mercy of two monsters whom he could not fathom or control: of a body moved by unaccountable instincts and of a soul moved by mystic revelations" (Atlas Shrugged, p. 1026). Rand celebrated the human body, bodily existence and bodily pleasures. In Anthem, the pleasures of bodily existence allow Equality 7-2521 to rediscover the nature of his human mind. When he first arrives in the Uncharted Forest, he feels the sunlight on his face, frolics on the forest floor, enjoys "the song of our body" and in the process comes to grasp his independence. Sex with Liberty 5-3000, a fellow transgressor, makes clear Equality's values to him, that sex is not shameful but "the one ecstasy granted to the race of men" (Anthem, pp. 79, 84). Rapturous sex is a feature across Rand's work. However, her celebration of bodily pleasure does not undo her privileging of the mind. She explicitly describes the body as a "machine" of which the mind is the "driver" (Atlas Shrugged, p. 1020). Rand's belief in the primacy of the human mind is consistent with transhumanist conceptions.

Rand saw "nature" as an external thing to be conquered by man's mind; this is what man does when he makes tools, builds factories, cures diseases: "The creator's concern is the conquest of nature" (*The Fountainhead*, p. 712). Rand was writing in a time before late-twentieth-century technology and attendant posthumanist philosophy reimagined the malleability of the body. What transhumanism does, in essence, is take the Randian view of the desirability of man's conquest of nature, and extend this insight to the human body itself. The mind becomes the chooser and shaper of its own body.

Of course, the view that man's role is as master of nature, this is not solely Rand's. It is part of the heritage of liberal humanism, and part of why transhumanism lays claim to this heritage. We can note for now that Rand is part of this milieu; that her ideas, in this regard at least, are an easy fit with the posthuman. But Rand, because of her explicit promotion of entrepreneurship and technological progression, also has a closer relationship with the posthuman than others.

As we saw in the previous chapter, Rand's influence on the technology sector is well documented, in the form of testimonials from those who have been inspired by her. Silicon Valley innovator John McCaskey, speaking to Adam Curtis for his documentary All Watched Over by Machines of Loving Grace, tells Curtis of the impulse many received from Rand in the new fields centered in the Californian hub: "Many of

the people here in Silicon Valley were greatly inspired by Ayn Rand—entrepreneurs who were building computers, entrepreneurs in biotech, entrepreneurs in software, in Internet networking." Rand's work "presented a vision of a morally exciting enterprise" (qtd. in Curtis 2011). Burns writes that "the emerging culture of cyberspace ... was strikingly libertarian from the beginning," and Rand was a major part of this milieu (Burns 2009, p. 263). That Rand inspired the likes of Wikipedia co-founder Jimmy Wales, PayPal co-founder Peter Thiel, and Craigslist founder Craig Newmark, has already been mentioned. Burns notes the irony of Rand's impact on such Internet innovators who, while on the one hand are enabling new forms of individual expression, are also "pioneering new forms of community" (Burns 2009, p. 284). Yet, it is also important to note that such innovators are building precursors to post-humanism, because any posthuman future will emerge from the extraordinary potentialities of current technology.

Paulina Borsook's book CyberSelfish is an attempt to explain and to chart the "terribly libertarian culture of high tech." Borsook discusses Extropianism along with the general rise of Silicon Valley libertarianism. Of the Silicon Valley mindset, Borsook writes: "There is a culturalstudies theory, which I only semi-seriously make fun of, espousing that this generation of technologists ... have read too much Ayn Rand and too much Robert A. Heinlein—though not in his Stranger in a Strange Land mode. Ayn Rand and Heinlein are authors who in their work celebrate male prowess and defy conventional notions of affectionate attachment. They write books that are pure 'Warrior Dreams' fodder" (Borsook 2000, p. 245). As if to confirm this theory, before Borsook had even written her book, Max More wrote in Extropy, to a readership of technologists and futurists: "Many readers of this journal have, to varying degrees, sought to emulate qualities found in the characters of writers Ayn Rand and Robert Heinlein" (More 1993). Rand wrote in her exposition of her literary philosophy, The Romantic Manifesto: "art does not teach—it shows, it displays the full, concretized reality of the final goal" (The Romantic Manifesto, p. 163, emphasis in original). In a startling echo of Rand's view of art, More goes on: "By focusing on the paradigm personalities in these didactic stories, we can home in [on] our desired self without having to deduce the requisite behavior from abstract rules. An image of our intended result is more effective at promoting change than is an abstract set of prescriptions. In times of intellectual opposition and isolation, for instance, recalling an image of Rand's Howard Roark will stiffen our resolve and independence more than advising oneself to 'be independent!'" (More 1993). The power of fiction can never be gainsaid. More is instancing the power of popular culture—in this case, Rand's novels—to shape individual lives, and in turn how the future will look, as readers seek to enact the ideal that inspires them; popular culture can offer, in Lawrence and Jewett's words, "trajectories of life meaning" (Lawrence and Jewett 2002, p. 9).

Transhumanism is about extending and improving the Western-conceived concept of the self; it is about power over nature. Self-evidently, it valorizes science and the possibilities of technology. All of these things make it an easy mesh with the philosophy of Ayn Rand.

Of course, the fusion of our minds and our technology may ultimately lead to a new form of consciousness, with a new set of morals and values, which are fundamentally posthuman rather than essentially anything human. The human would become vestige. Kevin Warwick, in describing this scenario, draws on his own experience of having an implant in his arm, connected to the Internet, with which he could control another "body part" halfway across the world. If—as brain and nervoussystem implants advance—it becomes possible to connect individual human minds in/to a network, then individuality would be suppressed or at least altered existentially, as the brain becomes a node in a network, rather than an autonomous, self-contained thing (Warwick 2017, p. 72). The humanistic, self-actualization impulse propelling trans-/posthuman technology could ironically result in dulling the importance of the individual self. This would be a form of collectivized posthuman consciousness that is certainly not Randian, given that Rand put forward a radical philosophy of each individual mind as discrete and self-contained. Nevertheless, Rand will have played a part in leading us to that point, as this book demonstrates. I am not so much concerned with whether Rand herself would have supported transhuman or posthuman aims: some of them she likely would and some certainly not. Rather, I wish to show how certain of Rand's ideas have inspired those who have a posthuman agenda; the synergies between her work and the posthuman agenda; and how her work has been put to use in the context of the posthuman/ posthumanism. My argument is that Rand's works should be given their proper place among the myriad of factors that have led us to the posthuman moment in history. Rand has influenced those who have pursued posthuman aims, and her work has been capable of being used as such because of certain overlaps between her belief system and posthumanism.

In mapping the overlapping circles between Objectivism and posthumanism, it is apparent that the strongest connections are to be found between Rand and that branch of the posthuman which labels itself transhumanism. The connections are several: first, the philosophical similarities that exist between Rand's ideas and transhumanism; second, the direct influence Rand's writings have had on those with a transhumanist vision. The latter connection takes two forms: Rand's impact on those who work in transhuman fields and who theorize the phenomenon, and her "presence" within fiction that portrays post-/transhuman possibilities. The remainder of this chapter and the next several chapters further investigate the links between Rand and transhumanism. The philosophical overlaps have already to a large extent been detailed, in the discussion above on Rand's conception of technology and how it leads toward posthuman conception. Chapters 4-6 look at Rand in the context of post-/ transhumanist science fiction. Shortly, I will go into more detail regarding the direct influence of Rand on transhumanism. First, I would like to consider another significant item of common philosophical ground between Rand and the transhuman: Nietzsche as precursor.

ÜBERMENSCH OF THE MIND'S EYE

When Zarathustra prophesized the Übermensch, Nietzsche could not have predicted the myriad uses to which his ideal would be put. The Nietzschean Übermensch, the Overman or Superman, is an ideal about which its author is notoriously nonspecific. The Übermensch is beyond man, "man overcome," but what form this post-human will take—and how exactly we are to go about creating him—are matters left to interpretation. Hence, the Übermensch has influenced Nazi images of the master race as it has influenced the development of comic book superheroes, and countless creations in-between. Nietzsche's ideal has been concretized by his followers in various and contradictory ways. In this respect, the Overman is emblematic of his philosophy as a whole. As Daniel Conway writes, Nietzsche's impact is his malleability—and the philosopher's own vagaries and multiplicities are at least partly responsible: the "farrago of interpretations constitutes his true political legacy" (Conway 1997, p. 120).

Considering the passage which introduces the Superman in *Thus Spoke Zarathustra* (1883), it is hard to escape the impression that Nietzsche is speaking about evolution, in one form or another. Darwin's *The Descent*

of Man was published just over a decade earlier (1871). Nietzsche tells us: "Once you were apes, and even now, too, man is more ape than any ape. ... What is great in man is that he is a bridge and not an end." A bridge to the Overman. We should cross that bridge and become more than men; reject "otherworldly hopes," "remain faithful to the earth" by and making the Overman "the meaning of the earth" (Nietzsche 1978, pp. 12-15, emphasis in original). Jean Gayon writes that "with the exception of Spencer, Nietzsche was the first major philosopher who felt the need for a dialogue with Darwin"; "there is no doubt that Nietzsche ... was concerned with Darwin" (Gayon 1999, pp. 154, 155). Nietzsche seems to suggest that we take control of our own evolution—whether it is intellectual or physical or another aspect—when he urges us to "will" the Overman to be the meaning of the earth, and thus create something beyond ourselves. It is not difficult to see how the Übermensch could provide inspiration to proponents of the posthuman and the transhuman. As Stefan Sorgner puts it, "significant similarities between the posthuman and the overhuman can be found" (Sorgner 2009). Transhumanism is all about humans taking control of their own mental and physical evolution, in order to inaugurate a race of superior beings upon the earth. To transhumanists, man is a bridge between the beastly past and the mind-made future.

According to Bostrom, transhumanism has more in common with the liberalism of J. S. Mill than the philosophy of Nietzsche. He writes that despite "surface-level similarities," the Übermensch did not directly inspire transhumanism, whose roots are far more evident in Enlightenment humanism, and traditions of both individual rights and democratic welfare. Bostrom's particularly liberal view of transhumanism, however, is not reflective of every facet of the movement. He is contradicted by More, who writes that Nietzsche's Overman has inspired transhumanists, himself included. Between Nietzsche's philosophy and transhumanism there are not "merely parallels," according to More: "transhumanist ideas were directly influenced by Nietzsche." Transhumanists, however, take from him "very selectively." Nietzsche, for instance, saw his idea of eternal recurrence—the hypothesis that everything that happens in the universe is repeated endlessly—as intrinsic to the Overman. Transhumanists reject this because it is opposed to the notion of continual progress: "As a strong opponent of philosophical systems, Nietzsche could hardly object to transhumanism's picking and choosing from among his thoughts" (More 2010, emphases in original).

More writes that some of his own foundational writings in transhumanist thought, including his 1990 statement of "Extropian Principles" (discussed later in the chapter), were impacted by his reading of Nietzsche. In his 1990 "Transhumanism: Towards a Futurist Philosophy," More quotes *Zarathustra*, in order to make a point about the necessity of atheistic human expansion: "The religionist has no answer to the extropic challenge put by Nietzsche's Zarathustra: 'I teach you the overman. Man is something that is to be overcome. What have you done to overcome him?" (More 2010).

Bill Hibbard, another transhumanist, argues that the primary difference between Übermenschen and posthumans, is that the former are an unrealizable ideal, whereas the latter will be real:

Nietzsche's overhuman is closely related to his concept of "eternal recurrence." Faced with the prospect of living one's life again endlessly, with every detail and misery replicated exactly, the ordinary human says no but the overhuman says yes. Nietzsche believed in human improvement, driven by a human "will to power." But the overhuman has no need for improvement, having achieved satisfaction with life. The overhuman is an ideal rather than an achievable reality. Posthumans, as envisioned by most transhumanists, will be real successors to humans and still struggling to improve.

Hibbard writes that Nietzsche is not a useful model for transhumanists concerned with "the radical inequality that could result from technological change to human bodies and brains": "Nietzsche thought that strength was the ultimate good and expressed little sympathy for measures to oblige the strong to subsidize the weak." Rather, "[f]ollowing Hobbes, transhumanists should ... ask what social contract will create stability and security for people to live meaningful lives" (Hibbard 2010).

One of the primary fears pushing against transhumanism is the belief that posthumans *would be* Nietzschean Supermen. Bioethicists George Annas, Lori Andrews, and Rosario Isasi, for instance, argue that a new species of posthumans "will likely view the old 'normal' humans as inferior, even savages, and fit for slavery or slaughter. ... It is ultimately this predictable potential for genocide that makes species-altering experiments potential weapons of mass destruction" (Annas et al. 2002, p. 162). Ronald Bailey, quoting this passage, asks in *The Transhumanist*

Reader: "[W]hat if enhanced posthumans did take the Nietzschean Superman option? What if they really did see unenhanced people as 'inferior, even savages, and fit for slavery or slaughter'?" Bailey points out that countless unenhanced humans through the centuries have looked upon people different from themselves as deserving of extermination. The protection against murder, slavery, and other horrors in the coming posthuman age will come from the same place where that protection exists today: liberal political institutions, which preserve the rights of all sentient beings (Bailey 2013, pp. 337–38).

The Nietzschean Superman informs the transhuman and the posthuman; it also informs the Randian ideal man. While at university, Rand read Thus Spoke Zarathustra; a cousin had told the individualistic and achievement-worshipping young atheist that Nietzsche had beaten her to all her ideas (Britting 2004, p. 22). For the next two decades, Nietzsche's philosophy would form a sort of proving ground in which Rand's ideas came of age, taking on the characteristics of the mentor while at the same time becoming themselves. In maturity, Rand would say: "The only philosophical debt I can acknowledge is to Aristotle" (qtd. in "About the Author," Atlas Shrugged, p. 1171). Perhaps Nietzsche had come too close to her own thinking for her to allow herself to acknowledge his influence. As she disagreed with much in Aristotle, Rand disagreed with much in Nietzsche, but both philosophers were formative in how her thought and writing developed. According to Jeff Britting, in his short biography of Rand sanctioned by the ARI: "Rand eagerly read Thus Spoke Zarathustra, embracing Nietzsche's exaltation of the exceptional individual. But her enthusiasm diminished while reading his attack on rationality in The Birth of Tragedy" (Britting 2004, p. 22). At one point around 1935, Rand referred to Zarathustra as "my Bible" (Hunt 2016, p. 343). Heller remarks succinctly on Nietzsche's impact:

The seventeen-year-old Rand immediately seized upon his ideas, including his call to discard old values and create new ones, his condemnation of altruism as a slave morality, and his argument for the inviolate rights of the gifted person She responded to his heightened language, his brilliance, his bold critique of Christianity, and his principled admiration of Jewish thought. From this point on, her major characters would be more or less overtly Nietzschean—and, because of their Superman aura, would often be wrongly seen as fascistic by her critics. (Heller 2009, p. 42)

It would be wrong to suggest that the Randian ideal man is a simple attempt to concretize the Übermensch. Rather, a Nietzschean sensibility suffuses Rand's thought and writing; a consciousness of the Superman must be seen as part of this, as is consciousness of another Nietzschean imperative articulated in *Zarathustra*: the will to power.

Rand, then, was already acquainted with Nietzsche before she departed Russia. Upon arrival in the United States, the first three books she bought were English translations of Beyond Good and Evil, Thus Spoke Zarathustra, and The Antichrist; she marked on those copies her favorite passages (Milgrim 2007, p. 24). According to Burns, Rand saw herself as one of the "philosophers of the future" prophesized by Nietzsche (Burns 2009, p. 41). In Nietzsche scholar Michael Tanner's formulation, the German's "fundamental concern ... was to plot the relationship between suffering and culture." The philosopher experienced unspeakable illness during his own life, but in Zarathustra he teaches that "joy is deeper than suffering"—and joy which is of this earth, not that belonging to some untouched realm (Tanner 2000, pp. 30, 56). In this sense, Rand takes on Nietzsche's project and takes it further, finally coming to argue that suffering should be considered an errant exception to true human life, and that achieving happiness—via productive work—is each individual's "moral purpose" (qtd. in "About the Author," Atlas Shrugged, p. 1170). For Objectivists, suffering is "unnatural," in the words of Rand's heir, Leonard Peikoff: "Pain, suffering, failure do not have metaphysical significance they do not reveal the nature of reality. ... [S]uccess, not failure, is the to-be-expected" (Peikoff, "The Philosophy of Objectivism" lecture series, qtd. in Binswanger, n.d.). Or, as Howard Roark puts it: "I'm not capable of suffering completely. ... It goes only down to a certain point and then it stops. As long as there is that untouched point, it's not really pain" (The Fountainhead, p. 354). Metaphysically, the Objectivist notion of the unnaturalness of suffering, fits easily with the transhumanist call to be "better than well."

Rand's early writing is suffused with Nietzschean elements. For Nietzsche, the will to power is the driver of life—and certainly, the driver of greatness, which the German philosopher worshipped. A people's "will to power" is "the tablet of their overcomings Praiseworthy is whatever seems difficult to a people" (Nietzsche 1978, p. 58). One characteristic of the Übermensch, presumably, is that he exemplifies the will to power. Rand's early heroes are attempts to encapsulate the Nietzschean will to power: Bjorn Faulkner in her 1934 play, *Night*

of January 16th; Leo in her first novel, We the Living. We are told that Leo "quoted Spinoza and Nietzsche" and "described the superiority of Western culture" (We the Living, pp. 127-28). Milgrim says: "The clearest indication of Nietzsche-like elements in writing published during [Rand's] lifetime was Bjorn Faulkner of Night of January 16th" (Milgrim 2007, p. 27). She cites from the play the district attorney's description of the financier Faulkner: "young, tall, with an arrogant smile, with kingdoms and nations in the palm of one hand—and a whip in the other" (Night of January 16th, in Three Plays, p. 21). The sentiment is not unlike that contained in our introduction to Leo: "He was tall His mouth, calm, severe, contemptuous, was that of an ancient chieftain who could order men to die, and his eyes were such as could watch it" (We the Living, p. 52). Leo's will to power, his potential greatness, is stifled in his social environment, the Soviet Union, because the socialist state does not allow great men to thrive.

When Rand re-edited We the Living for its second publication in 1959, it was to smooth over the sharpest Nietzschean edges of the original, to make the text more consistent with her mature philosophy, as found in Atlas Shrugged. Robert Mayhew identifies four elements Rand gleaned from her reading of Nietzsche, which are present in passages in the original We the Living:

- I. The existence of the masses—an ugly, low, worthless herd of people—is a necessary fact; they simply (but unfortunately) do exist.
- II. Either the masses sacrifice the best for the sake of the masses, or the best sacrifice the masses for the sake of the best. There is no other option.
- III. Each of the best should live only for himself, a fact which justifies actions that are beyond good and evil, for example, the use of force and even killing.
- IV. One should not strive for any kind of equality, including political equality.

All of these, Rand "rejected in her later, mature philosophy" (Mayhew 2012, p. 236, emphasis in original). Heller, commensurately, writes that Rand's argument in the first-published version of the novel, "echoes the Nietzschean view that the lower social orders are often impediments to the advance of society's Supermen and, if necessary, need to be herded by their betters. By the 1950s, she had reconsidered and tempered this

view" (Heller 2009, p. 87). Perhaps the best exemplar of Rand's transition is a statement by *Living*'s heroine, Kira, on the use of totalitarian methods. In the 1936 edition, Kira says the following in an exchange with Communist Andrei (who speaks first):

I know what you're going to say. You're going to say, as so many of our enemies do, that you admire our ideals, but loathe our methods.

I loathe your ideals. I admire your methods. If one believes one's right, one shouldn't wait to convince millions of fools, one might as well force them.

Kira goes on to say, "I don't know ... whether I'd include blood in my methods," but the above quote, for the mature Rand, is still an unacceptable endorsement of coercion by one of her fictional surrogates. In the 1959 edition, Kira's response to Andrei's assertion is simply: "I loathe your ideals" (Mayhew 2012, pp. 232–33).

The Fountainhead is the key battleground for Rand's ideas in relation to those of Nietzsche. It was as she was drafting this, and especially the character of Roark, that, as Heller puts it, Rand "begin[s] to loosen Nietzsche's seductive hold on her imagination" (Heller 2009, p. 42). The final novel, in Lester H. Hunt's words, "represents a clear, sharp, profound" break with the German philosopher, especially with regard to "the nature of power as a value" (Hunt 2016, p. 345). Rand's notebooks demonstrate how, through crafting her first ideal man in the figure of Roark, she moved from a highly Nietzschean concept of greatness toward something different. An early description of the character, from a notebook entry on February 9, 1936, reads: "He has a tremendous, unshatterable conviction that he can and will force men to accept him He recognises only the right of exceptions The others are to bow" (qtd. in Milgrim 2007, p. 26, emphasis in original). In the finished novel, by contrast, Roark explicitly states: "I don't propose to force or be forced." He can only be himself: "Those who want me will come to me" (The Fountainhead, p. 14).

Roark is referred to as a "Superman" in *The Fountainhead* (p. 352). This is a derogatory comment made by arch-collectivist Ellsworth Toohey, but it is Rand's acknowledgement of the link that can be seen between her heroes and the Übermensch, by those who wish to see it (perhaps for their own purposes). The crucial clarification Rand makes in

relation to Nietzsche is that, in her mature work, the will to power, for Rand, does not entail power over other human beings. The great man, Roark, seeks to actualize himself in the world, but does so through independent production—he seeks control over nature, yes, in the form of materials with which to construct his autonomous vision (the buildings he wishes to build), but he does not wish to coerce or shepherd other human beings in the process. Roark is indifferent to the social environment. If he has a "will to power," it is contained in his ability to withstand social and economic pressures, in order to stay true to his vision of his best self; his power is over himself. His will to power is willpower.

The Randian ideal man, Roark, is entirely focused on himself and achieving his own goals in the world. He understands that coercion or force against others is wrong; it is both a betrayal of himself and a morally unacceptable transgression of others' individuality. Therefore, if Roark is assisted by others in the pursuit of his aims, it must be by each individual's voluntary decision. Roark stands in contrast to newspaper magnate Gail Wynand—who, like Faulkner, embodies a more traditional reading of Nietzsche's will to power, in which it is the right or the imperative of the great man to shepherd the masses. Wynand is The Fountainhead's tragic hero and the most Nietzschean character in the book. Rand compared Wynand to Faulkner in January 16th and called him The Fountainhead's "most tragic character" (introduction to Night of January 16th, in Three Plays, p. 7). Wynand is a great man, and he understands his potential even as he grows up impoverished in Hell's Kitchen. Wynand imagines that in order to achieve greatness, he must bring the world under his thumb. So, he sets about building a newspaper empire. He expects this will give him the power he seeks. And it does give him power, or so it seems: the ability to make or break careers, to set agendas. Wynand for a time is herding the mob.

The newspaper magnate strikes up a friendship with Roark. The two have a lot in common, as supremely competent go-getters. But then Roark dynamites his own building, a public housing project. Roark could not let it stand after his designs were mingled with those of others, despite express assurances that the project would be built entirely according to his blueprints. Public opinion excoriates Roark; the mob is clamoring for his scalp: he has selfishly put his own creative rights ahead of the provision of homes to the poor. Wynand goes to work defending Roark, writing editorial after editorial in an attempt to sway the masses. It doesn't work. This time, Wynand is on the wrong side of the public,

and there is no swaying the man in the street. Wynand's own scalp is called for; he is persuaded to issue a retraction before he is removed as the boss of the empire he built. Wynand subsumed his own self-interest to public opinion, in the belief that he was shaping the latter. What he learns in the end is that he was never controlling the masses—they were controlling him. He set the course of his life by the crowd, and thus gave up his singular fire. At the end, he commissions Roark to construct the Wynand Building, the tallest skyscraper in New York, which will be his legacy. He tells Roark: "Build it as a monument to that spirit which is yours ... and could have been mine" (*The Fountainhead*, p. 725, ellipsis in original).

The character of Wynand demonstrates that, for Rand, one person has no command over another, in the ultimate sense: no man or woman can control what is in another human being's soul. We can only choose to allow our own souls to be governed by what others do—or not. Wynand is tragic because he imagines he is a shepherd. Roark is ideal because he has no ambitions to herd. Rand's model society in *Atlas Shrugged*, a society of independent, self-reflexive traders, is intended to represent the opposite of a world in which it is "very important to gain control over others, and to extend it as far ... as we can," which is "how Nietzsche tends to see the world," and in turn Wynand. Trade, for Rand, enables escape from dichotomies of control and submission, since its principles are those of mutual benefit and mutual consent (Hunt 2016, p. 346).

Robert Powell, writing in the *Journal of Ayn Rand Studies*, offers a dissenting view of Wynand. Powell's assessment is that he is the true hero of the novel, if the Overman is the standard: the magnate is "the only character in *The Fountainhead* who meets the criteria of both the Nietzschean Superman and Randian hero." Roark possesses a "false sense of integrity"; he "denies a will to power in his words but accepts it in his actions." Roark professes not to use force but is prepared to blow up a building to get his way. Powell argues: "Roark should not be Rand's true hero because he accepts and rejects selected forms of Nietzschean and traditional morality at his convenience. He should, like Wynand, either fully accept or reject one or the other. He rejects altruism and Christianity in the Nietzschean tradition while accepting humanism. ... Humanism and the Übermensch don't mix—Roark is Rand's problematic representation of both things" (Powell 2009, pp. 371, 374, 378, 386).

Within transhumanism, one of the central philosophical concerns is whether the transhuman is more faithful to the humanist tradition of Hobbes, Locke, et al., or to Nietzsche's Übermensch. The same philosophical issue is at the heart of Randian "hero worship": To what extent is Rand's ideal consistent with the drive for the Nietzschean Superman, and to what extent is it part of the liberal humanist tradition of personal fulfillment and accomplishment?

The four Nietzschean facets that suffuse Rand's early writing, which Mayhew identifies above, might be rewritten as follows—as applicable to Rand's final belief system: (i) Everyone is their own person and entitled to achieve their potential without imposition from others; (ii) sacrificing oneself to another or others to oneself is an immoral act; (iii) initiating force is *never* justified, only self-defensive force; and (iv) human beings are *not* equal either in potential or life-outcomes, but all are entitled to be treated equally before the law.

As we have seen, then, Nietzsche provides a precursor for both Objectivism and transhumanism. The latter philosophies move away from or beyond Nietzsche, but his work forms a philosophical baseline from which both can be considered. Indeed, Nietzsche is instrumental to the development of both and to how Rand and the transhuman are interpreted. The Randian ideal man and the transhuman have been seen as incarnations of the Übermensch. The significance of the connections between Nietzsche, Rand, and the transhuman will be seen further in the next chapter.

Not only do Rand's fiction and transhumanism express similar views regarding the conquest of nature as man's purpose—the two projects have similar philosophical roots, in both liberal humanism and Nietzschean an philosophy. The tension between humanism and Nietzsche has shaped the development of Objectivism and transhumanism; this tension continues to inform responses to and perceptions of both movements. The two movements are also linked through their interactions with the science-fictional sphere, as demonstrated in my subsequent chapters. There are thus several overlaps between Objectivism and posthumanism in its transhumanist guise, leading toward the conclusion that Rand's work can be used to support a posthuman vision.

RANDIAN TRANSHUMANISM

In a journal entry dated July 18, 1945, during a discussion of man's biological "instincts" versus his "rational faculty," Rand offers a bracketed comment which is both a restatement of Nietzsche's man-as-bridge

and a prefiguring of the posthuman: "Perhaps we are really in the process of evolving from apes to Supermen—and the rational faculty is the dominant characteristic of the better species, the Superman" (Journals, p. 285). The "rational faculty," man's ability to utilize reason, is what Rand most values in humanity; Objectivism deifies the rational: "My philosophy, in essence, is the concept of man as a heroic being, with ... reason as his only absolute" (Rand, qtd. in "About the Author," Atlas Shrugged, pp. 1170–71). Reason is valorized especially since its use is the basis of scientific discovery and technological advancement, the "productive achievement" which is also intrinsic to Objectivism.

Rand's statement about evolving into Supermen implies that she would welcome the arrival of transhumanity. Transhumanity comes about via the application of reason, taking control of our own evolution through science and technology. Whether or not she would have welcomed them into her sphere, transhumanists have certainly welcomed Rand into theirs.

Max More in 1990 produced a set of Extropian Principles, intended to guide adherents toward the transhuman future. The list, also called the Principles of Extropy, has evolved over the years. In the early 1990s, there were five principles: (i) boundless expansion, (ii) self-transformation, (iii) dynamic optimism, (iv) intelligent technology, and (v) spontaneous order. "Boundless expansion" meant conquering death and the universe: "unlimited lifespan," "the removal of political, cultural, biological, and psychological limits to self-actualization," "[e]xpanding into the universe and advancing without end." Self-transformation would involve continuous "self-improvement, through reason and critical thinking, personal responsibility, and experimentation. Seeking biological and neurological augmentation." The third principle meant turning away from "blind faith" and "[a]dopting a rational, action-based optimism." Embracing intelligent technology would mean using science "to transcend 'natural' limits imposed by our biological heritage" (More, "Extropian Principles," qtd. in Hughes 2004, p. 166). The final principle, spontaneous order, highlights especially the Extropian bias toward free markets and libertarian solutions. James Hughes comments: "More's fifth principle ... distilled their belief, derived from the work of Friedrich Hayek and Ayn Rand, that an anarchistic market creates free and dynamic order, while the state and its life-stealing authoritarianism is entropic" (Hughes 2004, p. 166).

Considering these principles, it is apparent that not only the final one is Randian. Each point on the list is to a great degree commensurate

with Rand's philosophy. Rand was very much in favor of rolling back the frontiers of the state in order to enable greater self-actualization, and of individuals adopting a philosophy that would allow them to realize their chosen best selves. Rand was a fan of space exploration, of humanity's expansion into the universe.3 "Dynamic optimism" in a sense describes Rand's benevolent universe premise. The Extropian Principles speak of rationality and "[p]ositive expectations fueling dynamic action" (More, "Extropian Principles," qtd. in Hughes 2004, p. 166). According to Rand's premise, as explained by her heir Leonard Peikoff, "reality is 'benevolent' in the sense that if you do adapt to it—i.e., if you do think, value, and act rationally, then you can (and barring accidents you will) achieve your values" (Peikoff, "The Philosophy of Objectivism" lecture series, qtd. in Binswanger, n.d., emphasis in original). The sentiment is the same. Most importantly, perhaps, as discussed throughout this book, Rand was a staunch defender of the place of science and technology in human existence, and a firm believer in its ability to safely expand our capabilities.

The similarities between Extropianism and Objectivism are not a coincidence. Rand's work is a visible presence in the movement, particularly in its early days. The Extropians started an email list in 1991, "catching the wind of the Internet typhoon and its high-tech libertopianism" (Hughes 2004, p. 166). A 1997 email from More to subscribers includes an Extropian Principles reading list. Among the ten most important books to read, according to More, is Atlas Shrugged. Also included in the top ten are Richard Dawkins's The Selfish Gene (1976) and Hans Moravec's Mind Children: The Future of Robot and Human Intelligence (1988). The longer-form, subject-categorized list includes Rand's Capitalism: The Unknown Ideal, and the work of Nathaniel Branden (More 1997). An early article in the techno-bible Wired, which did much to raise the profile of Extropianism, mentions the influence on the movement of Rand's concept of the "heroic being" (Regis 1994). At the Extropy Institute's 1994 conference, More discussed Rand's views on epistemology at length, in the process of putting forward his own vision. More argues against Rand's closed-mindedness, but this is almost beside the point: Rand is present as a basis, a progenitor, upon which a separate vision is achieved; this too is indicative of the reach of Rand's influence. Notably, More assumes his audience of transhumanists will be familiar with Rand:

Superficially and officially Objectivism opposed blind faith, dogma, unquestioned authority, and unexamined assumptions Despite all this,

as many of you have observed first-hand, Rand herself and too many of her disciples became true believers

. . .

Part of the dogmatizing pressure was generated by the *foundationalist* nature of her philosophical system, combined with her lifelong insistence that Objectivism was a *closed system*[,] an intellectual structure that must be taken whole or not at all, a system that was complete, perfect, and unalterable. ... Foundationalism shows up first in the axiomatic foundations of Objectivism. Rand declared the ideas of existence, identity, and consciousness to be axiomatic concepts. ... Theists have made exactly parallel statement[s], replacing "axiomatic concepts" with "God" or "The Bible."

. . .

Unlike Objectivism, Extropian thought has never claimed to be either complete or closed. (More 1994, emphases in original)

Neither Extropianism in particular nor transhumanism in general is a successor to Objectivism in any complete sense. The influences on the field, even in its most libertarian incarnations, are myriad, and often contradictory of each other. A new philosophy emerges from this mix. The important point to make is that Rand is a part of the mix—and a more significant part than many others. Marc Geddes wrote a lengthy article for the official website of the WTA (now Humanity+) outlining the relationship between Objectivism and transhumanism. Geddes argues that "Objectivism helped to play a role in the development of transhumanist thought and ... the defense of liberty and individualism is a key part of ... Extropianism." However, "Objectivism holds rigid, limited views on certain points, and these conflict with transhumanism." Among the significant common elements between Objectivism and transhumanism that Geddes cites are Rand's staunchly pro-technology views and the "Nietzschean" ideal of heroic man. Geddes's critique of Rand suggests that her philosophy is too self-centric and does not consider the social, which is necessary when contemplating a future of transhumanity:

A major problem with rational self-interest is that it fails to take into account the fact that human nature is not fixed. The concept of the "self" is fluid, and this means that we need to consider social goals as well as individual ones. ...

... One major problem with the Objectivist politics [is] the growing power of technologies required to carry out the transhumanist program.

These technologies require some degree of regulation to protect us from existential threats. (Geddes 2002)

On a similar note, Hughes, a self-described democratic transhumanist, commenting on the politics of the movement in 2002, summarized: "Contemporary transhumanism has grown out of white, male, affluent, American Internet culture, and its political perspective has generally been a militant version of the libertarianism typical of that culture." He goes on: "For the transhumanist movement to grow and become a serious challenge to their opposites, the bio-Luddites, they will need to distance themselves from their elitist anarcho-capitalist roots and clarify commitments to liberal democratic institutions, values and public policies" (Hughes 2002). In recent times this shift has become apparent. As a foundational figure in transhumanism, Max More's own growth has been away from Rand and toward liberalism, in the classical sense, rather than libertarianism. The most recent version of the Extropian Principles, released in 2003, significantly tones down the Randian rhetoric. "Boundless expansion" is replaced with the more moderate notion of "perpetual progress." "Dynamic optimism," with its connotations of the heroic world mover, is substituted by a more analytical "practical optimism." Most meaningfully, the anti-government idea of "spontaneous order" is gone. Rand/Hayek is replaced by Karl Popper. The fifth principle now advocates "open society" and warns against the kind of utopian thought and planning Popper excoriates in *The Open Society and Its Enemies* (1945). Popper argues that the very fact of believing an Ideal State is realizable, and attempting create such an order, constitutes a blueprint for dictatorship, since it results in a concentration of power among those prepared to wield it over others. Placing the 1990s principle and the latest version side by side, the transition from a pseudo-Randian free-market ideal, to a more inclusive Popperian concept, is evident. The early edition:

Spontaneous Order: Supporting decentralized, voluntaristic social coordination processes. Fostering tolerance, diversity, foresight, personal responsibility and individual liberty. (qtd. in Hughes 2004, p. 166)

And the latest:

Open Society—information and democracy

... supporting social orders that foster freedom of communication, freedom of action, experimentation, innovation, questioning, and learning.

Opposing authoritarian social control and unnecessary hierarchy and favoring the rule of law and decentralization of power and responsibility. Preferring bargaining over battling, exchange over extortion, and communication over compulsion. Openness to improvement rather than a static utopia. ... (More 2003)

The move away from Rand within transhumanism does not undo the fact that she was there at the origin. The Russian-American author provides fuel for many fires; her impact is far wider than those who would consider themselves firm followers of Objectivism, attempting to implement Rand's principles as policy, such as the Ayn Rand Institute (ARI). Notably, the inspiration Rand's work provides—as we have seen within transhumanism—is not *merely* of the life-affirming kind, which one could presumably gain from the work of various writers of fiction. Rand influences at the level of ideas. Belief systems are clarified in relation to hers.

Transhumanists have clearly paid much attention to Objectivism. Objectivists have also paid attention to transhumanism. The second-largest interest group pushing Rand's ideas, after the ARI—the Atlas Society—defines Objectivism as an open philosophical system, in which Rand is the foundational figure but not the final arbiter. It stands to reason, therefore, that the society would be open to amendments to Rand's beliefs from outside quarters in a way that "closed system" Objectivists (such as the ARI) are not—this includes from the field of transhumanism. Answering a question about transhumanism as it relates to Objectivism, William R. Thomas offers a comprehensive response on the Atlas Society website. Thomas is a lecturer in economics at the University at Albany, New York. He writes:

The basic premises of Transhumanism are compatible with Objectivism. Transhumanists emphasize the use of reason to assess new technologies, view technological progress as desirable, and value individual control over one's body and mind. Transhumanism is a this-worldly ideology descending from secular humanism and it rejects mysticism. Objectivist values would fit within the Transhumanist tent. And insofar as Transhumanist projections of the future are accurate, Objectivists would be advised to take them into account.

Thomas, however, explicitly warns against the kind of posthumanist discourse that denigrates man by purporting "to value all forms of sentience equally, including animals." This is the strain of posthumanism

put forward by Cary Wolfe and Donna Haraway. He makes the point that some transhumanists "deprecate man as he actually is," whereas for Objectivists, "[t]hat we can be improved and strengthened doesn't make us bad or incapable as we are. Indeed, it is glorious that we are increasingly able to take conscious control of our biological nature" (Thomas, n.d.). Thomas also criticizes certain transhumanists for seeking government funding for technologies and research, rather than sticking with laissez-faire principles. In essence, he argues for a *more Objectivist transhumanism*, suggesting that each philosophy will be strengthened by interacting with the other, given their core compatibility.

A 2004 article in the Québécois libertarian journal, *Le Québécois libre*, puts forward just such an Objectivist-transhumanist synthesis. Gennady Stolyarov II discusses the life-extension theories and science of gerontologist Aubrey de Grey, who is working toward the reversal of the aging process. De Grey's theories that aging can be ended within the next several decades are supported by, amongst others, Ray Kurzweil, a futurist and Google's chief engineer, and another famous figure within the transhumanist movement. Stolyarov argues that Objectivism—with its philosophical focus on the individual productive life, not on the supernatural realm or on the needs of the many—provides the basis for a *moral defense* of transhumanist goals, where traditional moral systems may be opposed to such goals:

While many "traditional" value systems do not provide support for the desirability of such advances, the Principles of Extropy, assisted by the firm, interrelated conceptual hierarchy of Objectivism, make it possible to argue in their favor on the most fundamental moral levels and reverse the prevailing mainstream paradigm which holds that such radical technological advances are either undesirable or impossible. Libertarians of all stripes should rejoice at the proximity of these opportunities, as well as their immensely beneficent implications for individual freedom. ... [R]esistance by governments, criminals, and irrationalist intellectuals against individual liberty and initiative will be futile once indefinite life is attained. (Stolyarov 2004)

This use of Rand's work to bolster the moral case for transhumanism is an exercise also taken up by others, including by Zoltan Istvan in his philosophical novel, *The Transhumanist Wager*, which is discussed in Chapter 6.

What this chapter has established is an array of philosophical links and common ideas between Objectivism and trans-/posthumanism. When looking at a writer's work and impact, we must look beyond what the work says, to how the work has been put to use, then look back to the work itself, to perhaps better understand why it has been put to use in this way. Ayn Rand's work supports a posthuman vision, precisely because it has supported a posthuman vision. This may be a solipsistic argument, but it nevertheless remains fact. Rand directly influenced transhumanism, and Objectivists are now seeing the importance of transhumanism too, and acknowledging that their philosophy is to a large extent consistent with it. Looking back at Rand's work, it is possible to see why. Both Objectivism and transhumanism are indebted to Nietzsche's Superman; the tension between the Superman and liberal humanism is at the philosophical core of each movement. The promotion of the rational individual mind as the creator of technology—this is also at the heart of both Rand's work and the transhumanist project, and the reason is the same in each case: the transcendence of limits to self-fulfillment. Objectivism and posthumanism represent overlapping circles, with transhumanism at the point of intersection.

Notes

- 1. In the first issue of the *Objectivist Newsletter* (1962), Rand wrote that Objectivists were not "conservatives," but "radicals for capitalism" (Burns 2009, p. 195, emphasis in original).
- 2. The precise origins of "Ayn Rand," the name, are a mystery. It appears "Rand" was in use before Alissa departed Russia; she used it as an abbreviated form of Rosenbaum. "Ayn," writes Burns, was "inspired by a Finish writer," who remains unidentified. In an early letter, Rand advised that her new forename was pronounced "I-n"—which may provide a clue as to why this ardent individualist favored it. In any case, Rand's chosen name allowed her to be shorn of her Jewish identity, and—in print—of her female identity; both shearings were conducive toward advancement as a bestselling author (Burns 2009, pp. 19, 301n22; *Letters*, p. 27). For his part, "Branden" is an anagram of "ben Rand," Hebrew for "son of Rand." Though, Nathaniel always denied the name was chosen for this reason (Heller 2009, pp. 219–23, 254; Cookinham 2005, p. 25).
- 3. The best example on point is Rand's reaction to the launch of *Apollo 11*. She wrote in her periodical the *Objectivist*, in September 1969, of experiencing "a feeling that was not triumph, but more": "For once, if only for

seven minutes, the worst among those who saw it had to feel—not 'How small is man by the side of the Grand Canyon!'—but 'How great is man and how safe is nature when he conquers it!'" ("Moon Launch Was Man's Shining Hour") Yaron Brook, the Ayn Rand Institute's primary spokesperson, advocates living in the oceans and then in space, as the human race continues to expand (Brook 2013b).

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CHAPTER 4

Rand Noir vs. Rand Incorporated

"There's a young man, and his name is Equality 7-2521," said Senator Rand Paul (R–Kentucky), speaking to a hearing of the US Senate Energy and Natural Resources Committee. It was 12 April 2011, and Paul was arguing against government mandates to phase out incandescent lightbulbs in favor of more energy-efficient models. Paul is the son of another prominent libertarian politician, former Texas congressman Ron Paul. He is not named after Ayn Rand (his full first name is Randal). However, as part of his argument at that committee meeting, he did offer a lengthy summary of his namesake's science-fictional novella, *Anthem*:

In that novel, individual choice is banned, and the collective basically runs society. ... [Equality 7-2521 is] an intelligent young man, but he is banned from achieving, or reaching any sort of occupation that might challenge him. He's a street sweeper.

Over time, he discovers a subway, and he rediscovers the incandescent lightbulb. And he thinks, naively, that electricity and the brilliance of light would be an advantage for society, and that it would bring great new things as far as being able to see at night, and to read, and the advancement of civilization.

Well, he takes it before the collective of elders, and they take the lightbulb, and basically it's crushed beneath the boot heel of the collective. The senator concludes with the moral he has drawn: "The collective has no place, basically, [in] individual choice." Therefore, government should play no role in compelling such standards (qtd. in Kleefeld 2011).

Anthem is hardly the only science fiction text ever to have been put to use in parliamentary debate. Perhaps the most frequently cited is the very first work of science fiction: Frankenstein. Mary Shelley's creation was referred to more than once during 1980s debates on embryo research in the House of Commons and the House of Lords, for example (Mulkey 1996, pp. 165–69). Frankenstein is a myth which still governs many of our thoughts about science and technology, and it is an early portrayal of the posthuman. Therefore, a discussion of Shelley's novel will shortly set up what is to come in this chapter, which considers Rand in relation to various science-fictional portraits of posthumanity. The common nineteenth-century origins of Objectivism and posthumanism are important to review first, however. We can see that they have a shared genealogy, which speaks to the relevance of looking at Rand in relation to the posthuman.

The Industrial Revolution is a pivotal point in human history, for Ayn Rand and for theorists of the posthuman. Man's mastery of nature here reaches new heights, as mechanization advances. This is the origin of modern industrial capitalism, the technological advancement which makes possible globalization and posthuman conception. According to Bruce Mazlish, this is "where humans pass, or begin to pass, the boundary between the animal and the mechanical. Henceforth, human evolution seems to point in a new direction" (Mazlish 1993, p. 12). The mechanical rises and the organic seems less essential. What Pat Hudson calls the "machinery question" was alive at the height of the nineteenth century: the issue of how mechanization was affecting humanity. This drove the Luddite opposition to mechanization: "The 'machinery question' was important in crowd action in manufacturing areas before and during the Luddite period"; "[1]ong-maintained traditional skills were made redundant and with their passing went long-established communal identities embedded in the cultures of work" (Hudson 1992, p. 217). Rand represents the opposite of Luddism. For someone with Rand's view, mechanization does not shackle man to the assembly line, but rather ultimately frees his mind to do more, as machines take over menial tasks: "The demand to 'restrict' technology is the demand to restrict man's mind. ... Technology can be destroyed, and the mind can be paralyzed, but neither can be restricted" (Return of the Primitive, p. 285, emphasis in original). The fear of lost identity which drove the Luddites, can also drive current opposition to technological advancement. Technological progress is marked by twin emotions: fear and excitement, both stemming from its possibilities. The fear is that technology will eclipse old ways of life; the excitement that technology makes possible new ways of living. Today, "Luddite" is a derogatory word, conflated with various kinds of backwardness. Thus, transhumanists have taken on the term to define their opponents. James Hughes refers to those who oppose genetic and technological augmentation as "bio-Luddites," a label which has caught on. Bio-Luddites can be of the traditional political right or left: the former generally opposed to transhumanism on religious grounds, the latter on grounds of environmentalism or anticorporatism (Hughes 2002; Hughes 2004, p. xiii).

It is no coincidence that science fiction also has its origins in the Industrial Revolution; SF can only exist once science and technology pervade the social structure such that they become a force in the popular imagination. As Ted Chiang puts it, the genre is "fundamentally a post-industrial revolution form of storytelling" (qtd. in Huang 2013). Existential fear and excitement are the twin emotions that mark the genre—scientific and technological advancement, and the consequences for humanity, provide the content which fuels these emotions. The era of the Industrial Revolution is also the era of Romanticism, Rand's favorite form of literature—and one of the prime literary forces behind science fiction: "[I]t is the primacy of notions of the Imagination and the Sublime associated with Romantic writing that sets the agenda for the development of SF" (Roberts 2006, p. 42). As man breaks free of nature with his technology, he was also breaking old cultural codes. The individual empowerment which is the promise of new technologies, is mirrored in the premise of Romanticism: the individual creator is not beholden to externally set laws. This, at least, is how Rand views history. Rand called the nineteenth century—the era of the Industrial Revolution and Romanticism—"a fiction-Utopia" in comparison to the rest of human history: "The greatest, unprecedented, undreamed of events and achievements were taking place before men's eyes I am speaking of the industrial revolution, of the United States and of capitalism." In this period, "men discovered science and political freedom," and "[f]or the first time ... gained control over physical nature" (Philosophy: Who Needs It, p. 65). Rand identifies the primary literary innovation of the period as Romanticism-however, her definition sweeps away much of what others might consider key traits of the movement, such as its mysticism, its poetics of the natural world, and its democratic consciousness. Rand's definition is perhaps less indebted to Romantic art itself than to the political texts of the Romantic era; it is a Paine's *Rights of Man* view of art.² For Rand, Romantic art's crucial facet is that it validates volition—the idea that we are independent beings, free to make choices and achieve our values. She sets this up in contrast to Naturalism, which posits that man's "life and his character are determined by forces beyond his control." Rand viewed her novels as "a bridge" between the great Romantic literature of the nineteenth century—including the work of Hugo, Dostoevsky, and Schiller—and a future Romantic tradition, which may or may not come about (*The Romantic Manifesto*, pp. vi–viii, 91–92).

If Rand was keen to associate herself with Romanticism, she did not associate herself with that genre which is one of Romanticism's primary offshoots: science fiction. In none of her statements on SF does she specifically consider herself an SF author.³ Nevertheless, calling Rand a science fiction writer is uncontroversial in certain circles. Jeff Riggenbach notes that the question of whether or not Rand wrote SF has been contested among Objectivists (perhaps in part due to SF's perceived lack of value as Literature); however, among the SF critical community, it is held as self-evident: Avn Rand wrote science fiction. Riggenbach notes that both Anthem and Atlas Shrugged are included in standard bibliographies of SF and SF reference works, such as Neil Barron's Anatomy of Wonder: Science Fiction, and John Clute and Peter Nicholls's Encyclopedia of Science Fiction. Anthem is science fiction since it is set in a future, technology-less dystopia; it draws on that great SF trope of speculating about future techno-scientific time. Atlas Shrugged, meanwhile, is also indebted to the SF tropes of utopia and dystopia: Galt's Gulch is an explicit utopia, contrasted with the dystopian America beyond its borders. Atlas features heavily another key element of science fiction: fictional advanced technologies which propel the plot (Riggenbach names three: Rearden Metal, an entrepreneur's powerful alloy that could revolutionize rail travel, but which government and union forces seek to curtail the use of; Galt's motor, a clean-energy generator Galt invented, but refuses to share with the world, because society will not allow him to profit from it in full—the motor is both an emblem of, and a practical assist to, the strikers; and finally, Project X, a state-sponsored weapon of mass destruction; Riggenbach [2007, p. 132–34]).

The SF Encyclopedia's entry for Ayn Rand, along with describing Anthem and Atlas as SF, suggests: "Although Objectivism has never incorporated itself as a religion under American law (Rand was an eloquent atheist), its theological reclusiveness as regards opposing argument, and the Star Chamber arbitrariness of its internal workings during its pomp some decades ago, mark this belief as unmistakably analogous to Scientology in its relationship to sf culture in general" (Clute 2017). The entry mentions that Rand has had "continuing influence" on libertarian SF. Meanwhile, the entry for libertarian SF posits that, "[u] niquely among political movements, many of libertarianism's most influential texts have been by sf writers," including Rand (Tringham 2015). Authors of libertarian science fiction who specifically mention Rand as an influence include J. Neil Schulman and L. Neil Smith (Riggenbach 2007, pp. 115, 125). The Libertarian Futurist Society annually offers the Prometheus Award for the best novel in the genre, recalling the moniker Equality 7-2521 chooses for himself in Anthem, after he breaks from his oppressors. A second accolade, the Prometheus Hall of Fame Award, honors classic works. Both Atlas and Anthem are recipients, in 1983 and 1987 respectively.

Thus, two of Rand's four novels can be counted as science fiction, while Rand and Objectivism form an adjunct to SF culture. Objectivism's closeness to science fiction is mirrored by the closeness of trans-/posthumanism to the field, as we will see—yet another example of the overlapping circles between Objectivism and posthumanism.

Beyond certain of her works being part of the genre, I would argue that a "science-fictional imagination" is present throughout Rand's oeuvre. By this I mean, the concerns of science fiction are also her concerns, whether she is specifically writing in the SF form or not. Ken Gelder, in his seminal study of pop-fiction genres, identifies a "scientific-social view" as key to SF (Gelder 2004, p. 64). In Rand's work this is manifested as an exploration of "the nature of science and its proper role in human affairs," in Riggenbach's words (Riggenbach 2007, p. 133). Scholar of Romanticism Marilyn Butler maintains that the science fiction novel "retains a unique licence to be didactic," since SF "has to evaluate whole societies"; this is in contrast to the typical novel as it has evolved, which explores individual psychology (Butler 2002, p. 29). Gelder makes a similar point when he refers to SF's "commitment to thinking socially" and the fact that it is "a polemical genre"; "science fiction busily creates entire societies and puts them to work, for better or worse" (Gelder

2004, pp. 65, 71, emphasis in original). Ayn Rand was not a psychological writer. While she writes about the individual, her work is not an exploration of the vicissitudes of the psyche, the "grey" that accompanies the human condition, as we might understand typical literary fiction to be. Moreover, Rand's work was nothing if not didactic. Each of her novels puts an entire society to work and evaluates it based on its (lack of) support for individual achievement: the Soviet Union in *We the Living*; a primitive future collective in *Anthem*; twentieth-century conformist America in *The Fountainhead*; and an America suffocating from government overreach in *Atlas Shrugged*. Hence, as I say, a concern with the concerns of science fiction—an evaluation of whole human societies, the proper role of science and technology—is evident across Rand's work. The field of posthumanism is also uniquely concerned with the concerns of science fiction.

The previous chapter identified transhumanism as the aspect of the posthuman most relevant to a discussion involving Ayn Rand. This chapter expands on this fact. The consideration of Rand in the context of the trans-/posthuman here turns to the fictional sphere. I examine Rand's relationship with the genre of posthumanist science fiction—and delineate the connections between her work and two discrete forms of posthumanist SF, which I term "Rand noir" and "Rand incorporated." I preface my discussion of these fictions with a general introduction to posthumanism as a strain within science fiction—a strain that begins with the very first SF text: *Frankenstein*.

HUMANITY, ENHANCED IN FICTION

When the atomic bomb was dropped on Hiroshima, American radio commentator H. V. Kaltenborn declared, "For all we know, we have created a Frankenstein!" (qtd. in Allen 1992, p. 506). Today the name of Mary Shelley's creation is cited in debates about embryo research; we speak of genetically modified organisms as "Frankenfood." As Jon Turney puts it, we still turn to a story that is now two centuries old, "when we look for ways to interpret the latest developments, the hot news from the lab, the technological promises for the twenty-first century, when we look for stories to tell about what we are about to do." Shelley "identif[ied] concerns which go to the heart of our response to science" (Turney 1998, pp. 2–3). Frankenstein is a gothic metaphor for fear of science that pushes the boundaries of life, and consequently could

destroy life as we know it. The creation and the creator have become fused in the popular imagination, a conflation signifying horror of both: the science and the scientist, the technology and its originator. Roslynn D. Haynes summarizes the situation thusly: "Not only has his name become synonymous with any experiment out of control but his relation with the Monster he creates has become, in the popular mind at least, complete identification: Frankenstein *is* the Monster" (Haynes 1994, p. 92, emphasis in original).

The novel which is often seen as the first work of science fiction is a Romantic novel—and it provides an image of the monstrous posthuman. The possibilities of contemporary science are at the center of Mary Shelley's Frankenstein; or, The Modern Prometheus (1818/31). Shelley was the first to put "the creation of the Homunculus on a purely scientific basis" (Louis Awad, "The Alchemist in English Literature: Frankenstein," qtd. in Botting 1991, p. 166). The opening line of the preface to the first edition states: "The event on which this fiction is founded, has been supposed by Dr. [Erasmus] Darwin, and some of the physiological writers of Germany, as not of impossible occurrence" (Shelley 2008, p. 13).⁴ Here, fear is the governing intent (also placing Shelley in the gothic tradition). A man, Victor Frankenstein, studies ancient and modern science to an intense degree, begins his own experiments—and innovates. He discovers the "spark," a kind of electricity, that gives life to living things. He creates a posthuman: a being that is man and more than man, human and not so human; man overcome. The creature's form is composed from the body parts of dead humans, and endowed with life via Frankenstein's discovery. It is possessed of supernatural speed and strength. Abandoned by his creator, the creature wreaks havoc on Frankenstein's life: murdering those close to Victor in acts of revenge. Confronting Victor, the creature demands a bride: a companion who will be like him, since he is shunned by all others who behold his hideousness. Frankenstein determines, however, that he must not create such a creature. He fears for "the existence of the whole human race," should "a race of devils ... be propagated upon the earth" (Shelley 2008, pp. 165-66). The creature continues his path of destruction, pursued but never caught by his creator. Haynes notes, appropriately, that it "has taken such twentieth-century Monsters" as in vitro fertilization and genetic engineering "to illuminate fully the depths of meaning" in Shelley's tale. Frankenstein became "the dominant image of the scientist in twentieth-century fiction and film" (Haynes 1994, pp. 92, 101).

Rand mentions Frankenstein in a writing course she delivered to a group of acquaintances in 1958, posthumously published as The Art of Fiction: A Guide for Writers and Readers (2000). Classifying Frankenstein as "fantasy," she says: "The meaning of the story is valid: a man must bear the consequences of his actions and should be careful not to create monsters that destroy him. This is a profound message, which is why the name Frankenstein has become almost a generic word (like Babbitt)" (The Art of Fiction, p. 170). Rand's brief comment does not capture the full thematic portent of Shelley's novel. "Frankenstein" has proved such a powerful general metaphor because of a very specific fear, which is a post-Industrial Revolution fear: that of men becoming gods. In David Skal's words, its impetus is "dire warnings against divine presumption" (Skal 1998, p. 34). Victor's narrative in the book is filled with pleas not to follow his path in the pursuit of ultimate knowledge and power over life itself. At the outset, Frankenstein resolves to tell his story to Walton in order to dissuade the explorer from the "madness" of attempts to conquer nature. When he describes the moment of his own discovery, Victor refuses to pass to Walton the knowledge he possesses, saying: "Learn from me ... how dangerous is the acquirement of knowledge, and how much happier that man who believes his native town to be the entire world, than he who aspires to become greater than his nature will allow" (Shelley 2008, pp. 28, 53). This is Frankenstein's, the man and the book's, moral encapsulated. The many monstrous adaptations of the novel in popular culture may not state this warning so explicitly—a good story is all that's required—but they play off the exact same theme, the same fear of transgressing the boundaries of life.

Of course, there are religious injunctions against messing with life's frontiers; according to this view, men are men and should not assume the powers of the divine. But, the fear is also entirely secular. Altering the boundaries of life may spell our doom: we may be destroyed by our creations, by the children of our minds.⁶ This fear holds true for "Frankenfood" as it does for the cyborgian posthuman and artificial intelligence.

The views expressed by Shelley in *Frankenstein* regarding the morality of scientific and technological development could not be more different from those of Rand. Where Shelley warns against the pursuit of knowledge, science, and by extension technology, Rand celebrates all these things. It is interesting that both make use of the Prometheus myth, a staple of Romanticism, in elaborating their contrary moralities.

In Shelley, Prometheus is certainly a symbol of hubris: he who steals the power of the gods, the "spark of being," and suffers for the same as Frankenstein, Prometheus's modern incarnation, suffers. Victor's final plea to Walton is that he should "avoid ambition," and thus avoid Frankenstein's fate (Shelley 2008, p. 217). In Rand, too, Prometheus is a symbol of pride—but pride is only ever a positive trait, for Rand; as is the pursuit of knowledge and science. Her Prometheus is also the bringer of the gods' fire, but this makes him an idol to be celebrated, not a dangerous delinquent deserving of punishment. Prometheus is referenced in three of Rand's four novels: Anthem, The Fountainhead, and Atlas Shrugged. The most significant use of the myth is in Anthem. Here, in a technologically bereft future, Rand's hero discovers the life-giving spark of electricity—something which could revolutionize ways of living on earth—and subsequently renames himself Prometheus, after "he [who] taught men to be gods." Prometheus's invention, a lightbulb, is framed as a giver of life. It is "[t]he power of the sky ... made to do men's bidding," "the future of mankind" (Anthem, pp. 60, 70, 99). Science here, then, is framed as the pursuit of life-expanding capability, not the harbinger of death, as it is in Frankenstein. At the end of Anthem, Prometheus triumphantly vows to convert those he can to his new creed of living for oneself; of freedom, science, and progress. Rand uses the same myth as Shelley as the basis for an opposing morality of technology. And so today her supporters, far from considering it Frankenfood, can write in praise of the genetically modified organism; for them, such playing God advances—it does not hinder—human survival (Maxham 2014).

The "posthuman," then, has been inherent in science fiction since its start, since *Frankenstein*, even if not named as such. It has been present as the possibility that humanity will be overcome by its techno-scientific creations. Many critics identify the creature as a proto-cyborg. The anxieties of *Frankenstein* are reproduced in popular SF from *Terminator* to *Battlestar Galactica* to *H+: The Digital Series*, a recent online episodic program, distributed by Warner Bros., which deals with transhumanism. The stories of science fiction can shape debates on science and even prefigure scientific reality. Humans have not yet been able to create sentient beings, children of our minds, which supersede us; we have not yet been outdone by our technology. But, as science and technology have advanced, speculation as to this possibility has only grown and found new forms. The posthuman is a direct presence in much twentieth- and twenty-first-century SF, including canonical works like Huxley's *Brave*

New World (Francis Fukuyama, for example, begins his monograph on the dangers of posthumanity, Our Posthuman Future, with a description of Brave New World). More generally, we could say that the posthuman lurks in the background of the very imagination of the science fiction genre, because of the genre's preoccupation with the relationship between technology and human societies. Thoughts of man combined with machine emerge from this imagination. For my purposes in this chapter, I will define a work of posthumanist science fiction broadly, as any work of fiction that portrays "the posthuman achieved through science"—cyborgs, genetically engineered humans, et al.

Within science fiction that portrays posthumanism proper, the posthuman is not always present as nightmare. In non-technophobic texts, it takes the form of a dream of overcoming the limitations of present existence. It is both fearful and exciting, depending on the observer. Both Haraway and Hayles discuss various science fiction texts as exemplars of the posthuman. Hayles references Robocop and the six-million-dollar man as embodiments of her cybernetic posthuman (Hayles 1999, pp. 3-4). Haraway celebrates cyborgs in the feminist science fiction of Joanna Russ, James Tiptree Jr., Vonda McIntyre, and others, as beings which "make very problematic the statuses of man or woman, human, artefact, member of a race, individual entity, or body" (Haraway 1991, pp. 178-79). According to Nick Bostrom, science fiction has been vital to the development of transhumanism, since it causes people to think "about the future evolution of the human race." He cites Brave New World and Frankenstein as key texts in the debates surrounding "human technological transformation"; the content of the novels has been used to reinforce fear of the transhuman (Bostrom 2005). Max More and his wife Natasha Vita-More's The Transhumanist Reader includes a section, by Michael R. Rose, discussing portrayals of immortality in fiction and their relationship with real-life scientific ideas. Rose's conclusion states the obvious: that achieving immortality through science in real life is a lot more complex than the many portrayals of immortality-throughscience in fiction (Rose 2013, pp. 203-4). Nevertheless, his contribution to the reader demonstrates that it is now not possible to offer a rounded view of certain scientific developments without discussing their antecedents in SF—the pendulum has swung all the way, if you like, from when Mary Shelley cited science in order to preface her work of science fiction. The posthuman and the transhuman are part of the science-fictional

milieu, as science fiction is part of the transhumanist and posthumanist milieu. As we have seen, Ayn Rand operates in both arenas.

From Ambivalence to Absolutism

In the 1980s, some of the basic tenets of Rand's worldview were accepted as economic (and hence political) fact: that wealth is created by an entrepreneurial elite who "move the engines" of economies. The Reagan presidency scaled back state involvement in the American economy to a level not seen since before the New Deal.8 Commensurate with this, since at least the 1960s, "dispersed narratives" of culture and of human activity were on the rise. The aftermath of World War II had brought about a questioning of all totalizing narratives. Modernism would give way to postmodernism; old ideas of truth, history, the integrity of the human itself, were fundamentally breached. Simultaneously, the rise of systems theory and the advent of cybernetics (mentioned in Chapter 2) provided a scientific parallel to cultural postmodernism: identity could be located not in a discrete self but in a diffuse network. In one respect, the Reagan Revolution was about a master narrative. Its impetus was the supposed rebirth of distinctly American values, such as individual freedom (people fending for themselves unaided by government). However, the decentering power of globalized high capitalism—in which Reaganism was firmly embedded—also facilitated the questioning and rupturing instincts of the postmodern era. Old ways of life and careers were made obsolete, as the United States became deindustrialized. The liberalization of trade meant factory owners could maximize their profits by moving to places with lower labor costs and lower taxes. Meanwhile, mechanization meant humans were simply not needed to do factory jobs that machines could now do. The explosive growth in consumer products provided choices for entertainment and ways of keeping in contact that had never been there before. But this technology of connectedness, too, had a rupturing effect: human lives and communities could not exist unto themselves, in aspic, as they might have done before. Globalization may be about progress—depending on your political viewpoint—but it is also about disruptive change, loss, the obsolescence of prior truths. It leads to the post-human in the sense described by Rosi Braidotti—of an ultimate existential crisis: "The global economy is post-anthropocentric in that it ultimately unifies all species under the

imperative of the market and its excesses threaten the sustainability of the planet as a whole" (Braidotti 2013, p. 63). As Rand is one of the forces embedded in and behind globalized high capitalism, she can be said to bolster posthumanism in this sense, too—though, this is not the particular focus of my study.

The late-twentieth-century hyper-capitalist order, inaugurated under Reaganism, was met with a twin-pronged cultural response. On the one hand, an attempt to reassert the cleanliness of certain American/Western values; on the other, a radical lack of idealism, or an ambivalence, toward the future and what it entails for humanity. Hollywood blockbusters such as First Blood (1982) and Die Hard (1988) exemplify the first trend; 1980s American popular cinema was marked by, Susan Jeffords notes, "spectacular narratives about characters who stand for individualism, liberty, militarism, and a mythic heroism" (Jeffords 1994, p. 16). But there was also postmodern/posthuman ambivalence, found in sci-fi noir such as Blade Runner (1982). Unleashed laissez-faire combined with postmodernism is responsible for this Janus-face.

The 1980s saw the birth of an iconic form of posthumanist SF: cyberpunk. Blade Runner set the tone for the genre, according to Scott Bukatman, both anticipating and heavily influencing it (Bukatman 1997, p. 48). The genre can be understood as a response to the dislocating realities described above. What we might at this juncture call "classic" posthumanist science fiction—that is, the mold of cyberpunk—operates out of postmodern ambivalence. I refer to postmodernism in Lyotard's sense. In today's globalized world, "[o]ne listens to reggae, watches a western, eats McDonald's food for lunch and local cuisine for dinner, wears Paris perfume in Tokyo and 'retro' clothes in Hong Kong, knowledge is a matter for TV games" (Lyotard 1993, p. 42). What goes along with the globalized intermixing of cultures is a relativity of all values, and a questioning and disrupting instinct: "To live in the postmodern condition ... is to live without a grand and deep sense of abiding truth" (Fortier 2002, p. 176). This is what Jameson calls the cultural logic of late capitalism. Jameson himself considered cyberpunk "the supreme literary expression" of late capitalism (Jameson 1991, p. 419n1, emphasis in original). Posthumanism, in its Haraway-Hayles-Wolfe construction, is the critical twin of postmodernism, even a facet of it, perhaps. It extends postmodernism's cultural breakdown/intermixing to the breakdown of integral human(ist) identity itself; the human is intermixed with other elements as new definitions of identity are sought. This sense of

posthumanism is about the negation of the old truths of Western life, of humanism itself; about disrupted boundaries and radical ways of calling into question the human being's relationship to itself, to culture and the world, and to the machine. The latter-twentieth-century fictions which portray posthuman vistas, typically live in the questions of the future without offering an answer to them; because, they suggest, none is possible. The question of man interlaced/interfaced with the machine is the primary. Posthumanist science fiction of the 1980s and 1990s—the period of Rand's ascension as a legitimate political force—depicts vistas of man interlaced with/interfaced with the machine, and raises questions about what such radical combining would mean for the nature of the human. Often the depictions have a dystopian hue. Though, this depends on the nature of the reader. The overpopulated and crime-ridden environs of Blade Runner and Neuromancer do not strike me as places I would like to live. But, to a hardcore of "technolibertarians," Gibson's work, in particular, suggests a radical freedom they wish to emulate. The "console cowboy," Case, answerable only to himself, hacking into government agencies and mega-corporations, is a post-Randian libertarian hero. His work is in the utopia of cyberspace: a place where normal rules don't apply, and an avatar can be free even of the laws of physics. The "post-Rand" nature of Gibson is discussed further below.

Rand stated cleanly the values of capitalism. They were for her utopian values, ideals which if properly practiced would result in a perfect form of civilization. Rand's work played a significant part in the unleashing of high capitalism—the freeing of market forces, as regulations on capital were rolled back—in the final quarter of the last century. Heller writes that The Fountainhead "almost single-handedly renewed popular interest in the cause of individualism," while Atlas Shrugged "resurrected interest in American capitalism at a time when it was under pressure by both the liberal Left and the Christian Right" (Heller 2009, pp. 245, 270). Andrew Hoberek credits Rand with helping cement the dominance of white-collar morality, particularly in relation to intellectual property, "in which ideas rather than things have become the characteristic object of production" (Hoberek 2006, pp. 321, 336). Rand's direct impact on economic policy during the Reagan administration and beyond has already been outlined, in Chapter 2. Cyberpunk emerges out of an environment Rand helped create—late capitalism. However, cyberpunk typically hinges upon late-capitalism-as-dystopia: it extrapolates from the present high-capitalist moment to a future even-more-advanced capitalist

moment, where the erasure of humanity itself becomes a possibility. It is recognizable as "our world, gotten worse" (Pam Rosenthal, qtd. in Chun 2006, p. 183). In the context of this study, I call these classic posthumanist SF texts Rand noir, since the relationship between them and Rand's works is roughly analogous to that between "clean" heroic fiction and noir texts. The former is the thriller genre, the novels of Fleming, Spillane, et al., which Rand celebrated as offering "the spectacle of man's efficacy: of his ability to fight for his values and to achieve them" (The Romantic Manifesto, p. 132, emphasis in original). By contrast, noir is fraught with ambivalence, questioning, jadedness: it offers a sensibility, not an ideal. The latter depends, however, on the prior existence of the former; it states with irony and a disruptive instinct the ideals unambiguously espoused by the former.⁹ I am not suggesting that posthumanist science fictions of the 1980s and 1990s are necessarily responding directly to Rand; but, as I've said, they emerge out of a culture Rand helped inaugurate, and they provide a portrayal of capitalism which is a response to Rand's, in that they accept the existence of high capitalism but do not accept it as an ideal.

There is, thus, "classic" posthumanist science fiction, operating out of postmodern ambivalence, which depends upon the existence of a kind of Randian precursor (high capitalism), turned dark: Rand noir. The relationship of this work to Rand's works has been explained above, and the explanation is expanded below; the relationship is indirect. There is another strain of posthumanist SF, however, that takes Rand openly into its analysis. An important early text here is Nancy Kress's novella Beggars in Spain (1991)—later expanded to a full novel, and then a trilogy with Beggars and Choosers (1994) and Beggars Ride (1996). The third millennium—the first two decades of it, at least—has seen the advent of a number of works depicting transhumanism and posthumanism which interact directly with Rand's fiction. These include Andromeda (2000-2005), a television series developed from notes left behind by Star Trek creator Gene Roddenberry; the videogame BioShock (2007), developed by 2K Games; and The Transhumanist Wager (2013), a novel by Zoltan Istvan. These works take up a position, and put forward an argument, with regard to the issues they are airing: issues of the human future, man in relation to machine, and the nature of Objectivism itself. As they address or incorporate Rand's vision, this position-taking is a logical response, I suggest. The absolutism of Rand demands an argument in response—not ambivalence. Any work that truly takes account of hers, would have to

take this into account. This process is shown in operation below. Let us call these works, as a contrast to Rand noir, *Rand incorporated*, since this describes what they have done: incorporated Ayn Rand directly into their plots and themes.

The remainder of this chapter looks at three "Rand noir" texts—Ridley Scott's 1982 film *Blade Runner*, Mamoru Oshii's 1995 animated film *Ghost in the Shell*, and William Gibson's 1984 novel *Neuromancer*—and examines how they fulfill the definition of Rand noir given above. The chapter thereby delineates, through the three examples, Rand's relationship with a particular sensibility of (post)modern, posthumanist SF. By way of contrast, the chapter closes by looking at the first of the three twenty-first-century "Rand incorporated" texts mentioned above, *Gene Roddenberry's Andromeda*. We will see how Rand incorporated, unlike Rand noir, responds directly to Ayn Rand's work, and does not offer only ambivalence, but definitive statements. Chapters 5 and 6, respectively, delve into *BioShock* and *The Transhumanist Wager*, as these require more unpacking, and are each deserving of a chapter unto themselves. More is said about *Beggars in Spain* in Chapter 5, too, as it is a kind of precursor to *BioShock* and *Wager*.

The remainder of this book, therefore, may in a sense be seen as an extended case study, comparing classic Rand noir works of posthumanist science fiction, with major posthumanist science fictions that interact directly with Ayn Rand. All of this analysis speaks to Rand's presence within the sphere of posthumanism. Since I cannot assume the familiarity of the reader with every work, much of my analysis is necessarily bound up with plot synopses; out of these my own argument will become apparent.

LIFE BEYOND MAN

Blade Runner is certainly one of the most commented upon portrayals of a posthuman future. Based on Philip K. Dick's 1968 novel, Do Androids Dream of Electric Sheep?, the film is a more overtly dystopian text, more solidly contemplative when it comes to the relationship between human beings and our scientific offspring. It is an excellent example of a narrative that raises questions about the posthuman future, without making didactic statements about the direction we should take.

Set in 2019, the movie portrays a twenty-first century in which humanity struggles to control the integrity of its own identity. The Tyrell

Corporation, an enormous conglomerate, has created a race of beings known as Replicants. These genetic mutations bear the appearance of humans; they are stronger physically and equally intelligent, if not more intelligent. Director Ridley Scott envisioned them as "supermen who couldn't fly" (Philip K. Dick, qtd. in Bukatman 1997, p. 68). The only thing they lack is human emotions. In order to prevent the Replicants forming their own emotional lives, and thus surpassing humanity completely, the beings have been given only a four-year lifespan. Replicants are used as "slaves," unpaid labor in "off-world" colonies. In this reality, man has expanded into space as a matter of survival; Earth gives the impression of being overpopulated, over-polluted, and near death: a symbolism reinforced through the fact that the film's only time-settings appear to be twilight and night. Because of the risk of insurrection, Replicants are banned on Earth. Policemen named Blade Runners hunt down and "retire"—that is, "kill"—any Replicants that make it back to our world. An "empathy test" is employed to detect Replicants, in which the subject's pupil is monitored for his or her emotional responses to various hypothetical scenarios. The movie's plot involves Blade Runner Rick Deckard (Harrison Ford) in pursuit of several Replicants who are loose in Los Angeles.

As in much posthumanist SF, Blade Runner suggests a certain Randian precursor: the power of the free market. High capitalism has given rise to the Tyrell Corporation, an organization which now has more control over the fate of humanity than any government. The free market created Replicants. It is government, in the form of the police, that is scrambling to "regulate" this runaway technology, and thus to preserve human essentialism in a world where it is under threat. The film makes a nod to the (Randian) view of technology as tools of the human, to the technological impulse as part of what it means to be human, but asks: When our technology becomes so advanced that it surpasses us, that it gains its own sentience, does this not negate the human being? Deckard says at one point: "Replicants are like any other machine. They're either a benefit or a hazard. If they're a benefit it's not my problem" (Scott 2007; note: all subsequent quotations from the movie are from this source). For the purposes of this book, then, it is valid to ask: If two of Rand's essential tenets are a promotion of technology and a belief in the free market, and the free market gives rise to sentient technology that surpasses what's human, does Rand's work not entail—in spite of her glorification of man—an ultimate nihilism regarding human destiny?

Blade Runner's depicted society equates human emotions with what's essentially human. Rand rejected emotionalism as a core human faculty, instead privileging reason and rationalism. Yet, compared to the "sentient machines" that are their offspring, human beings cannot hope to compete in terms of rationality. And so, Blade Runner is left with emotions as the sine qua non of humanness. Humanity rejects the notion that its technology could have an emotional life equivalent to its own, because this would mean—according to the very standards of humanism—that it would be wrong to subjugate Replicants as slaves. We thus preserve the idea, in spite of all evidence to the contrary, that Replicants are a programed tool like any other: an extension of our individual minds, not individuals with minds of their own. The humans in Blade Runner practice what Hughes calls human-racism: a bigoted belief in the superiority of human sentience over other (potential) forms (Hughes 2004, p. xv). There is even racist terminology that goes along with this. Deckard's captain, Bryant, refers to Replicants as "skin jobs." As with other forms of racism, human-racism comes from a position of fear and an attempt to preserve one's own power. Were Replicants afforded the same right to their own lives as humans, human society would forever change, and perhaps fade from view as something "human" at all. Bred for physical and intellectual superiority—and in fact capable of deep emotion, as the film demonstrates—Replicants are clearly the "fitter," compared to humans, and thus over time perhaps the more likely to survive and thrive, if set free. Man would be superseded by his creation. The vista Rand alluded to is recalled again: "Perhaps we are really in the process of evolving from apes to Supermen—and the rational faculty is the dominant characteristic of the better species, the Superman" (Journals, p. 285).

Blade Runner, as I've indicated, lives the questions of the potential posthuman era. It does not provide any answers or suggest effective actions humans could take to both preserve their own identity and face a future of artificial intelligence with moral impunity. Indeed, humanity seems a spent force in the film. It is the "criminal" Replicants who evince vitality: urgently seeking a way to prolong their short lives and gain new experiences. Human culture is worn and faded. The movie opens with a vista of an endless city at twilight, smog polluting the air and fire billowing upwards from chimneys: hell on earth. It is always night or twilight, and narrow and hyper-crowded streets suggest claustrophobia. Earth has become dystopian, and the only escape is wild promises of utopia. A blaring blimp punctuates the skyline, advertising life in the off-world

colonies: "The chance to begin again in a golden land of opportunity and adventure." The movie's protagonist, Deckard, like the lead in a noir film, is a hard-drinking cynic who hates what he does—what he *must* do. Bryant basically bribes him into hunting down the Replicants, threatening him with the loss of the few comforts and privileges he enjoys: "If you're not police, you're little people." Deckard finds his job morally repugnant, patently distressed at "executing" beings that look, think, act, and bleed like humans. Famously, at the end of the film, we are left with the strong possibility that Deckard is himself a Replicant—which gets to the heart of the issue: What's the difference between us and them? By what right do we murder our children?

This is Rand noir: a vista of high capitalism and superlative technology, turned dark, inverted from where Rand hoped such forces would lead humanity. *Blade Runner* is literature (in the broad sense) which is the opposite of Rand's view of what literature should be. The highest kind of art, for Rand, "shows" the way to go, "it displays the full, concretized reality of the final goal" (*The Romantic Manifesto*, p. 163). It not only raises questions, it is prepared to answer them with clear-eyed certitude. *Blade Runner* prompts us to ask many questions about the (post)human future, but it has no answers.

THE UPGRADED BODY

If Blade Runner is a seminal work of posthumanist SF, influential beyond its time, then so too is Mamoru Oshii's 1995 anime Ghost in the Shell, based on the 1989–1991 manga series of the same name by Masamune Shirow. As is the case with Do Androids Dream and Blade Runner, the film provides greater depths for posthumanist philosophical analysis than the text on which it is based, though it deals with essentially the same issues as—and many of the plot points of—the original. While protagonist Kusanagi in the manga is sassy and direct, offering to take her male colleagues to a strip joint, and running a profitable side business in illegal virtual lesbian sex, in the anime she is haunted and questioning. The manga is replete with political machinations and humorous asides, while the anime, despite its copious action, is more self-consciously cerebral. The film shares much of the cyberpunk esthetic, and has inspired, amongst others, the Wachowskis, Steven Spielberg, and James Cameron; the influence of Ghost can be seen in their respective works, The Matrix,

A.I.: Artificial Intelligence, and Avatar (Rose 2009). The release of a live-action remake of Ghost in the Shell in 2017, starring Scarlett Johansson, merely reinforces the relevance of the 1995 version that I am concerned with here.

According to the definition of Rand noir as it has been set up for this chapter, Rand noir depends upon the *absence* of Rand qua Rand—yet the presence of Randian traces in the form of unbound hyper-capitalism. The atmosphere of Rand noir is profoundly ambivalent, in line with its post-modern sensibility. *Ghost in the Shell* fits this bill. It has been described as "cyberpunk-noir," "with elegiac, gothic, and even apocalyptic overtones" (Napier 2005, p. 105). It takes place in a future of high capitalism and high tech. Where Rand would have seen this as a morally exciting time, *Ghost's* mood is somber and reflective. Here we are in the murky world of corporate espionage and government assassinations. *Ghost's* future of technologically advanced capitalism is deep greys to Rand's clean white.

Ghost offers a far more nuanced vision of posthuman bodies than, for example, BioShock, the Rand incorporated text discussed in the next chapter. Ghost, in line with the formulation of classic posthumanist SF given above, airs the questions of the posthuman era rather than providing answers about the moral direction we should take. Set in a postmodern metropolis based on Hong Kong, the anime presents us with a world of cyborgs. Our protagonist, Major Motoko Kusanagi of Section Nine, a covert government agency tracking and eliminating cyber-terrorists, has a fully machine-body, her only human "part" being her ghost—the essence of her consciousness—encapsulated in the machine-shell. As a result of her cyborg flesh, Kusanagi is more durable and more agile; her body even comes with an in-built camouflage feature. Being a cyborg also makes communication easier: people can directly access each other's thoughts through ports in the back of the neck (Bukatman's "terminal flesh" [1993, p. 266]). The title Ghost in the Shell evokes Arthur Koestler's ghost in the machine—a "mind dependent on, but also responsible for, the actions of the body" (Koestler 1976, p. 202)—and in turn the problem of dualism dating back at least as far as Descartes: Is the human the bodily entity, or the intellectual essence? Ghost updates the mind-body problem for an age when the body is technological and a simulacrum of humankind's original prosthesis, as Hayles calls it (Hayles 1999, p. 3). When the body can be constructed and reconstructed time

and again, the mind and soul ("ghost") become even more important in identifying what's human. The following exchange between Kusanagi and a fellow Section Nine operative exemplifies the questioning the film engages in:

Kusanagi: That robot—did we seem similar to you?

Batou: Of course not.

Kusanagi: No, I don't mean physically.

Batou: Just what then?

Kusanagi: Well, I guess cyborgs like myself have a tendency to be para-

noid about our origins. Sometimes I suspect I'm not who I think I am, like maybe I died a long time ago and somebody took my brain and stuck it in this body. Maybe there never was a real me in the first place and I'm completely synthetic

like that thing.

Batou: You've got human brain cells in that titanium shell of yours,

you're treated like other humans, so stop with the angst.

Kusanagi: But that's just it. That's the only thing that makes me feel

human: the way I'm treated. I mean who knows what's inside

our heads, have you ever seen your own brain?

Batou: It sounds to me like you're doubting your own ghost.

Kusanagi: What if a cyber-brain could possibly generate its own ghost,

create a soul all by itself. And if it did, just what would be the

importance of being human then?

Batou: Hm. That's bullshit. (Oshii 2003; note: all subsequent quota-

tions from the anime are from this source). 10

As we will see, a Rand incorporated text such as *BioShock* can engage in its own form of questioning—in the case of *BioShock*, with regard to the idea of free will, brought forward into posthuman time. However, in terms of a moral message concerning the posthuman body, the player ends the game having received a relatively simple one: Randian absolutism is bad because it leads to destructive posthumanism. This stands in contrast to the Rand noir of *Ghost in the Shell*, which does not contain simple moral messages. Rather, it is all about the questions surrounding posthuman life: What does it mean to be a cyborg rather than an organic human? What is the relationship of the cyborgian to the human? At another point, Kusanagi and Batou ruminate on the nature of physicality and ownership in cyborgian society:

Kusanagi: If man realizes technology is within reach, he achieves it. Like

it's damn-near instinctive. Look at us, for example. We're state-of-the-art. Controlled metabolisms, computer-enhanced brains, cybernetic bodies. Not long ago this was science fiction. So what if we can't survive without regular high-level

maintenance, who are we to complain? ...

Batou: I'm afraid we've both signed our bodies and ghosts away to

Section Nine.

Kusanagi: True. If we ever quit or retire we'd have to give back our

augmented brains and cyborg bodies—there wouldn't be much left after that. There are countless ingredients that make up the human body and mind, like all the components that make up me as an individual with my own personality. Sure, I have a face and voice to distinguish myself from others, but my thoughts and memories are unique only to me, and I carry a sense of my own destiny. Each of those things

are just a small part of it.

Ghost in the Shell does not ultimately portray the upgraded/machine body as destructive or constructive. It enables greater abilities—greater strength, the ability to survive physical "death" through uploaded consciousness—but the diversity of humanity, and of human drives, remain essentially the same. The film is upfront in stating the sameness of its world to our own, in key respects, despite the fact that many humans are now cyborgs. The text that opens the movie states: "The advance of computerisation ... has not yet wiped out nations and ethnic groups." The characters in the film still cling to their human identity, and the complexity implicit in that, despite the fact that they have upgraded their bodies. Ghost is therefore ultimately morally ambivalent, where BioShock or Andromeda portrays Randian absolutism in order to argue against it. Posthumanist science fiction that interacts with Rand is required to take up a moral position in relation to her simplistic, idealized concept of humanity; classic posthumanist science fiction shuns moral positioning.

EARTH OF THE FUTURE

The definitive novel of cyberpunk is an excellent example of the lapse in moral positioning evident in late-twentieth-century postmodern science fiction. Gibson's 1980s classic, *Neuromancer*, also exemplifies the porous border between (science) fiction and reality: its portrayal of a virtual world called cyberspace gave a name to the later development of the Internet. *Neuromancer* "gave popular currency to the term 'cyberspace' as an analogue for the realm of computerized flows and interactions"; the novel "depicts a world in which human consciousness can be both eclipsed by, and released into, a virtual realm" (Yar 2012, p. 184).

Of all the texts written about in this chapter, Neuromancer is the one which most clearly epitomizes Rand noir. The novel's earth is one of hyper-capitalism. Rand's celebrated field, big business, has turned mega—instanced in the names of merged conglomerates like Mitsubishi Bank of America and Mitsubishi-Genentech. As in Blade Runner, corporations hold sway over much of human life. Capitalist life is centered in cities, and the city in Gibson is an all-consuming presence; the novel's near-future location is the Boston-Atlanta Metropolitan Axis, also known as the Sprawl. This is a Randian utopian precursor, advanced capitalism, become dystopian. The area known as Night City is described as "like a deranged experiment in social Darwinism" (Gibson 1995, p. 14). Life in the arena of high capitalism does not hew to Objectivist valuefor-value rationality; it is about surfing chaos. Neuromancer marries its postmodern Rand with posthuman time. People can plug into the Net through connecting wires, their minds directly controlling avatars in an environment with more virtual freedom than the physical world. Simstim, or simulated stimulation, allows you to experience the movements and sensations of another human being. The body can be remade for both cosmetic and enhancing reasons; it is malleable according to the desires of the mind. You can have a plastic arm that is stronger, mirrorshades embedded in your eye sockets that allow you to see more spectrums than the human eye; you can have retractable blades under your fingernails, as the character Molly does. Artificial intelligences exist, with rights of their own.

As in Rand's capitalist vista, in the world of *Neuromancer*, technology is privileged as a tool of the mind—as something which extends the human mind's capabilities—and thus the mind itself is privileged. The body is relegated. It is explicitly described in the text as merely "meat," according to those whose main joys involve mental stimulation (and the novel is set in their world). Their goal is to live in the frontier of cyberspace, an arena for minds disembodied through tech (Gibson 1995, pp. 11, 71, 97).

Gibson's text has had a profound influence within the same high-tech fields where Rand has had influence. The *Sunday Times* comments that the book has "inspired technologists from Silicon Valley to Wall Street and a global network of computer hackers who have committed countless nefarious deeds in the book's honour" (qtd. on Gibson 1995, back cover). Paulina Borsook, drawing on her years embedded in the Silicon Valley community, writes that certain technolibertarians "take gleeful pleasure in imagining" the "hell" of *Neurmancer*'s world. This is because "any two individuals can arrange anything they want among themselves with no busybody intrusion of third parties such as government or fellow feeling" (Borsook 2000, p. 18). Such reasoning relates directly to Rand's anarchistic trader principle; Rand anticipated these forces.

The aspects of Rand noir must be seen as central to Neuromancer's influence. Both novelists portray high-tech capitalism as an arena of exciting endeavors. The key post-Randian figure in Neuromancer is the "console cowboy," hacker extraordinaire, Case. He is the character many of the individuals mentioned by the Sunday Times seek to emulate, one can assume; as the protagonist, he most clearly embodies the novel's vision. Case is a freelance technological operator who feels he is not beholden to any government or value system other than his own selfinterest. As such, he can be understood as an Ayn Rand hero—absent Rand's elaborate philosophy. He is a "hollowed out" Ayn Rand hero, Randian without Rand's values, and thus a kind of postmodern Rand figure: a Rand noir figure. Just as, indeed, protagonists in noir films fill the role of the hero but are more properly antiheroes: heroes without heroic values. Gibson's protagonist is a lone-wolf trader in illicit goods and services; ignoring all the misery around, he looks out only for himself. Case does not in any way follow Objectivism, but he does offer a vision of selfish independence, which is what Objectivism also offers.

This, then, is Rand without the consciously constructed value system—but the shell of selfish independence and the vicarious fantasies associated with that remain: the "freedom" and the challenge of transgressing the system, doing your own thing, for yourself, in a world where the structures of society are stacked against you; the buzz of "biz"—making profits from entrepreneurial (criminal) business. If we ignore the elaborate construct of Rand's philosophy for a moment, it is possible to say that—on the level of the text itself, and how it has been perceived by those with libertarian inclinations—Gibson offers essentially the

same fantasy as Rand: a fantasy of being unbound in high-tech time, not beholden to government or other people.

Neuromancer is absent entirely of didacticism with regard to its social and technological environs; its world is presented as a fait accompli. Ordinarily, this might not merit mention; except here, we are comparing Gibson to Rand, whose novels always tease out the moral and philosophical reasons her worlds are the way they are. Gibson does not explain how we got to this future, but he is interested in airing its questions. The novel's main plot involves the illegal liberation of an AI by Case and others. The question of posthuman consciousness is never far from the book's surface.

The earth of the future, according to *Neuromancer*—and *Blade Runner* and *Ghost in the Shell*—will be Rand noir. It is high-tech hyper-capitalism, divorced from "Objectivism," and yet certain Randian drives—selfish independence, the laissez-faire trader principle—remain. Amidst supreme technology, fantasies of posthuman lives can be lived; the boundary between human and machine is intensely blurred. The worlds of these fictions require living practically in order to survive, a Randian imperative; and yet, contra Rand, this appears to mean (in the case of Case) living without steadfast philosophical principles. There is another vision of the possible posthuman future earth, however; one where Randian absolutism is incorporated, and such absolutism is presented as necessary in order to achieve that very posthumanity. This is the portrayal represented by *The Transhumanist Wager*, which will be discussed in Chapter 6.

Having covered three Rand noir texts, from now on, we will be looking at Rand incorporated texts—as outlined in my definition earlier—as a point of contrast to Rand noir. The first text discussed is *Andromeda*, a TV series created from the archive of Gene Roddenberry. As a necessary preamble, let us look briefly at the relationship between Objectivism and Roddenberry's most famous creation, *Star Trek*—where there are already, in fact, strong connections.

Bringing Rand on Board

In their questioning without offering answers, Blade Runner, Ghost in the Shell, and Neuromancer can all be contrasted with an example of a science-fictional text that Objectivists praise: Star Trek. Blade Runner—like the progenitor of dystopian posthuman futures,

Frankenstein—presents science as our potential undoing. On the other hand, Gene Roddenberry's creation, as Bradley Doucet writes for the Atlas Society, "celebrates science and exploration"; it is even "optimistic about the prospects for artificial intelligence" (Doucet 2009).

There was mutual admiration between Rand and Roddenberry, and today there is an overlapping fan base for Objectivism and Trek. According to Barbara Branden, Rand herself was very much aware of the original Star Trek series (1966-69), and enjoyed it. SF author J. Neil Schulman, who spoke to Rand about Trek, reports that her favorite character was Spock (Branden 2005; Schulman, n.d.). Jeff Riggenbach, who writes on Rand and Trek, tells us that Roddenberry and Rand never met. However, asked about her for the book "Star Trek" Lives! (1975), Roddenberry said: "Ayn Rand? Oh, yes. I read The Fountainhead four or five times, Atlas Shrugged, but also some of her nonfiction—her book on art [The Romantic Manifesto]." The Romantic Manifesto, Riggenbach points out, was published a number of years after Trek's premiere. Rand's esthetic philosophy as recounted therein, could therefore not have influenced Roddenberry in the inception of his famous franchise. Aspects of Rand's broader view, however, as found in her fiction, may well have done. Given the theme of The Fountainhead, and the nature of Roddenberry's own body of work, the fact that he read the novel "four or five times" makes it likely that it imparted some positive vision of individual achievement (Riggenbach 2004, pp. 119-20). Whether or not Roddenberry was influenced directly by Rand in the making of Trek, the visions of the two writers evidently overlap—from views on technology, to humanist use of reason, to the adventure of space travel itself—and it is this which is the most important point in terms of why Rand fans celebrate Trek. The very first book on the phenomenon of Trek fandom, "Star Trek" Lives!, is a work which offers a semi-Objectivist reading, essentially branding the show a piece of Romantic art in Rand's sense. The authors acknowledge their debt to Rand in their reading of the show (Lichtenberg et al. 1975, p. 129). Support for Trek is widely expressed among self-described Objectivists today. Prominent Objectivist and therapist Dr. Michael J. Hurd has made a serious case for Trek as a Randian text: "Star Trek challenges us to project ourselves into a future where individuals consistently and heroically utilize reason, instead of reliance on emotions, whims, or superstition, to solve their dilemmas. ... Its themes, such as individualism vs. collectivism (in the case of the evil Borg), are both relevant and timeless. ... Psychologically, the shows

are magnificently refueling" (Hurd, qtd. in RationalEgoistSG 2004).¹¹ One pro-Rand columnist at online conservative outlet Pajamas Media describes *Star Trek: The Next Generation*, half-jokingly yet whole in earnest, as "established Objectivist canon" (Sunny 2013).

Overall, Trek takes a position which is the same as Rand's on the issue of technology and the potentialities of technological development: Technology is an extension of human will and capacity and thus good—but only so long as it remains under the control of the individual mind. When it comes to posthumanism, Star Trek offers the view that the human-negating potential of the posthuman will not come to be: we can have our technological development and keep our selves too. This is achieved through an application of principles consistent with Rand: reason and respect for individual rights. Though, Trek's United Federation of Planets also puts in place legal frameworks restricting scientific experimentation which would not be consistent with Rand's call to keep government out of the development of science. Across the Trek universe (seven television series and 13 films thus far), humans are sometimes depicted with mechanical implants—the character Geordie La Forge's cybernetic eyes, for example, first seen in the movie First Contact (1996). But such biological augmentation is not the norm, and not portrayed as optimum. When it is shown, it is presented as a replacement for natural deficits; in Geordie's case, his blindness. This technology is always within the control of the individual mind. The integrity of the "naturally born" human body and mind is fundamental. So much so that genetic enhancement of individual ability is banned in the Federation.

As to how humans will deal with artificial intelligences—our mind children—this too is dealt with in the franchise in a very humanist way. In one seventh-season *Next Generation* episode, "Emergence" (1994), life spawns from the mass of the *Enterprise*'s data: the ship's computer becomes so complex that it gains sentience. No longer a tool of the human, it is now a life-form. The crew deal with the situation with the respect for life that marks the series. The computer is attempting to create a living entity of energy and information that will live on after it—its "child," in effect. The crew assists the living *Enterprise* by helping it find in space the particular particles it needs for its child to survive. The youngling is released into the universe, while the computer sentience that gave birth to it naturally "dies" after its successful procreation (Menosky and Braga 2006). In another *Next Generation* episode, from season six, "Ship in a Bottle" (1993), a holographic representation

of Sherlock Holmes's nemesis, Moriarty—another computer program, in effect—becomes self-aware. Moriarty began as a character in the entertainment of the ship's "holodeck." But, the computer made him so complex that he gained a will of his own; he became alive. Moriarty now seeks an existence outside of the holodeck. Unable to find a way for a hologram to exist in the world of real matter, the *Enterprise* crew perform a trick on Moriarty—which nonetheless liberates him, in a true sense. Moriarty thinks he has left the *Enterprise* in a shuttlecraft, to explore the universe. Instead, he has been released into a holographic representation of the known universe, to explore it—a computer program which will run continuously, enabling Moriarty to "live," on his own terms (Echevarria 2006).

The *Enterprise* in *Star Trek: The Next Generation* even has a post-human life-form as a member of its crew, the advanced android Data. Though physically stronger and with more rational capacity than a human, Data is not a threat, because he has been instilled with humanist values and indeed seeks to become more human. Humanism, as embodied in the Starfleet characters in *Trek*, is presented as a continuing goal to aspire to. *Trek* thus makes a fairly definitive statement about the possibilities of the posthuman future: it portrays humanity as efficacious when it comes to the consequences of dealing with posthuman life. Posthuman life-forms can be born, but this does not portend the erasure of humanity. *Trek* does not live on the edge of the questions, as does a work such as *Blade Runner*.

As mentioned, Roddenberry found much to like in Rand's writing, as Objectivists, including Rand herself, have found much to like in *Trek*. There is another space-age series created by Roddenberry, however, which in fact brings Ayn Rand within the context of the show itself. *Gene Roddenberry's Andromeda* was developed by *Star Trek*: *Deep Space Nine* writer Robert Hewitt Wolfe, and executive-produced by, amongst others, Roddenberry's widow, Majel Barrett. The show originally aired between 2000 and 2005, and is based on a concept from Roddenberry's archives. The similarities with *Trek* itself are undeniable; the series is almost a kind of *Star Trek* prequel. Set in the distant future, it is a dark time for the universe: disorder and lawlessness reign. The Systems Commonwealth, a galaxies-spanning liberal-democratic civilization—a version of *Trek*'s United Federation of Planets—has collapsed; it was betrayed and attacked by one of its key members, a race of genetically engineered humans known as Nietzscheans. In the midst of civilization's fall,

Commonwealth starship captain Dylan Hunt (Kevin Sorbo) and his vessel were suspended in time by a black hole. Reappearing 300 years into the future, Hunt vows to rebuild the Commonwealth. He travels known space gathering various races into a nascent humanist ic coalition. As the voiceover states on the opening credits for the first two seasons: "On the starship Andromeda, hope lives again." The series does not possess the consistency of vision that Star Trek does; however, in the broad sense, it puts forward the same ideas as its bigger brother. Andromeda makes idealistic statements about the possibilities for the human future, and these are the same statements that *Trek* makes: about the value of pluralism, the benefits of seeing and treating others as equals; the importance of individuality, as well as a sense of the general welfare. The vision is one of liberal-democratic humanism winning out over anarchy, totalitarianism, enforced collectivism, and other actual and philosophical adversaries.

The Nietzscheans-key figures in the series-are akin in certain respects to Blade Runner's Replicants: they were created from humanity, genetically engineered offshoots. They are stronger, with apparently greater rational intelligence. They lack responses such as empathy; the full diversity of human behaviors. Their primary goal is survival and perpetuation of their genes via reproduction. They are named Nietzscheans because they are Supermen, superior to humanity. They supposedly follow a philosophy gleaned from the works of Nietzsche, Darwin, and Rand: the will to power, survival of the winners, and putting oneself before everything else. "Ayn Rand Station" is the colony where they were created, and where significant Nietzschean events take place; their home planet is named Fountainhead (Lipper 2000a; Engels 2014; Hewitt Wolfe 2013b). Rand evidently holds a central place in the minds of Übermenschen.

Roddenberry was sympathetic to Rand in certain respects, but he could not be called a Randian. The aspects of Rand incorporated into Andromeda come from the series' modern developers, rather than Roddenberry's original notes, which stated only the show's central premise. 12 In any case, the outcome is the same: what is presented is an implicit critique of Rand, based on her promotion of selfishness and her uncompromising mindset. In one early episode, a Nietzschean member of the Andromeda crew, Tyr Anasazi (Keith Hamilton Cobb), is seen reading The Fountainhead. The brief shot sets up the theme of the ensuing scene, a conflict between the interests of the individual and those of the collective. Hunt is about to attempt a life-threatening experiment,

and he tries to persuade Anasazi that, were the ship's captain to die, the Nietzschean should stay aboard to protect the crew, "because they need you." Anasazi's reply evinces Randian selfishness: "You say that as if you actually believe it means something to me" (Miller and Stentz 2013). His words recall those of John Galt: "Ever since I can remember, I had felt that I would kill the man who'd claim that I exist for the sake of his need—and I had known that this was the highest moral feeling" (Atlas Shrugged, p. 745, emphasis in original). Tyr's own interests are the only thing that matters to Tyr. These values are presented as inconsistent with those needed to rebuild the Commonwealth—they are not the values of the Commonwealth's embodiment, Hunt. The Nietzscheans' rationale for overthrowing the Commonwealth in the first place, was that it had neglected its own essentialist self; it became weak, too liberal and too pluralist. As Hunt's original first officer, a Nietzschean named Gaheris Rhade (Steve Bacic), tells him in the first episode, the Commonwealth "bargains with its enemies, it compromises"; it is "no place for the strong" (Hewitt Wolfe 2013a). Rand is conflated with this absolutism. In the long run, over the course of the series, the liberal values of Hunt are shown winning out over the absolutism of the Nietzscheans.

Despite Rand's insertion into Nietzschean culture, the Nietzscheans could not be said to be followers of Objectivism in any complete sense. Rather, "Rand" is a name dropped as a philosopher who lauded strength above all else, along with Nietzsche himself. This is why, presumably, Nietzscheans incorporate Rand into their culture. Aspects of Nietzschean life are in direct conflict with what Objectivism advises. The Nietzscheans are in many respects a tribalist, warrior culture. Rand suggested certain attributes of warrior cultures as primitive prerequisites to her view of civilization—in We the Living, protagonist Kira's childhood hero and early life-model was a Viking; he is celebrated for the independent strength with which he faces life. However, the way of the warrior is not reflective of Rand's final view of man. Consistent with their privileging of Darwinian evolution, what is most important to a Nietzschean is procreation, perpetuating the genetic line. Tyr says that "what every fiber in our being strives to be" is "a husband and a father" (Keine and Reinkemeyer 2013a). Again, this is not consistent with Rand, whose focus is on each individual's right to be "an end in himself" (The Virtue of Selfishness, p. 30); procreation is not an imperative. A Nietzschean seeks his own survival and to maximize his power, first; but the collective is also important. The race is divided into tribes, called prides, that are

in conflict with one another. The survival and the maximized power of the pride is important to every member of that pride. Nietzscheans conquer worlds, and use other sentient beings as slaves. "Power" to most of them means power over other people—not solely over nature, as Rand intended. Nietzschean life is very far from Rand's ideal of the lone trader, exchanging value for value with other individuals through the exercise of his rational mind, in order to achieve his own potential, without concern for any collective. Within a pride, for instance, an individual Nietzschean may have no right to his or her own life, if his or her sacrifice is deemed beneficial to the group. In the episode "The Honey Offering," we meet a Nietzschean woman, Elssbett Mosadim (Kimberly Huie), who has been coerced by the pride into sacrificing herself for a singular mission. She has been training 25 years for it: to assassinate significant members of a rival tribe via a sham marriage in which she is the bride. She plans to set off a bomb at the wedding that kills everyone but leaves infrastructure intact, ready for the takeover. Mosadim tells Hunt at one point that, throughout her life, "I was too valuable to be allowed much freedom" (Keine and Reinkemeyer 2013b). This whole plot-concept violates Rand's injunction against self-sacrifice. According to Objectivism, every individual "must live for his own sake, neither sacrificing himself to others nor sacrificing others to himself" (The Virtue of Selfishness, p. 30).

When it comes to aspects of the transhuman and the posthuman the genetically or cybernetically enhanced Homo sapiens—Andromeda is a lot more liberal in its portrayal than Star Trek. Many humans have implants in their necks, through which they can plug their consciousness directly into computer matrices. Such ports—what Scott Bukatman calls "terminal flesh"—are a common feature of posthumanist science fiction. The presence of these cybernetic enhancements in Andromeda, however, does not alter on a day-to-day basis the integrity of individualsubjectivity; people still see themselves as wholly human and self-contained within mind and body. It is also normal for humans to be genetically engineered in Andromeda's future. Hunt has genetic alteration in his past: his mother was engineered to survive on heavy-gravity worlds. Hunt's first officer, Beka Valentine (Lisa Ryder), has genetically engineered quick reflexes. Crucially, in the main "human" characters, as with the cybernetic neck sockets, these genetic alterations are not associated with a shift in the essentially humanist values that *Trek* also promotes: they are specific adaptations related to physical survival. Human minds, in terms of ethics and values, have not been reengineered. Andromeda

represents, then, the kind of transhuman future promoted by the likes of Nick Bostrom, discussed in the previous chapter, where transhumanity is consistent with and an extension of ethical humanism; it is "humanism, plus," in Thweatt-Bates's term (Thweatt-Bates 2012, p. 5). Genetic engineering in Andromeda, however, has also given birth to new races, offshoots of the human, such as the Nietzscheans—whose ethics are not humanist. What is significant about the series in terms of this analysis, is not only the fact that it represents Rand's philosophy as a presence in a time of transhumanity. Contrary to Rand's own gloss on her mature work, "Ayn Rand" in the show is presented, in the final analysis, as not continuous with liberal humanist values, which are the values the show espouses. Rand's work, rather, is aligned with power over others, with oppression, and domination of the weak by the strong. There isn't a positive gloss on her philosophy in the show: Rand is equated with the kind of uncompromising and anti-community spirit that brings down liberal civilizations. The Nietzscheans are responsible not just for the fall of the original Commonwealth; powerful prides attempt to destroy the new Commonwealth that Hunt inaugurates. Certain Nietzscheans are forces for good in the show, but on the whole the race is treated as a threat-source.

Of course, as suggested by the above, it is debatable to what extent Ayn Rand is an actual presence in Andromeda. Her work on its own terms is in fact not a presence at all—it is never quoted or debated. Rather, a few cursory references to Rand are thrown into the context of Nietzschean culture. However, this in itself is of note, in terms of Rand and the posthuman. Rand herself paid little attention to discussions of social Darwinism, or evolutionary progress in the genetic sense (whether man-made or naturally occurring). She was about man exercising his reasoning mind to the greatest degree, to become his best self. And yet, Andromeda exemplifies an evident fact: Rand's promotion of a self-centered philosophy, her valorization of strength and abhorrence of "weakness," are clearly aligned in the popular imagination—in aspects of popular culture—with social Darwinistideas. As Nietzsche, too, has been similarly characterized. Andromeda, as a facet of twenty-first-century culture, a product of a time of gene-manipulation technology, fuses this social Darwinist conception of Rand and Nietzsche, to a genetically engineered Übermensch. This posthuman Overman becomes an immense threat-source to egalitarianism. Genetic engineering itself is not necessarily a threat to humanity, Andromeda suggests. Combining this

technology with values such as those of Rand, however—this is a threat. This is a fairly unequivocal message from a popular television show, a statement of moral direction regarding the use of genetic engineering technology, which incorporates a view of Ayn Rand; its divergence from the ambivalence of classic/cyberpunk posthumanist SF could not be clearer. *Andromeda* says: genetic engineering may be a good thing, it may enable us to live on planets we never could before; the transhuman future could be a positive one for humanity (unlike the vista in *Blade Runner*): but only so long as it rejects the absolutism with which Rand is associated. We have seen that Objectivists possess an affinity with *Star Trek* and its United Federation of Planets. *Andromeda*, however, portrays a Federation-like civilization which expressly repudiates a particular formulation of Rand.

Andromeda provides an insertion of Rand into a years-long science-fictional television drama, which also portrays aspects of posthumanism. This is notable—but the version of Rand used here, like the version of Nietzsche, is a gloss consistent with impressions prevalent in popular culture. Rand is more a name dropped than a subject of thematic/philosophical interrogation. There is nothing wrong with this, but as a treatment of her actual philosophy in an SF/posthuman context, there is more value in <code>BioShock</code>—a discussion of which is coming up in the next chapter.

Notes

- 1. Shelley's *Frankenstein* has been identified as the genesis of SF by many commentators. See, for example, Franklin (2009, p. 30), Roberts (2006, p. 42).
- 2. Rand praised the US Declaration of Independence as "the greatest document in human history, both philosophically and"—crucially—"literarily" (Ayn Rand Answers, p. 1). Thomas Paine's earlier pamphlet, Common Sense (1776), was vital in marshalling support for American independence (Brogan 2001, p. 173). The Declaration is full of sentiments echoed in Paine, penned as it was by his friend Thomas Jefferson. If some have seen Romanticism as a reaction against the Enlightenment and the Industrial Revolution, Rand views it in continuum with the advancements in reason, science, and technology brought about by those events. Rand never mentions the Enlightenment specifically, but her view of Romanticism in art makes clear that she views the phenomenon as stemming from rational faculties rather than emotional mysticism. In this,

Rand in fact prefigures academic criticism of the last several decades, which has attempted to define a continuum between the Enlightenment and Romanticism, where previously the latter was identified as a break with the former. One of the first books to describe this continuum was Aidan Day's *Romanticism* (1996), where he characterizes the "political radicalism which exists in the period, purveyed by supposedly 'Romantic' writers" as "a late Enlightenment phenomenon" (p. 182). This political view of Romanticism chimes with Rand's.

- 3. Rand's own statements on SF as a genre are fairly banal. In a 1958 course she gave on writing and interpreting fiction, Rand classifies SF as a form of fantasy "which projects future inventions." She continues with an illustrative example: "Most of Jules Verne's science fiction presented extensions of the discoveries of his time; for instance, he wrote stories about dirigibles and submarines before these were actually invented. This was merely a literary exaggeration of an existing fact. Since inventions exist, it is legitimate for a writer to project new and greater ones." Rand writes that SF and other types of fantasy "are rational when they serve some abstract purpose applicable to reality." She appears to classify SF proper as only those stories which predict future inventions, and whether or not a work is good SF depends on the viability of the inventions depicted. In the same course, when considering "Special Forms of Literature," under the rubric "Fantasy," Rand says: "To begin with, there are stories laid in the future, as, for instance, Atlas Shrugged and Anthem, Orwell's Nineteen Eighty-Four, and a whole string of older books." Rand thus classifies all these works as "stories laid in the future," but she does not describe them as SF. The "justification" for works like Anthem, Atlas, and Nineteen Eighty-Four, "is to show the ultimate consequences of some existing trend, or some other application to actual reality"; "[s]trictly speaking, this type of fiction is not fantasy, but merely a projection of something in time" (The Art of Fiction, p. 169).
- 4. This 1818 preface was reportedly written by Percy Shelley, though its authorship does not alter the claims of the text. In her introduction to the 1831 revised edition, Mary also references "the experiments of Dr. Darwin" as lying behind the book's premise (Shelley 2008, pp. 8–9).
- 5. That which brings the creature to life is described as the "spark of being" (Shelley 2008, p. 57). M. K. Joseph comments that Shelley links the myth of the Promethean life-giver with "certain current scientific theories which suggested that the 'divine spark' of life might be electrical or quasi-electrical in nature" (Joseph, Introduction, in Shelley 2008, p. vii).
- Robotics expert Hans Moravec refers to robots and artificial intelligences as "mind children" and "the children of our minds" (Moravec 1988, p. 1).

- 7. "The cyborg is ... a Frankenstein [monster]" (Skal 1998, p. 274); "James Cameron's Terminator (1984) is Mary Shelley's Frankenstein revisioned via gleaming machines instead of body parts" (Roberts 2006, p. 110); "In literature ... the cyborg's inception occurred in ... Frankenstein" (Brasher 1996, pp. 809-10).
- 8. Both the welfare state and old state-favored industries came under assault. John Patrick Diggins writes: "[N]o president attacked the welfare state with Reagan's animosity. From wherever he derived it, nothing could shake Reagan's belief that poverty saps character and renders humankind weak and dependent" (Diggins 2008, p. 327). Judith Stein comments: "Ronald Reagan propped up sectors [like finance] that had been outside New Deal relationships and undermined industries, like steel, that had been at their center. Without the weight of industries like steel, market ideologies reflecting favored sectors filled the vacuum. The nation replaced the assumption of the earlier era that capital and labor would prosper together with an ethic that postulated that promoting capital would eventually benefit labor, a very different way of running a nation" (Stein 1998, p. 6).
- 9. Given the amorphous nature of "noir" itself, I hope the reader will understand the license I have taken in coining Rand noir. In citing noir here, I am thinking of many aspects in James Naremore's description. As he suggests, it is not easy to define what constitutes a text under the rubric, and yet noir is something palpable. Films with the moniker might fit "somewhere between Gothic horror and dystopian science fiction"; film noir entails "a synthesis of hard-boiled fiction and German Expressionism." Crime and "resistance to Aristotelian narratives [and] happy endings" are plot aspects associated with it, even if not definitive in themselves. Noir "reverse[s] the conventional norms" of clear heroes and villains and logical narrative action—both the latter being aspects of Rand's fiction, of course. "[T]he ideal noir hero is the opposite of John Wayne"; he is "passive" and not rugged or chiseled in appearance. This also makes him the opposite of Rand's heroes. Noir is associated with postmodernity. There is a "plausible case" that it is "a creation of postmodern culture—a belated reading of classic Hollywood" that has been "recycled." Nowadays the term is applied to "many things besides movies." Noir "has less to do with a group of artefacts than with a discourse—a loose, evolving system of arguments and readings" (Naremore 1995, pp. 12, 14, 19).
- 10. "Batou" is spelled "Bateau" in the film credits. I use the correct manga spelling here.
- 11. The Michael Hurd quote comes from a post linking to an article on Hurd's website. The website can still be visited (http://drhurd.com/),

- though the original link is now dead. I have verified the authenticity of the quoted extract with Dr. Hurd (email received January 15, 2014).
- 12. Majel Barrett Roddenberry says of the material in the archives, which led to *Andromeda*: "There was only about one or two sentences—or four sentences anyway—in it. And it just said that it's a spaceship that hasn't been operational for 300 years and when it wakes up, its head guy is way behind the times. So he wants to go find his family, and he wants to rebuild the Commonwealth" (qtd. in Lipper 2000b).

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Objectivism in BioShock

CHAPTER 5

Alicia Florrick is the protagonist in US legal drama *The Good Wife*. The character, played by Julianna Margulies, is a founding partner in her own law firm; she is married to the Democratic governor of Illinois. Like any self-respecting liberal, Alicia scorns Ayn Rand. Her views were aired in a 2014 episode of the show, "The One Percent." A major corporate client is being sued for discrimination. The head of the company, James Paisley (Tom Skerritt), tells Alicia she should read Rand. Alicia tells him he shouldn't be getting his ethics from those novels: "It's like basing your philosophy on the books of John Grisham." Paisley is about to lay off a fifth of his workers. But he claims that he is a victim. Channeling Rand's mid-1960s declaration that big business is America's "persecuted minority," he says: "The 1 percent is the new hunted minority in this country. Not unlike the Jews in Nazi Germany" (*Capitalism: The Unknown Ideal*, p. 40; Humphrey 2014).

"The One Percent" is an obvious reference to Occupy Wall Street, the protest movement that emerged in the course of the post-2008 recession, demanding greater income equality between the bottom "99 percent" and the top-earning "1 percent" of the population. Akin to many television dramas, *The Good Wife* taps into the zeitgeist and abstracts plotlines from current events. This was the third episode of the 2013–2014 season of the show to mention Rand. Its portrayal of an arrogant, Rand-touting corporate king is hardly an original take on her work. However, it is emblematic of Rand's revived presence in the media

sphere, in the wake of 2008. And it does emphasize the continuity that the political left sees between Rand's works and corporate excess.¹

A subtler and more interesting reference to Rand is made in a 2007 episode of *Mad Men*, a TV drama about advertising executives on Madison Avenue in the 1960s. Don Draper (Jon Hamm), the lead, is invited into the office of his boss, Bertram Cooper (Robert Morse). Cooper tells Draper that he appreciates all his work. He says that he knows Draper's talents are unquantifiable, but nonetheless gives him a bonus of \$2,500. "Have you read her?" Cooper asks, pointing to his bookshelf. "Rand. *Atlas Shrugged*. That's *the one*." He says that he and Draper are alike: "It's strength. We are different. Unsentimental about all the people who depend on our hard work" (Provenzano 2008, emphasis in original). *Mad Men* is really about the birth of modern commercialized life. Rand is placed right there at the origin.

This chapter is about a work of popular culture that makes extensive use of Ayn Rand's ideas, while also making extensive use of posthumanism—the videogame *BioShock*. Before I get to a discussion of the game, however, I would like to establish two things. The first is that *BioShock* is not so unusual in being a pop-media product that references Rand; many products in popular culture, across multiple media and genres, do so—the above being just two examples. We saw Rand put to work within a popular television show (*Andromeda*) in the last chapter; this chapter shows some of the other ways she has been put to use within pop culture. I delve into this phenomenon further, in order to set up a context for *BioShock*. The game may not be unusual in terms of referencing Rand, but it is remarkable for the extent to which is makes direct use of her philosophy, and interrogates it.

The second contextual aspect I want to establish relates to science-fictional utopias and dystopias. These were literary tropes that Rand drew on in her work, and which *BioShock* in turn draws on. I will briefly consider how Rand fits with other well-known twentieth-century writers of utopia/dystopia, before showing how *BioShock* turns Rand's utopian creation (Objectivism) back on itself, resulting in—within the game's narrative—a dystopian nightmare.

Multi-media Rand

The above scenes from *The Good Wife* and *Mad Men* are just two recent examples in a long line of TV references to Rand. Often she is a figure of fun, though sometimes her ideas are put to thematic use. The

sheer number of programs that have referenced her is overwhelming. It includes everything from animated comedies *The Simpsons*, *Futurama*, and *South Park*, to live-action shows across various genres: *Frasier*, *Columbo*, and *Gilmore Girls*, to name three (Sciabarra 2004, p. 4).

Young adult network The WB featured Atlas Shrugged in one of the earliest episodes of One Tree Hill-a program whose theme song, evincing Randian self-esteem, goes, "I don't wanna be anything other than me." Main character Lucas Scott (Chad Michael Murray) is finding it hard to hone his basketball prowess; fellow players on the high school team are giving him a rough time. As they chat in the school library, a teammate, Jake Jagielski (Bryan Greenberg), hands the protagonist Rand's novel. He says of Lucas's talent, "Don't let 'em take it," tapping the book knowingly. Lucas's voiceover at the episode's close, quotes from the end of Galt's speech: "Do not let your fire go out, spark by irreplaceable spark, in the hopeless swamps of the not-quite, the notyet, and the not-at-all. Do not let the hero in your soul perish, in lonely frustration for the life you deserved, but never been able to reach. The world you desire can be won, it exists, it is real, it is possible, it is yours" (Schwahn 2005).² Rand is fodder for stories of teenage angst as well as stories about the origins of the modern market system.

Nor is television the only pop-cultural medium in which she has made an impact. One of the best-known instances of a Rand-inspired product is the album 2112. Canadian progressive rock band Rush credit "the genus [sic] of Ayn Rand" in the liner notes to this, their 1976 long play. The album was released under Rush's label Anthem Entertainment: another explicit reference to Rand, as the company's website makes clear.3 The "2112" suite has a plot which mirrors the Anthem novella. It tells a story set in a collectivist dystopia. Rand's hero reinvents the lightbulb, Rush's hero rediscovers the guitar; both present their discoveries to the authoritarian powers-that-be, and are shot down. Both imagine an alternative world where the individual is his own master. Rush drummer and lyricist Neil Peart was profoundly influenced by Rand; her impact is apparent throughout his writing. Creem magazine interviewed Peart in 1981, where he said: "Everything I do has Howard Roark in it, you know, as much as anything. The person I write for is Howard Roark" (qtd. in Bowman 2002, p. 183).

Surveying articles by Chris Matthew Sciabarra and Jeff Riggenbach in a centenary symposium issue of the *Journal of Ayn Rand Studies*, one is faced with an ineluctable conclusion: Ayn Rand should be taught on all

popular literature courses. The authors go into impressive detail regarding Rand's influence on popular fiction: on numerous novelists and on writers for comics. Rand was not an artistic innovator, in the sense of form. As such, she has had little impact on literary esthetics, broadly conceived. It is an understatement to say that she is not a celebrated figure of modernism or postmodernism, the two major artistic movements of her lifetime. Indeed, she is a subject of scorn among literary critics described by Slavoj Žižek, for example, as producing "ideological and literary trash" (Žižek 2002, p. 225). Within the field of popular literature, however, Rand has left a significant mark, even if her impact is not "pervasive" (Riggenbach 2004, p. 141). She has given younger writers philosophical-political ideas to play with, and taught them how to spin a gripping yarn. Popular literature in the manner discussed here conforms to Ken Gelder's definition; not only fiction with a large readership, but that which is "simple"—relative to high literature—in terms of ideas, language, and structure; work which is "exaggerated" and "exciting" (Gelder 2004, pp. 19–20).

When it comes to sheer numbers, the most popular novelist derivative of Rand is Terry Goodkind, whose Sword of Truth fantasy series (1994-2015) has reportedly sold over 25 million copies worldwide (Amazon.com, n.d.). Goodkind is a self-described Objectivist, and acknowledges Rand as his sole literary influence (Perry, n.d.; Riggenbach 2004, p. 131). In a review of the series on the Atlas Society website, William Perry notes:

Each of Goodkind's books has a theme expressed by a Wizard's Rule, and in fact the title of the first book is Wizard's First Rule. The first rule is, "People are stupid. They will believe what they want to be true or what they fear to be true." This does not mean that people are necessarily stupid, only that they usually are. The second rule is: "The greatest harm can come from the best intentions." This is the rule of unintended consequences from economics and politics, which is so familiar to Objectivists and libertarians. (Perry, n.d.)

The characters and plotlines in Goodkind's books play out these maxims, just as Rand's philosophy is demonstrated in the course of her novels. Goodkind's Randian themes are apparent even from these two rules: the first representing Rand's belief that human competency is rare and to be venerated; the second her belief that you should never set out to help others (unless you're helping yourself first).

Goodkind slips into paraphrasing Rand. Consider the following passage, quoted by Riggenbach, from *Faith of the Fallen* (2000), the sixth in the series. Richard Cypher—a magician, a warrior, and one of the series' protagonists—is speaking:

The only sovereign I can allow to rule me is reason. The first law of reason is this: what exists, exists; what is, is. From this irreducible, bedrock principle, all knowledge is built. This is the foundation from which life is embraced.

Reason is a choice. Wishes and whims are not facts, nor are they a means to discovering them. Reason is our only way of grasping reality—it's our basic tool of survival. We are free to evade the effort of thinking, to reject reason, but we are not free to avoid the penalty of the abyss we refuse to see. (Goodkind 2000, p. 26)

This clearly draws on elements of Galt's speech, which offer the foundation of Objectivism: "Existence exists To exist is to be something ... A is A. A thing is itself. ... Reality is that which exists"; "Man cannot survive except by gaining knowledge, and reason is his only means to gain it. ... [R]eason, man's only means of knowledge, is his only standard of truth" (Atlas Shrugged, pp. 1016–17).

Other novelists who count Rand as an influence include Kay Nolte Smith, who was part of Rand's circle in the 1960s and 70s, and started her career writing for Rand's periodical, the Objectivist. Erika Holzer was also part of the early Objectivist movement, and acknowledges what she terms a "profound literary debt" to Rand. Her thriller Eye for an Eye was adapted into a 1996 movie starring Sally Field, Kiefer Sutherland, and Ed Harris. Helen Knode, author of mysteries The Ticket Out (2003) and Wildcat Play (2012), considers Rand's theory of art-explained in The Romantic Manifesto—to be a major influence on her. The sci-fi subgenre of libertarian science fiction, including authors such as J. Neil Schulman and L. Neil Smith, counts Rand as a foundational figure, as mentioned in Chapter 4. Smith's alternate-history series beginning with The Probability Broach (1979) designates Rand as president of the North American Confederacy, a continent-encompassing libertarian nation, between the years of 1952 and 1960. Smith has told Jeff Riggenbach: "Ayn Rand established the formal framework for my personal philosophy" (Riggenbach 2004, pp. 93, 105, 115, 121). A whole book could probably be written about the traces of Rand in libertarian SF—but that is not my focus here.

One novel incorporating Objectivism that has garnered considerable attention in libertarian circles—in part because it is a response to Rand is Nancy Kress's Beggars in Spain. It initially appeared as a novella (1991), then a full novel (1993), the first of a trilogy. It is a work of posthumanist science fiction, and a precursor to the Rand incorporated texts I discuss here. Indeed, it is probably the most consequential science-fictional interrogation of Objectivism, until BioShock. Kress has said that in her twenties she became fascinated by Rand, reading her voraciously; she found her ideas both "very troubling" and "very compelling," and she describes Beggars as an attempt to find the middle ground between Rand's outright individualism and the collectivism of renowned SF novelist Ursula K. Le Guin (Kress, qtd. in Pendergrast 2000). In the original novella (which forms the first part of the 1993 novel), we are introduced to Leisha Camden—one of the first of a new breed of genetically altered humans, called the Sleepless, who are engineered to not need sleep. Leisha's father is a prominent financier and font of Randian aphorisms, a follower of "Yagaiism," a version of Objectivism. Roger Camden wants his daughter to not have to sleep, because he thinks of all he could have accomplished, were so many hours of his life not forcibly put to waste through rest. Because they do not need sleep, the Sleepless have more time to develop themselves and are typically higher achievers than the rest of the population. Because they do not dream, they are not as subject to the whims and unexplained urges of the subconscious, and are more rational and intellectual. A clear divergence exists between the Sleepless and the rest of humanity. Before long, the moral majority and its servants in government begin instituting laws that penalize the Sleepless, as a perceived threat to normal society. Conflict follows as the Sleepless fight for their right to exist on their own terms.

So, we see in Kress strong Randian themes: The importance of rationality and individual achievement; collectivist laws supposedly upholding the "common good," which in fact drag down the best among us. Posthumanism is here the context for these themes: the fact that we can use science to create an improvement upon the species. The novella illustrates very clearly, concerns that philosopher Francis Fukuyama echoed a decade later in *Our Posthuman Future* (2002)—where he argues that genetic alteration will result in a kind of radical, socially corrosive inequality that the human race has not seen before, between the modified and unmodified. The conclusion Kress comes to in the novella brings forth a very unRandian idea: solidarity; the notion that we may

find common cause and common bonds with others, regardless of their ability or intellectual outlook; the notion that we may someday depend on the help of another, regardless of our own abilities or position. By a fluke of nature, Leisha has a twin who is not a Sleepless. Unwanted by her father, because she is not special, and growing up in the shadow of Leisha, Alice Camden follows a very different path to her sister, whose life is one of continuous professional and personal growth. Alice moves into a cabin in the middle of nowhere, with a man who abuses her, and gives birth to a son she fears will also be abused. In the end, however—turning Randian expectations on their head—it is Leisha who relies on Alice for help, not the other way around. Leisha is able to save a Sleepless child from an abusive family thanks to Alice's particular knowledge and circumstances. The novella's conclusion is that our interactions should not be reduced to matters of linear, logical trade, where the benefits are immediately clear for each party, a la Rand; everybody has the potential to benefit from everybody else, in an "ecology of trade": "Does a horse need a fish? Yes" (Kress 2011, p. 150).

Beggars in Spain is an important predecessor to BioShock and The Transhumanist Wager, in terms of how it uses a close reading of Rand to make a philosophical point. As a critique of Objectivism, however, BioShock has achieved far more in terms of mainstream impact, audience, and awareness. Beggars is also an interesting instance of how Rand has been a recurring subject within science fiction's discussion with itself about ideal societies and optimum human relations.

Chris Matthew Sciabarra, in his article for the centenary issue of the *Journal of Ayn Rand Studies*, examines Rand's impact within another field of popular literature—comics. One important example here is Frank Miller, creator of 300 and Sin City, and author of Batman: Year One and The Dark Knight Returns, which were used as a partial basis for Christopher Nolan's hugely successful Batman films (2005–2012). Miller "credits Rand's Romantic Manifesto as having helped him to define the nature of the literary hero and the legitimacy of heroic fiction" (Sciabarra 2004, p. 12). Miller's Martha Washington Goes to War (1994) draws on Atlas Shrugged, a debt acknowledged in the afterword. The premier exhibit in terms of Rand's influence on comics, however, is Steve Ditko, co-creator of such Marvel heroes as Spider-Man and Doctor Strange. Ditko's comic creations include Mr. A (from Rand's/Aristotle's exhortation "A is A") and The Question, both of whom personify Objectivism. Ditko's Randian worldview is perhaps best summed up by a quote from

Mr. A, who, Sciabarra notes, is appropriately drawn "in sharp blacks and whites" (Sciabarra 2004, p. 10). The hero exclaims: "Fools will tell you that there can be no honest person! That there are no blacks and whites. ... That everyone is gray! But if there are no blacks and whites, there cannot even be a gray. Since grayness is just a mixture of black and white!" (Ditko, qtd. in Sciabarra 2004, p. 11) Alan Moore, whose politics are more left-aligned, created a character in his acclaimed *Watchmen* series as a response to Ditko (Sciabarra 2004, p. 9). "Rorschach," an uncompromising vigilante, can be read as a critique of Ditko and in turn Rand's absolutism.

There are traces of Rand everywhere in our culture. When Anne Heller titled her biography of the author, *Ayn Rand and the World She Made*, it of course had two meanings: the world that Rand created for herself through her fiction, and our world as it is now, which is left with indelible imprints. Rand's work is at the center of a truly vast phenomenon; a network of influence that extends into politics, business, and popular culture.

Given Rand's presence in so much of popular media, it should not surprise us that makers within the world's most financially successful medium, which generates more revenue than movies or music (Nath 2016)—videogames—would also seek to find inspiration from the Russian-American novelist. So it is with BioShock. BioShock draws on Rand's philosophy, while also drawing on Rand's use of utopian and dystopian tropes. At the same time, the game locates itself within a tradition of utopian and dystopian literature. It is thus doubly aligned with Rand, in a sense: as a work making use of Objectivism, and as a work of dystopian science fiction, like Rand's Anthem or Atlas Shrugged. It is, as I've suggested, probably the most serious and consequential fictional interrogation of Rand's ideas, while remaining within the realm of popular media. Before turning to talking about BioShock and Rand by themselves, let's consider how Rand was aligned with twentieth-century dystopian literature, with a view to contextualizing BioShock's critique of Rand's use of utopia and dystopia.

I, UTOPIAN

The mid-twentieth century stood between utopia and dystopia, in terms of the absolute ideas of where humankind might end up. It was our technology in both cases that would bring about the end: the awesome

technology of the nuclear bomb, reducing the earth to a new stone age; the awesome technology of the moon rocket, taking us where no men had traveled before. It is a banal comment to say that the tension between technology-as-force-for-good and technology-as-destructive lies at the heart of much twentieth-century science fiction. Here Rand bucked the trend of many of her fellow writers of science-fictional utopias/dystopias, in only ever presenting technological development—as an end in itself—in a positive light. Technology is a force for good when left in the hands of independent individuals.

It is after the Russian Revolution and the First World War, moving decade by decade toward the Cold War, that some of the most enduring SF dystopias emerge; fictional worlds that extrapolate from particular trends, in order to create utopia's polar opposite, the worst kind of living environment, according to a particular perspective. These works include Yevgeny Zamyatin's We (c.1921), Aldous Huxley's Brave New World (1931), George Orwell's Nineteen Eighty-Four (1949), and Ray Bradbury's Fahrenheit 451 (1953). Rand's novels of dystopian futures, Anthem (1938) and Atlas Shrugged (1957), were written and published contemporaneously with some of the most famous books of the genre. Anthem in particular is often likened to We, Nineteen Eighty-Four, and Brave New World.

For Raffaella Baccolini and Tom Moylan, the "dystopian imagination"—dystopian fiction—functions as "a prophetic vehicle, the canary in the cage, for writers with an ethical and political concern for warning us of terrible sociopolitical tendencies that could, if continued, turn our contemporary world into the iron cages portrayed in the realm of utopia's underside" (Baccolini and Moylan 2003, pp. 1-2). The grip of totalitarian governments in the early to mid-twentieth century influenced the writing of all of the above examples of dystopian science fiction. We is usually interpreted as a thinly veiled attack on the Soviet system; it was the first novel proscribed by the Soviet Chief Administration for Literary Affairs, set up in 1922 (Milgrim 2005, p. 137). Orwell and Bradbury both cite fascism and Soviet Communism in explaining the origins of their works.⁴ Critics have been commenting on the connection between Nineteen Eighty-Four and the USSR since the earliest reviews (Snyder 1949; Underhill 1949; Gardner 1950). Brave New World was published before the Nazis came to power. The direct influence of Communism, however, is evidenced not only by the planned structure of society in the novel, but in the very names of the citizens of Utopia, as it is called:

Bernard Marx, Polly Trotsky, Sarojini Engels, Lenina. All of these novels are also more generally about dilemmas for humanity as a whole, about where the future is headed. Their setting in a time more advanced than the moment at which they were written, suggests that the future could be disastrous—unless the trends extrapolated in the novels are checked.

How do Rand's dystopian novels, Anthem and Atlas, compare to those of her contemporaries? Certainly, they were also influenced by twentieth-century totalitarianism. It would be folly to consider any of Rand's work, her horrified responses to collectivism, without considering her experiences in Soviet Russia, where she and her middle-class family lost much following the revolution.⁵ Randian scholar Shoshana Milgrim has written a comprehensive study comparing Anthem to "related literary works," where she concludes that Orwell is the author of dystopia with whom Rand has the most in common. According to Milgrim, it is "possible" that Rand read fellow-Russian Zamyatin's We, before she emigrated, or afterwards (the novel circulated privately in Russia in the 1920s, though was not published there until 1988; its first publication was in the US in 1924). However, there is no direct evidence that she read or was influenced by Zamyatin, notwithstanding certain similarities between We and Anthem, including "the regimentation of life, the world-wide state, the replacement of names by numbers, and the first-person narration by a secretly rebellious protagonist."6 In any case, as Milgrim goes on to point out, the moral conclusion of Anthem differs markedly from that of We-and indeed Brave New World and Nineteen Eighty-Four—especially with regard to the role of technology in human enslavement. For Rand, technological advancement itself is never to blame for the use of technology by the state to coerce the populace. This is merely another form of the collective imposing its will on individuals. Rand's dystopias—the worldwide state in Anthem, and the declining America in Atlas Shrugged—are technologically backwards compared to the twentieth-century West. Rand created primitive dystopias because, for her, technology is a liberator, not an oppressor. Moreover, it requires free men and women to create and sustain technological development. Rand does not see "technological advancement as compatible with political slavery" (Milgrim 2005, p. 149). As we will see, BioShock seems to accept the Randian suggestion that truly innovative tech advancement only happens in a capitalist environment. However, it turns this suggestion back on itself, by portraying how radical laissez-faire could

ultimately create another kind of dystopia, one where the posthuman is ascendant.

Milgrim opines that of the various similar works by other authors she discusses, *Nineteen Eighty-Four* "is the one that comes closest to the idea of *Anthem*—and to the related ideas of *The Fountainhead* as well." This is certainly fair. Notwithstanding Orwell's lifelong avowed socialism, he was also a proponent of the individual. When protagonist Winston Smith is tortured by O'Brien, a member of the ruling Inner Party, toward the end of *Eighty-Four*, O'Brien expresses the view that power over others is an end in itself—sentiments which echo the worldview of arch-villain Ellsworth Toohey in *The Fountainhead* (the totalitarian powers-that-be in both Zamyatin and Huxley maintain that the happiness of the masses is the purpose of their control). Another important similarity between Orwell's novel and *Anthem* is "the observation that a decline in the quality of human life is accompanied by a decline in language" (Milgrim 2005, pp. 152–53).⁷

We, Brave New World, Nineteen Eighty-Four, Fahrenheit 451, and Anthem—despite their differing styles and the differing politics of the authors—are part of an economy of texts which situate themselves in opposition to the totalitarian political systems of the mid-twentieth century. All these texts delineate the deleterious effects of totalitarian states on the individual mind, on free-thinkers such as Winston in Eighty-Four, Bernard in Brave New World, and Equality 7-2521 in Anthem. The mind of the individual cannot flourish in the social environments depicted, which are marked by state control over vital aspects of life. Uniquely among the dystopian texts mentioned here, however, Atlas Shrugged sets up a "perfect" society within its dystopia, Galt's Gulch within the failing socialist America. Rand, unlike anti-utopian writers, established her own utopian ideal as a counterpoint to dystopia; she did not just warn against dystopia but actively promoted a utopian opposite. BioShock interrogates this utopia and finds it severely wanting—suggesting that it in fact leads back to dystopia. Into the mix is thrown posthumanism, a Randian free-market philosophy leading toward rapid technological development, which eclipses what's human. Thus, BioShock falls within the tradition of dystopian fiction—a tradition Rand also falls within—while making use of Rand in order to do so. The game opens with one disaster—a plane crash—before taking us to its disastrous city of sunken dreams, Rapture, where Objectivism has led to ruin.

Welcome to Rapture

It is 1960. You sit back, a cigarette lit, in the warm environs of a commercial airliner. You are looking at a picture of your parents. You say aloud: "They told me, 'Son, you're special. You were born to do great things'" (Levine 2007; note: all subsequent quotations from the game are from this source). Disaster strikes. The plane goes down. You are swimming for safety in the wide Atlantic Ocean, fiery wreckage all around. You spot a tall, grey structure—a lighthouse—and swim toward it. You see a set of solid gold double doors; embossed on them is the figure of a man, holding aloft an orb—it recalls the figure of Atlas. Above the doors there is a gold shield, the letter "R" centered upon it. A red banner greets your entrance through the doors: "No Gods or Kings. Only Man." Heading down stairs, you see golden plaques formed in art deco style, dedicated to "Science," "Art," "Industry."

A curious submersible vehicle is ahead, and you step in. The vehicle plunges into the depths of the Atlantic. A recording of a man's voice comes through the speakers, as a magnificent city comes into view upon the ocean floor:

I am Andrew Ryan, and I'm here to ask you a question. Is a man not entitled to the sweat of his brow? No, says the man in Washington, it belongs to the poor. No, says the man in the Vatican, it belongs to God. No, says the man in Moscow, it belongs to everyone. I rejected those answers. Instead, I chose something different. I chose the impossible. I chose ... Rapture. A city where the artist would not fear the censor, where the scientist would not be bound by petty morality, where the great would not be constrained by the small. And with the sweat of your brow, Rapture can become your city as well.⁸

This is the opening of *BioShock*, a first-person shooter developed by the Boston division of 2K Games for the Xbox 360 and PlayStation 3 consoles, as well as for Mac and PC. The city of Rapture, standing at the bottom of the Atlantic Ocean, is the brainchild of Andrew Ryan, an entrepreneur who came from the Soviet Union to America—but grew tired of the overregulated economy even in that supposed bastion of the free market. To accomplish his vision of man, wholly free from the shackles of government, religion, and irrationality, he knew he would have to manufacture a new country: "It was not impossible to build Rapture at the bottom of the sea. It was impossible to build it anywhere else." Like

Howard Roark, Ryan's past experience was of looters corrupting his glorious, independent vision: "On the surface, I once bought a forest. The parasites claimed that the land belonged to God, and demanded that I establish a public park there. Why? So the rabble could stand slack-jawed under the canopy, and pretend that it was paradise earned." Ryan's solution is the same as Roark's. When the government brings in other designers to amend Roark's blueprints for a public housing project, Roark dynamites the project. The public good be damned: he wants his vision to be his. As does Ryan: "When congress moved to nationalize my forest, I burned it to the ground." This is the methodology of the strikers in Atlas Shrugged: what belongs to them, they will not allow it to stand if they cannot have it on their terms. Francisco d'Anconia secretly destroys his own copper-mining business, so there is nothing left for the "looters" when it is nationalized. Ellis Wyatt sets fire to his oil well, rather than let the government seize his operation. "I am leaving it as I found it," is the note he leaves, as he flees for Galt's Gulch (Atlas Shrugged, p. 336). Rapture is a version of Galt's Gulch. Rand herself called the Objectivist utopia in Atlas, "Atlantis"—actively courting comparisons with a mythical paradise beneath the sea; Rapture merely literalizes this. The loaded name of the city in itself references a number of notions pertinent to Rand and the posthuman: Rand's view of man as a sacred being, and the joy in that sacredness; the endpoint of history and the "culmination of man"; the ascension of the worthy to a higher form of existence.

The name Andrew Ryan is a near-homonym of "Ayn Rand." Ryan, the character, is both a version of Rand and a version of John Galt. Ryan shares elements of Rand's biography: his Russian origins. His ideals are the same as Rand's. He uses a linguistic tone and extremes of language—as well as a binary of moral extremes—that will be familiar to readers of Rand: "Ownership is civilization. Without it, we're back in the swamp"; "What is the difference between a man and a parasite? A man builds. A parasite asks, "Where is my share?" The latter example directly recalls the words of Roark: "The creator originates. The parasite borrows" (*The Fountainhead*, p. 711). Ryan repeatedly refers to "parasites," as does Rand: the human leeches sucking life from those more capable. Like Galt, Ryan has encouraged wealth creators to abandon productive life in the surface world, to leave the looters to reap what they have sown. The promise of Rapture is the promise of a new order, which is the promise of Galt's Gulch: productive men and women can keep all the rewards

of the products they create with their own minds. It is a view of man, like Rand's, which sees ideas of the mind as the essence of wealth, not the work of the bodies employed to construct a mind's vision. Ryan, like Galt, is engaged in an immense project of utopian social engineering: an effort to construct a society from first principles; what Karl Popper—in The Open Society and Its Enemies (1945)—terms "the reconstruction of society as a whole," in an attempt to create an Ideal State. Popper predicts that such utopian engineering inevitably results in the centralization of power among those who are prepared to wield it over their fellow men, and hence it is a blueprint for totalitarianism (Popper 2013, pp. 149, 151). So it proves in BioShock: an imagined utopia becomes dystopian.

The BioShock franchise—the original game, along with its sequels, BioShock 2 (2010) and BioShock Infinite (2013)—"has attained something of a hallowed status as one of the greatest examples of commercial videogame artistry ever made," according to Robert Jackson's book "BioShock": Decision, Forced Choice and Propaganda: "Its complex moralistic narrative, level of emergent customisation, immersive dark tone and technical artistry all culminate into a series of videogame experiences, somewhat elevated from the usual 'cause and effect' shooter" (Jackson 2014, opening blurb; it is not possible to identify page numbers in this Kindle edition). The original game is the recipient of multiple Game of the Year awards, including a BAFTA. The series' adoption of Rand has undoubtedly helped raise it to a status not usually enjoyed by examples of this medium. BioShock's use of Objectivism lends it an atmosphere of a secondary world produced in accordance with its own laws—the laws of Rand's philosophy. Meanwhile, the game's serious treatment of certain of Rand's ideas affords thematic weight. It is, in the words of Jason Rose, a sort of "spiritual sequel" to Atlas Shrugged, "revealing a possible fate for John Galt's mysterious hidden utopia"; a sequel in which the Galt figure (Ryan) is revealed to be not infallible (as Rand imagined Galt to be), but all too human. BioShock also draws on Randian ideas of choice and free will, in using the fact that the videogame is a participatory medium to its full advantage; the player's in-game decisions have a direct role in how events in Rapture progress: "If BioShock were merely read or watched instead of played, it would lose much of its emotional impact" (Rose 2015, p. 18).

The use of Randian facets in BioShock is neither a coincidence nor mere artistic borrowing. The game is an intentional interrogation of

Rand's utopian ideal. The game's lead writer and director, Ken Levine, says that the creative process began with the idea of an underwater city, a "complete" environment that the player could fully explore. "I started thinking about utopian civilisations I've always been a fan of utopian and dystopian literature." Rand, whose books Levine had been reading in the years leading up to BioShock, fitted this mold: "The surety she has in her beliefs was fascinating I started to wonder, what happens when you stop questioning yourself?" (qtd. in Crecente 2008). BioShock's whole mise en scène establishes a Randian ambience. The timeframe is an alternate-history 1960; in the real world, this was the period of Objectivism's gaining flight, after the publication of Atlas Shrugged. The city's motto, "No Gods or Kings," alludes to Rand's concept of the human sacred, "man-worship"—not recognizing the divine or any divine right. The names of the locations in Rapture take from Greek myth, as Rand did with her use of Atlas and repeated use of the Prometheus story: Neptune's Bounty, Apollo Square, Hephaestus, Olympus Heights, Point Prometheus. Red banners with gold lettering throughout the city put forward Randian slogans, such as, "Altruism is the Root of All Wickedness," "The Great Will Not Be Constrained by the Small." A public address system repeats aphorisms like the following: "The parasite hates three things: free markets, free will, and free men." The look of Rapture is art deco, an esthetic that Rand "loved" (Burns 2009, p. 282). Art deco takes from the actual, yet stylizes reality to be more cleanly beautiful—like Rand's own utopian philosophy, we might say. The beauty is in the beholder's eye.

As in Galt's Gulch, there are no formal laws in Rapture, there are no restrictions on innovation or invention. It is out of this scenario that posthumanism comes into play. Unrestrained, rapid scientific advancement, and a transhuman impulse, has led to a posthuman vista. The continuum between Randian philosophy and posthuman technology is paramount. The chosen self—mind and body—is an imperative. The inhabitants of Rapture can choose to upgrade their capabilities, upgrade their bodies. A substance called ADAM is used to turn regular bodily cells into adaptable stem cells. Rapture residents can then inject Plasmids, "bottled abilities" available from vending machines throughout the city, which recode the user's DNA. Depending on the Plasmid, different powers are bestowed on the body: the ability to shoot lightning bolts or fire from one's hands, for example. This is an extreme form of "biohacking"—the trend in favor of upgrading your biology

through pharmaceuticals and genetic research—which is currently in vogue in Silicon Valley (Sifferlin 2017, p. 62). The extraordinary powers of Plasmids, however, do not come without a cost. ADAM is harvested from young girls who have been turned into vessels for its production, "Little Sisters." ADAM is the technological enabler of humans possessing godlike powers, through transcendent scientific knowledge and ability. The name is notable in the Randian context, since Rand saw the Garden of Eden resident as an exemplar of her kind of hero, the "unsubmissive and first" creator, who should be emulated for claiming his right to godly knowledge (The Fountainhead, p. 710). In BioShock, however, contra Randian morality, eating the fruit of the knowledge tree has wrought destruction. Plasmids must be powered by injecting a substance called EVE. Upgrading via ADAM, EVE, and Plasmids has proved to be notoriously addictive. Rapture is now populated by thousands of "Splicers," humans made into a kind of hyperactive/acrobatic zombie because they indulged in too much gene splicing. The game suggests that were Ryan not such an ideologue, such a utopian, his city might not have been brought to ruin. Ryan resists the urge to develop the apparatuses of a state to regulate the evident chaos of the posthuman free market he has instigated. At one point, a recorded message from Ryan you pick up tells you: "There has been tremendous pressure to regulate this Plasmid business. There have been side effects: blindness, insanity, death. But what use is our ideology if it is not tested?" A later message from Ryan goes: "Is there blood on the streets? Of course. Have some chosen to destroy themselves with careless splicing? Undeniable. But ... I will dictate no laws. ... It is our impatience that invites in the parasite of big government. And once you've invited it in, it will never stop feeding on the body of the city."

When the player arrives in Rapture, the city is in the midst of a civil war. Splicers have overrun the place; water leaks in through cracked walls; lights flicker on and off as electricity comes and goes. It is a gothic, gloomy, sunken world. Before you even exit the submersible, you are contacted via radio by a man with a homely Irish accent. The man is named "Atlas." As you wander through the city, you see posters asking, "Who is Atlas?" The question obviously mirrors the repeated phrase in Atlas Shrugged, as well as the mystery at the novel's heart: "Who is John Galt?" Atlas guides you through Rapture, as you upgrade your own body with Plasmids and fend off attacks from crazed Splicers. To garner ADAM, you must rescue or harvest the Little Sisters; rescuing gives you

a smaller amount than butchering the girls in order to harvest. The Little Sisters are guarded by "Big Daddies," men who have been transformed via enormous metal exoskeletons, to make them more powerful: another aspect of the upgraded body, the trans-/posthuman. Atlas initially enlists you to save his wife and son and get them out of Rapture. But when it appears that Ryan has killed Atlas's family, the mysterious Irishman has you hunt down the city's founder and confront him. It transpires that Atlas is the leader of an insurrection against Ryan. Ryan led one side of the civil war, attempting to preserve his city according to the ideals on which it was founded. "Atlas" is Frank Fontaine, not an ideologue like Ryan but a smuggler and a criminal who saw an opportunity to gain power for himself—by leading Rapture's proletariat in a bid to take control of the city. Toward the end of the game, you enter Fontaine's apartment, the sounds of "Danny Boy" drifting gently through the residence. Fontaine tells you: "These sad saps. They come to Rapture, thinking they're gonna be captains of industry. But they all forget that somebody's gotta scrub the toilets. What an angle they gave me—I hand these mugs a cot and a bowl of soup, and they give me their lives. Who needs an army when I got Fontaine's Home for the Poor?"

This, then, is where BioShock's critique of Objectivist absolutism lies. BioShock comments on the ultimate unrealism of Rand's ideal—on the impossibility of a Galt's Gulch-style utopia in actual life. The game's critique is, at root, the same as Alan Clardy's, described in Chapter 3. BioShock questions "the soundness" of the Randian utopia's "psychological and sociological underpinnings," as Clardy does. Rand's perfect society only works in her fiction because she "grossly caricatures and distorts the full range of human diversity," dividing all humankind into heroic producers, power-seeking looters who usurp the work of the productive, and the noncommittal masses who will adapt to whatever ideology is prevalent (Clardy 2012, pp. 238, 259). Galt's Gulch in Atlas Shrugged "works" because all its denizens espouse the same Objectivist value-system; the second-handers and the noncommittal have been removed from the equation. BioShock re-injects some of the to-be-expected diversity of human nature, and of human societies, into the Objectivist paradise, runs the experiment again, and shows its disastrous results. It is not just the wildcard of a criminal like Fontaine that causes the Objectivist paradise to fall. Ryan, faced with seeing the diversity of humanity not conform to the ideals of his city, becomes a megalomaniac, a murderous dictator. When you enter his lair to confront him, the bodies of those who

have betrayed his ideal line the walls. Ryan becomes drunk on his own immovable vision, and on his own power, and is corrupted utterly. The game suggests a continuity between Objectivism and real-life tyranny, as does Andromeda. This is because of Rand's philosophy's absolutism, its utopianism.

There is an element of caricature in the game's portrayal of Objectivism. At the entrance to the location Neptune's Bounty, for instance, we see a man strung up by ropes, in the image of a crucifixion, a suitcase of Bibles at his feet. Religion is banned in Rapture and this man has been killed for smuggling it in. Though she despised religion, Rand was not in favor of its outright banning, or of wiping out its adherents. Ryan's absolutism leads him to murder those who oppose his philosophy. One could argue, as Objectivists do, that BioShock is not a fair critique of Objectivism, because Rand's whole point was that her utopia was only possible once enough people accepted her "rational code of ethics": she was proposing people adopt a new philosophy, before a new kind of society would be possible. But this is precisely where BioShock's argument is strongest. The idea that conflicting interests both within and between human beings could be harmonized by the widespread adoption of a new "philosophy": this is patently not continuous with the nature of human beings or the nature of human societies. To re-use a John Gray quote from Chapter 3: "Conflict is a universal feature of human life. It seems to be natural for human beings to want incompatible things—excitement and a quiet life, freedom and security, truth and a picture of the world that flatters their sense of self-importance" (Gray 2007, p. 17). And Clardy again: "Social stratification and economic classes do not vanish, under either Marxist or libertarian doctrines, and neither do the class conflicts embedded in the differential distribution of power, prestige, and resources" (Clardy 2012, p. 259). For many Objectivists, BioShock "seems to commit a blatant 'strawman fallacy" in establishing "a weak version of Randian Objectivism so that it can easily shoot it down" (Rose 2015, p. 21). Yaron Brook criticizes the game for misrepresenting Objectivism on the grounds that, for himas a Randian—perfection does exist. Levine is "setting it up to fail," Brook says. "I think it's flawed logic in the sense that he thinks that people have to be flawed. ... I think there are great people and perfect people and I think we all should strive to be great and perfect" (qtd. in Crecente 2008). What is Randian discounts the reality of pluralism what is flawed to one person may be perfection to another. And this is

where the continuity between the Randian ideal and dictatorship lies: in the very fact that Objectivists believe in the realizability of the perfect social order. Brook claims that *BioShock* puts forward a "misinterpretation of Objectivism," because, for Brook, absolutism need not necessarily lead to disaster—if it is the right kind of absolutism (qtd. in Crecente 2008). But, in fact, *BioShock* does not misrepresent Objectivism, as such: Levine and Brook simply disagree profoundly about the compatibility of Randian philosophy with actual human life on a societal scale—and about what would happen if a society based completely on an Objectivist premise were ever to emerge. This author is far more sympathetic to Levine's position than to Brook's.

WILL IN A TIME OF POSTHUMANITY

A rejection of utopian absolutism is not the only theme of *BioShock*. The work also addresses another very Randian human subject-matter—the idea of free will—brought forward into posthuman time. It is revealed in the course of the story that you, the player (who is named as "Jack"), are a genetically altered individual. You were bred in Rapture, before being sent out into the world in order to return at the appropriate moment. You have been engineered by Fontaine to respond to commands from Atlas, when prefaced with the phrase "Would you kindly..."—the words that the "Irishman" uses when issuing you instructions throughout the game. In the course of the normal gameplay, you make moral choices: whether to save or to harvest the Little Sisters, for example. However, at a crucial moment—the confrontation with Ryan—your free will is taken from you; the game assumes automatic control and has your avatar beat Ryan to death, while the player can only watch. BioShock thus plays with the issue of free will: Do you have it or is the course of your life externally determined?

BioShock's focus on choice—different moral choices made by the player in the course of the game determine the atmosphere of the lived world as well as the ending—means that it makes the best thematic use of the videogame as a user-controlled medium. As Jackson points out, the series plays off the notion of free will versus determinism, in a meta sense, since in theory the outcome of the game is controlled by the user; but of course, all possible outcomes are programed in advance by the software. Jackson writes: "The series is important insofar as it self-refers to its own methods of forcing choices and deciding consequences for

the player." There is no better example than the sequence with Jack/ Ryan where the game takes over and has you murder him. For Jackson, this aspect of BioShock is indicative of the franchise's crucial connections with the "forced choices" that exist in today's lived reality: "BioShock embodies the very worst of late capitalist logic: it offers the ambiguity of moral agency, 'the freedom to decide'—when the real technical, social and structural decisions have already decided what will happen anyway" (Jackson 2014, Chapter 2).

In the context of the game itself, however, BioShock's representation of choice is more simply a direct commentary on Ayn Rand and on posthumanism. According to the Randian view, every man or woman chooses his or her own fate. BioShock makes the sensible interjection that this is not always the case; that we have natures—and there are events—that also determine where we end up. This, then, is a critique of Randian absolutism (which holds that, in a free-market society, an individual always gets what they "deserve," according to their ability and the choices they have made). It is also, as I've said, a treatment of free will in posthuman time. The player is a "posthuman": genetically engineered to fulfill another's purpose. More broadly, the game suggests that the transhuman impulse—the hyper-technological advancement which could occur in an unrestricted, Randian free-market environment could in fact restrict or negate other aspects of Randian man: human free will being the most obvious example. This advanced transhuman technology in fact results in an erasure of individuality. The "Splicers," for instance, are formed into different threat-groups depending on how they are equipped; they have collectivized not individual identities, named as Houdini Splicers, Thuggish Splicers, Spider Splicers, et al. The Splicers' unique individuality as people is lost as they become slaves to the impulses of too much ADAM; their crazed addiction assists in Rapture's being torn apart.

The Splicers are truly posthuman in that they have emerged out of humanity, but no longer display a complexity of characteristics which we might associate with the human; they are killers driven by cravings. As Lars Schmeink summarizes, the Splicers' enhanced physical capabilities—"excessive strength, quick reflexes, and brutal resilience"—are matched by cognitive impairment: "the mutation has also incapacitated them as regards reason, emotion, and communication. Thus, they represent the posthuman in the sense of the anti-human, having lost all properties that are commonly ascribed to the liberal humanist subject"

(Schmeink 2009). The Big Daddies, as well, are no longer each unique human beings. They have become a group of automatons, programed with one goal—to protect Little Sisters. Like the Splicers, the Big Daddies once were human, but now have no observable individual personalities; they are posthuman and not human.

BioShock makes a powerful statement regarding the unviability of Objectivism as a philosophy for a society; it also suggests that Randian ideas lead toward posthumanism. The game does more than raise questions, though it is less than didactic. Its portrayal of the posthuman is bound up with its critique of Rand; and since the game is, in effect, criticizing Objectivism, the transhuman and the posthuman (as they come about via an "Objectivist" free market) are presented as destructive. The upgraded self in fact leads away from individuality because it results in deleterious mutation, whereby people become "types" of monsters, slaves to impulses that do not come from their natural humanity. BioShock thus takes up an ideological position, one out of which Objectivism does not emerge well. On its own terms, "Objectivism" in the game achieves the opposite of its intent. Rand's/Ryan's drive is to venerate the unregulated individual mind, science, and technology; but the work of the unregulated mind results in science and technology that destroys the unique mental properties of man. In BioShock, neither Objectivism nor posthumanism is presented as continuous with what's human.

An extra chapter which players can download for BioShock 2, called Minerva's Den, gives us a further warning against posthuman extremes, delving deeper into the advanced technology underlying Rapture. This time the focus is on artificial intelligence rather than the upgraded body, but the message regarding posthuman technologies—that they are potentially destructive to human uniqueness and happiness—is broadly the same. A radical attempt to recreate the nature of the human is shown to be folly, suggesting that we should reinforce the boundaries between human and artificial life. Minerva's Den tells the tale of Charles Milton Porter, creator of The Thinker, a supercomputer that can reason and is responsible for Rapture's many automated systems. Porter attempts to mold the AI into a version of his dead wife, Pearl, so that she may "live" again. Pearl died in London during the Blitz, while Porter worked with the godfather of computer science and AI, Alan Turing, attempting to crack the Enigma code. Porter's efforts to recreate Pearl lead only to sadness and trouble; and at the end, though it is the hardest thing, letting go of the life that is gone becomes a moment of liberation. The transhuman imperative—and its radical, utopian call for the conquest of death, rather than its acceptance—is shown as Porter's albatross.

After the first game in the BioShock series, it becomes clearer that the franchise's critique is not just of Objectivism, but of utopianism in general and all absolutist dogma. In BioShock 2, the player returns to Rapture, after its fall, this time as a Big Daddy looking to rescue his Little Sister. Since Ryan's and Fontaine's deaths, a new force has risen in the city: a woman named Sofia Lamb, advocating complete negation of the self and mystical collectivism (an incarnation of Ellsworth Toohey, perhaps). Lamb's ideas are shown to be just as destructive as Ryan's. BioShock 2 and Minerva's Den were developed by a different team from the first game, while Levine and his team return for BioShock Infinite. Infinite makes something of a sideways move, while continuing to focus on the nature of ideals as they relate to reality—to focus on radicalism, its sources and dangers. The third game could be said to be an expansion of the Randian premise of the first, as it is still concerned with individual will as it interacts with social, class-based, and metaphysical dynamics. Infinite's setting is a flying city named Columbia, a version of the United States in its earlier decades, and the game explores the religion-tinged notions of entitlement (manifest destiny) underpinning the entire American project. That game's ideological force—so sure in his "perfect city," like Ryan and Lamb before—is a "prophet" and "founding father," Zachary Hale Comstock.

At the end of *Infinite*, the player returns briefly to Rapture, when the game's protagonist, a private detective named Booker DeWitt, is transported there. DeWitt seems to view Rapture like something out of a dream, the whole idea of the city "ridiculous." But the player's companion, a woman with the power to traverse time and dimensions, tells you that such cities are infinite in history; she warns of the constant appeal of the shining light in the fog, of Utopia and the strongman who says he can deliver it: "There's always a lighthouse. There's always a man. There's always a city."

Notes

1. Gary Weiss, for instance, sees the same "philosophy of greed," a concern only with personal profit, evidenced in both Rand's work and the behavior of "the main actors in the financial crisis." Whether such a philosophy was

- "explicitly adopted" by the individual actors is not important; it was a culture promoted from the top, by Rand advocates such as Alan Greenspan, and the consensus regarding "market supremacy" (Weiss 2013, pp. 2–3).
- 2. The quote is from "The Places You Come to Fear the Most," episode 2 of the first season, which originally aired on The WB on 30 September 2003. One Tree Hill's opening theme is "I Don't Want to Be" by Gavin DeGraw (2003). The episode's closing voiceover bears only minor differences with the passage in Rand. The voiceover highlights the final sentiment, "it is yours," by undoing Rand's contraction "it's." Lucas also skips a few words and adds an "and." The original passage reads (words deleted in the episode are emphasized by me): "Do not let your fire go out, spark by irreplaceable spark, in the hopeless swamps of the approximate, the not-quite, the not-yet, the not-at-all. Do not let the hero in your soul perish, in lonely frustration for the life you deserved, but have never been able to reach. Check your road and the nature of your battle. The world you desire can be won, it exists, it is real, it is possible, it's yours" (Atlas Shrugged, p. 1069).
- 3. "The name 'Anthem' was taken from a title of an Ayn Rand novel," "About Anthem," Anthem Entertainment Group, accessed October 16, 2014. http://www.anthementertainmentgroup.com/sro/anthem/about_anthem.php.
- 4. Bradbury writes in his afterword to *Fahrenheit 451*: "What caused my inspiration? There was Hitler torching books in Germany in 1934, rumours of Stalin and his match-people and tinderboxes" (Bradbury 2008, p. 221). Orwell wrote: "My recent novel [*Nineteen Eighty-Four*] is *not* intended as an attack on socialism or on the British Labor Party (of which I am a supporter) but as a show-up of the perversions to which a centralized economy is liable and which have already been partly realized in Communism and fascism" (qtd. in Gardner 1950, emphasis in original).
- 5. What the Bolsheviks did to her family is key to understanding the psychology of Rand's writing. Burns sees as pivotal the moment when Rand's father's pharmacy was seized by the revolutionaries, in 1918. Rand's father had studied hard to become a pharmacist, then worked hard to build up his business; his customers in the community valued him. And yet "in an instant" his livelihood was commandeered, for the benefit of "strangers who could offer [him] nothing in return. The soldiers had come in boots, carrying guns Yet they had spoken the language of fairness and equality It was a lesson [Rand] would never forget" (Burns 2009, p. 9).
- 6. Milgrim continues: "[T]hese are not unique to We. The regimentation of life and the world-wide state are features of [H. G.] Wells ... whom both Zamyatin and Rand read. The number-names and regimentation ... can be found in Jerome K. Jerome's 'The New Utopia' (1891); Jerome's works were popular in Russia and easily available" (Milgrim 2005, pp. 137–38).

- 7. There are other lines that can be drawn between Rand and Orwell, too. Indeed, Rand might be said to prefigure concepts that have come to be called "Orwellian" with her indictment of the Soviet state, We the Living, published over a decade before Orwell's indictment of the Soviet state, Nineteen Eighty-Four. The significant common elements between the first novel about Soviet Russia by a Russian in English (Heller 2009, p. 91), and the novel by an English writer which—at least according to Soviet dissidents—best portrayed Soviet Russia as it was, should not be overlooked. A dissident Russian intellectual, Vladimir Shlapentokh, has described the sense of revelation he experienced upon encountered Eighty-Four, that someone in the West truly understood what was happening within Soviet borders; he says that Orwell had "godlike status" among the anti-Soviet Russian intelligentsia (Shlapentokh 2004, p. 272). Shlapentokh details how the operations found in Orwell would have been easily recognized by Soviet citizens as the modus operandi of their own state: the rewriting of history, the constraints on individuals' behavior, the necessity of concealing one's real feelings. It is the case, however, that Rand had detailed all these operations of the Soviet state in We the Living, 13 years before Nineteen Eighty-Four was first published. There are many moments in We the Living which call to mind the Orwellian concept of doublethink, which Orwell defines as a form of "reality control" involving victory "over your own memory" (Orwell 1984, p. 34). At a Party meeting in Leningrad in Living, the gathered are told: "We don't need the obstinate, unbending Communist of iron. The new Communist is of rubber! Idealism, comrades, is a good thing in its proper amount. Too much of it is like too much of a good old wine: one's liable to lose one's head. Let this be a warning to any of Trotsky's secret sympathizers who might still remain within the Party: no past services, no past record will save them from the axe of the next Party purge" (We the Living, pp. 295-96). The past does not matter: you must 100% agree with the Party line now. In another pre-echo of Orwell, Kira's love interest, Andrei, is told by a Party operative after the same meeting: "I know—we know what you think. But what I'd like you to answer is this: why do you think you are entitled to your own thoughts?" (p. 297) Rand drew such operations of the Soviet state into her fictional dystopias, Anthem and Atlas Shrugged, as Orwell took inspiration from the workings of the Soviet state for Nineteen Eighty-Four. After its publication, Rand became "familiar" with Eighty-Four, and was of the view that it was influenced by Anthem, though there is no evidence that Orwell read Rand's novella (Milgrim 2005, p. 153).
- 8. Ellipsis in original.

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CHAPTER 6

Howard Roark, John Galt, and *The Transhumanist Wager*

Zoltan Istvan, a Hungarian-American writer and futurist, announced in 2014 that he would run for president of the United States in the 2016 election, as the founder and head of the Transhumanist Party. Istvan's platform was simple: "[T]o use science and technology to radically improve the human being and the society we live in." He wishes to "[c] reate a cultural mindset in America that embracing and producing radical technology and science is in the best interest of our nation and species." This includes designing appropriate safeguards so technology is not used to exploit people "as we transition to the transhuman era." His primary goal, however, is immortality, "to do everything possible to make it so this country's amazing scientists and technologists have resources to overcome human death and aging within 15–20 years" (Istvan 2014). He argues: "We didn't evolve through billions of years to remain animals. In the twenty-first century—the age of unparalleled scientific and technological achievement—everyone faces a Transhumanist Wager" (Istvan, n.d.). The "Transhumanist Wager" that every human being now apparently faces, is whether or not to seek immortality—perpetual sentience—through modern machines. The conquering of death is "a goal an increasing number of leading scientists think is reachable" within two decades (Istvan 2014). Istvan is certainly correct that a number of scientists are very optimistic in this regard, the aforementioned Aubrey de Grey and Ray Kurzweil perhaps chief among them. Fresh off his presidential run, Istvan declared that he would run in the 2018 California gubernatorial election, aligning himself with the Libertarian Party this time to broaden his base, while maintaining his transhumanist goals (Bohan 2017; Istvan 2017).¹

Istvan is the author of a philosophical novel which extrapolates his radical premise. The Transhumanist Wager (2013a) is of a slightly different order to the texts so far considered under the rubric of Rand noir versus Rand incorporated. Blade Runner, Ghost in the Shell, BioShock, and Neuromancer are all critically acclaimed, and celebrated as exemplars of their genre; they have entered mainstream discourse. Gene Roddenberry's Andromeda is perhaps less celebrated, but it is still a mainstream product—it aired on cable and satellite TV on the Sci-Fi Channel, and has been made available on Netflix. Istvan's novel is more properly a product of a niche: Internet-based techno-culture; the same environment that fostered Extropianism. Wager is self-published. That said, though his views are radical, Istvan is not an obscure figure. As a journalist, he has worked for the National Geographic Channel and the New York Times Syndicate. His opinion pieces are published with the Huffington Post. Well before the 2016 election, he was featured in articles on technology and transhumanism by mainstream outlets including Newsweek and the Financial Times (Mejia 2014; Kaminska 2015). He has been interviewed by Fox News, the Daily Mail, the BBC, the Atlantic, and the Telegraph, amongst many others. Istvan's supporters would no doubt argue that Ayn Rand herself was a curiosity to the mainstream before she became mainstream. The Telegraph posits that Istvan's views, or their ilk, will likely "become part of the political furniture" as technology continues to develop. The newspaper describes Wager as "a philosophical near-future dystopian thriller," and Istvan himself is called "a high profile, but controversial" figure within the transhumanist movement (Bartlett 2014). As covered in Chapter 3, there has been a concerted effort within transhumanism to move it away from Randian radicalism to the non-threatening political center. It therefore stands to reason that certain of its grandees would be distressed by Istvan's emergence, since he represents the return of the repressed. The Transhumanist Wager's relationship to my theme will be readily apparent from what follows: it is a key example of how Rand can be used, and has been used, to advance an argument for posthumanism.

The Transhumanist Wager has been greeted by multiple Internet outlets as a new Atlas Shrugged, and—in addition to its mainstream mentions the book and its author's opinions have received widespread attention in the technology-oriented media and in transhumanist circles.² The novel has gone so far as to become "a surprise bestseller on Amazon" (Bohan 2017). Istvan, like Rand, is clear that his fiction puts forward his personal philosophy.³ The radical vision of capitalism in Rand's work informed policy and individual lives in the latter half of the twentieth century, the era which gave rise to an unprecedented triumph for free-market thinking. Istvan hopes to accomplish a similar revolution: to move the world from acceptance of high capitalism to acceptance of the transhuman vista that emerges from it; acceptance of the transhumanism that emerges from capitalism's privileging of technological innovation, its privileging of individual choice and acquisition. These are Randian imperatives: Favoring individual rights and personal development above all else; transforming the culture so that it further supports free-thinking men of science in their quest to innovate; accomplishing nothing less than a philosophical revolution in the way human beings think about themselves in relation to the world. It should not surprise us, then, that Istvan is "a dedicated Ayn Rand reader" (Istvan 2013b). He has actively courted Rand fans as readers for his novel and as supporters of his vision, posting the following message on the website Good Reads, a large online community for bookworms: "For those interested in Objectivist (Atlas Shrugged) principles applied to what the human species will evolve into, I've written a book about it. ... The Transhumanist Wager, takes many of Rand's ideas and applies them. However, my novel also expands on many ideas that Rand missed or didn't understand. If form follows function, then some of Rand's ideas will soon be obsolete, because many of us will not be human in another 30-50 years" (Istvan 2013b).

The Transhumanist Wager is, in many respects, a kind of condensed amalgam of Rand's two major novels, The Fountainhead and Atlas Shrugged, augmented with a new didactic premise. Where Rand promotes individualism (The Fountainhead) and ultimately expands this to promote laissez-faire capitalism (Atlas), Istvan expands a promotion of the "self-made self" into a full-fledged image of the earth transformed "for the better" through a philosophy of transhumanism. The novel follows the journey of Jethro Knights, a handsome, independent, strongwilled hero in the Randian mold, who ultimately reshapes the world order with his vision of technologically enhanced man. What I will do in this final chapter is show how, and what, Istvan takes from Rand in his novel. We can thus see that Rand's work provides a basis for the book, and has been transfigured to advance a philosophy of transhumanity. In the process, I summarize how The Transhumanist Wager instances the

core argument of this book: the evident continuum between Ayn Rand and posthumanism.

ROARK, REVISITED

"Howard Roark laughed." This is the opening line of *The Fountainhead*. *The Transhumanist Wager* begins with a mirror image, darkened: "Jethro Knights growled." As each novel opens, its protagonist is facing a defining moment, a moment of feeling acutely alive. Yet, while Roark is opening up to the possibilities ahead of him, Knights has narrowed his focus to a final reality. The similarities are remarkable even in the opening paragraphs of the two fictional works; Istvan has exactly adapted Rand to his own purposes. *The Fountainhead* begins:

Howard Roark laughed.

He stood naked at the edge of a cliff. The lake lay far below him. A frozen explosion of granite burst in flight to the sky over motionless water. The water seemed immovable, the stone flowing. The stone had the stillness of one brief moment in battle when thrust meets thrust and the currents are held in a pause more dynamic than motion. The stone glowed, wet with sunrays. (*The Fountainhead*, p. 3)

Jethro's journey begins on a boat in the middle of the South Pacific:

Jethro Knights growled.

His life was about to end. A seventy-foot wall of shifting blue with a million tons of water was veering down on him. It was the largest wave of the hurricane—what scientists and sea captains call a rogue. He watched the wave steepen, the wind lines near the lip combing the sky, painting an arc of dark rainbow hues far above his yacht's mast. He calculated how much time he had. Maybe ten seconds, he thought, aghast. His pupils tightened. (Istvan 2013a, p. 4)

In terms of length alone, these openings are close to each other: 72 and 84 words, respectively. With the deftness of her descriptions and her use of symbolism, Rand is clearly the superior writer. Indeed, as a novel, Istvan's tale suffers throughout from far too many direct statements—of characters' motives and intentions, especially; too much telling and not enough showing. The literary quality of the work, however, is beside the point. What we can see from the very beginning of his book

is how Istvan has adapted Rand. Both of these openings make statements about the theme of the novel that is to come. Both begin with a man—a Randian hero—alone against nature; the imagery of water and motion is even the same. However, Rand's theme in *The Fountainhead* is realizing the possibilities of your life. Hence, the world—nature—seems benevolent, inert, waiting to be put to use by man. As Roark will soon observe: "He looked at the granite. To be cut, he thought, and made into walls. He looked at a tree. To be split and made into rafters" (*The Fountainhead*, p. 4). As *Wager* opens, by contrast, nature is not portrayed merely as a tool to be put to use by man's mind, but as an obstacle to be overcome: nature is a threat to the life of man.

These divergent emphases establish the parameters of the hero's journey in each book. Roark's driving force is to fulfill his potential for happiness within the timeframe of his life. Nature is a tool for this end: it has given him his life, and it also supplies the raw materials with which he will make his buildings, structures that are both the source and the achievement of his happiness. His buildings recreate nature according to the images of his mind. Istvan takes these insights from Rand and goes further: happiness within the timeframe of a normal human lifespan is not enough; if you truly love your life, you will want more of it, you will want to keep it forever. Immortality—removing the threat of nature (death)—must be accomplished. Structures created by the human mind cannot remain external to the human body if this is to happen. We have used our technology to recreate the world; we must now use it to recreate our own bodies. In short, then, Istvan updates a Randian imperative—conquering nature to use it for human ends—for an era of transhumanity, an era when the ultimate conquering of nature, abolishing death, is posited as scientifically plausible.

Istvan takes a certain something from We the Living in Wager, in that, significant elements of the protagonist's background are the same as his own, as was the case with Rand and Kira. Istvan's Amazon biography mentions that in his youth he sailed the globe with 500 books on board, an adventure undertaken by the protagonist in his novel, who carries the same number of books (Amazon.com, n.d.). Istvan worked for National Geographic, while Jethro Knights works for the fictional International Geographic; Istvan's wife is a doctor, as is Knights's love interest. We could also say that Wager represents Istvan's "intellectual" autobiography, as Rand called her first novel (Foreword, We the Living, p. ix). Despite these parallels between Wager and We the Living, the two

works by Rand that Istvan most obviously draws on are her major novels. The characters in Wager, the relationships between them and how they play out, are more similar to The Fountainhead. The plot throughline and the philosophical ambition of the novel—presenting a whole image of society, not just an individual life—are more similar to Atlas. I will first consider Istvan's major characters and how the author uses Rand as a template; I will then look at the overarching plot-theme and radical vision of the novel and how these relate back to Atlas.

The Transhumanist Wager, like all of Rand's fiction, relies on absolutist binaries to make its points. As the book opens, we are brought into a polarized America. It is the 2010s, but a more advanced moment in techno-scientific time. The culture is divided in two. On one side there are the transhumanists: "Futurists, technologists, and scientists tout[ing] transhuman fields such as cryonics, cloning, artificial intelligence, bionics, stem cell therapy, robotics, and genetics as their moral and evolutionary right—and as crucial future drivers of the new economy" (Istvan 2013a, p. 7). On the opposite side there is a rogues' gallery of Rand's usual list of villains: government agencies and religious authorities, the former concerned with preserving their own power in a world of upgraded humans, the latter arguing that altering biology is a sin against God. In the middle there is the majority of the world's population, the pliable masses. We have here, then, the same essentialized view of humanity that Rand proffers in Atlas: the heroes who innovate, who move the human world and want to achieve their best selves; the villains who attempt to stifle the heroes and keep their own collectivized control; and the masses who will go along with whatever power wins out. In Alan Clardy's words: "Supermen, looters, and sheep" (Clardy 2012, p. 259).

This broad conception of society takes from Atlas, yet, the relationships of the individual heroes and villains to the story are more like those found in The Fountainhead. The protagonist, Jethro Knights, borrows from John Galt in Atlas, in that he is both an inventor and a developer of his own particular philosophy of the world, which he uses to transform the world into his own image. However, he is also a Howard Roark figure, an individualist who wants to accomplish his highest vision of himself, and has no thoughts for others who don't offer value to him: "Jethro only noticed values, not people" (Istvan 2013a, p. 12). Knights's journey takes us through Wager, as Roark's does in The Fountainhead; the books' stories are primarily those of the respective protagonists. This is different from Atlas, where a more diverse cast of characters propels the plot, and the novel's pivotal figure, Galt, does not appear in the flesh until the final third.

Knights's love interest is Zoe Bach, a pioneering doctor. Their relationship mirrors that of Roark/Dominique Francon, rather than that of Galt/Dagny Taggart. In The Fountainhead, Dominque is not only a soulmate for Roark, she provides the hero's greatest challenge. She is in love with Roark, and like him is an individualist, but she does not believe a man of his integrity and surpassing abilities can survive in the social world as-it-is, an environment that requires the performance of conformity to collective values and that raises up mediocrities. In Rand's own words, Dominique's "error is the malevolent universe premise: the belief that the good has no chance on earth" (qtd. in Bernstein 2007, p. 203, emphasis in original). As Bernstein puts it, Dominique is simultaneously an idealist who "understands man's capacity for greatness," and "a philosophical pessimist, who believes that the heroes among men are doomed to defeat" (Bernstein 2007, p. 203). Therefore, perversely, Dominique sets out to prove herself right about the world—while secretly hoping she is proven wrong. She works to destroy Roark professionally, writing columns against him for the New York Banner, and using her job as a society columnist to gather commissions for the competition. She works to destroy Roark personally, by marrying Peter Keating, the embodiment of the current society upon which Roark places no value—a performative-conformative society, in which one's conformity to the prevailing social and professional system must be performed, displayed for all to see (it does not matter that there is no authentic vision behind it). Roark, on the other hand, has no truck with such lack of authenticity. It is only at the end of the novel, when Roark has won the battle against the forces of conformity on his own terms, that Dominique allows herself to be his wife, because she sees that it is possible for individuality to succeed on this earth, and therefore she does not have to fight the world and her true self any longer—she realizes she is free. The particulars of this relationship are not repeated in Wager. The core premise, however, is: the idea that love is the hero's greatest challenge. Knights meets Zoe on the edge of a Kashmiri warzone; he is a correspondent for International Geographic, she a doctor laboring near the frontlines. Her interest in Asian philosophies, and her nonchalance regarding the inevitability of death, are mystifying to Knights, concerned as he is only with improving his own self and with never dying. Bach and Knights are thus counterpoints to each other, as Dominque and Roark are. Jethro

says: "I might be too selfish for love"; the "awareness of someone else" is "shocking" (Istvan 2013a, p. 62). Neither Roark nor Knights questions for any significant period of time his ability to achieve his vision of himself. In both texts, the heroine's actions are a challenge to the hero. Dominque overtly acts to bring down Roark, in the process causing a greater struggle for him as he seeks to accomplish a completed version of himself (as a successful professional architect). She thereby clarifies and strengthens his role as the hero. Bach's challenge to Knights is more in the private than the public sphere, but no less significant: her divergent belief system causes him to clarify and strengthen his own views (over the course of many lengthy philosophical discussions), and thereby makes him a (somewhat) more rounded protagonist. When Zoe dies due to a bomb planted by an anti-transhumanist that was meant for Knights, Jethro's transhuman imperative is given a renewed emphasis. He seeks not only to achieve immortality for himself but to bring Zoe's dead, but preserved, mind and body back to life. Istvan differs in the details, but the template of the central relationship in his novel is clearly to be found in The Fountainhead: the hero's aims are challenged and clarified by his love interest.

The primary pairing of antagonists in Istvan also relies on that found in The Fountainhead. Peter Keating's place is taken by Gregory Michaelson, a college classmate of Knights—as Roark and Keating were college classmates. Michaelson is Wager's embodiment of the performative-conformative values favored by society as-it-is. Michaelson, like Keating, has no real self in the Randian definition, has no sense of himself beyond a desire to climb the social ladder and to fulfill the expectations placed on him by others: "Modishness, flair, and class were in Gregory's every thought and decision—esthetics before function, pomp before action, style before reason"; "[1]ike all superficial showmen, Gregory lived inside of others' opinions and never considered what it would be like outside of them" (Istvan 2013a, pp. 13, 57). Knights and Michaelson's relationship shadows that of Roark and Keating. In college, both Roark and Knights are iconoclasts who anger the conservative faculty. Roark is expelled after a meeting with the dean in which he lambasts the existing architectural profession. At his final-year thesis defense, Knights has a public verbal jousting match with an old-school academic over Knights's theory of the "omnipotender"—"one who contends for omnipotence"—a theory that repudiates the humanitarian values of the old culture—as does Roark's self-centered set of values (Istvan 2013a, p. 80). Michaelson, in

contrast—like Keating—is the darling of the university establishment, as he will come to be the darling of a dying culture. Keating grows up to be, for a time, an architect who is perceived as the leading light of his profession. This is because he does everything the existing "neoclassical" esthetic culture expects, and does it well. He performs conformity better than anyone else. In reality, he is being propped up by the true villain of the piece, Ellsworth M. Toohey, a socialist cultural commentator and opinion-former. Toohey seeks power for himself by promoting mediocrity and denouncing true originality; it is only by advancing the small that he can make himself seem large: "I shall rule. ... It's only a matter of discovering the lever. ... It's the soul Not whips or swords or fire or guns. ... Tell man that he must live for others"; "If you learn how to rule one single man's soul, you can get to the rest of mankind" (The Fountainhead, p. 665). Toohey uses his newspaper columns and pull with the cultural elite to push Keating as the architect of the age. Keating takes this as a wonderful thing, since he has no values of his own and sees social advancement as the only form of success. The exact same dynamic is put to work in The Transhumanist Wager. A character named Reverend Belinas takes the form of Toohey. Belinas is the head of the Redeem Church, the largest evangelical movement in the United States. A powerful cleric who counsels politicians from the president on down, Belinas is also a vigorous opponent of transhumanism; it goes against his religious beliefs regarding the inviolability of God's creation, and the rise of the atheistic philosophy that goes along with it proves a threat to his material influence. Like Toohey, Belinas is "hungry for power," power "that best accomplished his bidding for his church and the Lord. He would stop at nothing to achieve it" (Istvan 2013a, p. 52). Belinas recruits Michaelson as his chosen son, much as Toohey recruits Keating—in both cases the "villain" chooses this character because of Keating/Michaelson's malleability: Keating and Michaelson represents ready-made vessels for others' agendas. Toohey grooms Keating as a cultural celebrity; Belinas grooms Michaelson for political celebrity. Michaelson becomes a US senator and comes to head up a prominent government bureaucracy regulating transhumanism, the National Future Security Agency. Belinas's goal is to halt Jethro Knights's agenda, as Toohey's is to drive Roark out of the architectural profession: both heroes represent radical threats to the existing culture as it is set up in each novel.

The villain of *The Fountainhead*, Toohey, is a socialist, while the Toohey figure Istvan chooses for *Wager* is a cleric. This has significance

in itself, since Rand saw a clear continuity between socialism and religion. For her, both were about collectivized concepts of identity, surrendering one's rational individuality to an external force (whether God or "the people"). Rand wrote in the 1960s: "Today, Catholicism and communism may well cooperate, on the premise that they will fight each other for power later, but must first destroy their common enemy, the individual, by forcing mankind to unite to form one neck ready for one leash" (*Capitalism: The Unknown Ideal*, p. 363).

Engineering the Earth as Utopia

There is something of an irony in Zoltan Istvan running to be democratically elected as US president or California governor—attempting to gather popular support for his transhumanist ideas—when the vision that he presents in *The Transhumanist Wager* is utterly undemocratic and anti-populist. *Wager* takes the Nietzschean will-to-power, anti-democratic, and absolutist elements in Rand to a new extreme. Jethro Knights engages in an even greater project of utopian social engineering than Andrew Ryan in *BioShock*: he assumes the status of a global dictator, rebuilding the world according to an image in his imagination, so that it better conforms to his will.

The character dynamics in Wager draw heavily on The Fountainhead. The final philosophical/thematic dynamic of Istvan's novel, however, is a version of Atlas Shrugged's. Knights's ever-presence in the narrative is more reminiscent of Howard Roark than John Galt, but his project in the novel is that of a Galt. Roark has no need to redesign society so that he can be free to be his best self; in the end he is able to accomplish his goals without having to consciously re-engineer social structures. We could say that certain aspects of the world of The Fountainhead come round to him, but he does not want to remake the world, as such: Roark's focus is always on himself only. John Galt wants to remake the world. He needs to, according to the parameters of the text, if he is to realize who he is: the embodiment of Rand's virtue of selfishness. The social environment of Atlas Shrugged is one that oppresses the creators; it does not let the inventor profit from his inventions; it sees all wealth created as something to be distributed to the public at large, not the private property of the creator for his use as he sees fit. And so, Galt sets about re-engineering the world—by first re-engineering America—in the image of his values, the image of Objectivism and pure capitalism.

He encourages the creative elite, the best artists, inventors, and entrepreneurs, to drop out of the economy: to take manual-labor jobs and not use their singular minds, their unique talents, for the benefit of a flawed social structure. This elite withdraws to Galt's Gulch, where they establish a social structure in accordance with their worldview, where all property is private, there is no welfare, and those of "lesser ability" are not carried on the backs of the strong, as they are in a redistributive society, according to Randian opinion. Galt's Gulch is a small-scale utopia, in accordance with Objectivist parameters; it is also the model for, and the breeding ground of, the utopia-at-large that the world will become. The absence of the "world movers" from productive life in short order brings about the collapse of the old American economy, and in turn all the institutions of the old polity. There is no one competent enough to create and manage technological infrastructure, or to run major businesses; there is no one to create enough wealth and thereby pay the taxes that keep the whole system going: the whole system collapses. With this accomplished, Galt and his cohort of strikers can return to the world and rebuild civilization from scratch. This is how they go about building their ideal society. It is an at-length portrayal of Popper's concept of utopian social engineering.

This dynamic is repeated in *The Transhumanist Wager*; the essentials are the same, though the details differ. Atlas Shrugged dramatizes a particularly twentieth-century, particularly Cold War, philosophical binary: the battle of individualism versus collectivism as the engine of society. Rand's novel privileges individualism in order to promote capitalism. Istvan's book uses Rand as a model in order to move the debate to a twenty-first-century vista: the battle of individual-empowerment versus the "common good," with technology as the battleground. Istvan sees Randian individualism as compatible with technology as an enhancer of the chosen self—in other words, compatible with transhumanism. Rand's imperative was that the individual mind be seen as the engine of all (human) creation. Istvan's imperative is an extension of this: Given the creative capacity of the individual mind, it should not be left encased within a flawed, perishable body; we should use our "rational faculty," as Rand called it, in order to choose to upgrade our minds and bodies so that our uniqueness as individuals continues in perpetuity, and so that our selves continue to be improved upon. Galt desires a life of freedom (on his terms), Knights desires an endless life of freedom (on his terms).

Jethro Knights takes actions that are every similar to John Galt's. Like Galt, he wants to achieve his highest vision of his own self on this earth. Like Galt, he comes to realize that in order to do this he will have to remake the world in the image of his personal values. In Atlas Shrugged, the government strangles the productivity of wealth creators with taxes and regulations. In Wager, the government declares a "War on Transhumanism" and legislates and pressures transhuman sciences out of existence in America. "Big Government" is an enemy in both texts. Knights had initially set up his institute for the furtherance of immortality, Transhuman Citizen, in Silicon Valley—Istvan here implicitly making the connection between Randian philosophy and the Californian technological hub, a connection which, as we have seen, exists in real life. As the government tightens its noose around transhumanism, however, Knights decides that in order to fulfill his vision he will have to depart the world as-it-is. He hires a designer of floating cities to build him one—a "seastead," which he names Transhumania.

Seasteading is a real-life phenomenon, a movement that has emerged from the same technolibertarian community that reveres Rand and gave birth to transhumanism. The Seasteading Institute was founded in 2008 by Patri Friedman-Milton Friedman's grandson and a vocal member of the transhumanist organization Humanity+—and Peter Thiel, PayPal entrepreneur. Both men have Rand in their pasts. Their institute aims to establish "floating cities—which will allow the next generation of pioneers to peacefully test new ideas for government" (Seasteading Institute, "Introduction," n.d.). In a 2009 essay for the Cato Institute in support of seasteading, Thiel presented a very Randian vista: "The fate of the world may depend on the effort of a single person who builds or propagates the machinery of freedom that makes the world safe for capitalism"; the broken nature of current politics requires "focusing energy elsewhere, onto peaceful projects that some consider utopian" (Thiel 2009). The similarities between seasteads and Galt's Gulch have not gone unnoticed (Daily Mail 2011). The institute's logo depicts a titanic man, standing on the ocean, holding aloft a city. It is not a stretch to call him Atlas. Istvan's decision to include seasteading in his work spotlights the connectivity between Rand, transhumanity, and other aspects of contemporary techno-culture. The seasteading ideals are those of libertarian individualism and capitalist competition, brought to the realm of government itself. The organization envisages "a vibrant startup sector for governments, with many small groups testing out innovative ideas as they compete to better serve their citizens' needs" (Seasteading Institute, "Why the World Needs Seasteading," n.d.). Rand thought government should be removed from the usual realms of competition; limited to the armed forces, the police, and law courts, and acting as an objective defender of laws and property; paid for voluntarily as individuals pay for insurance (The Virtue of Selfishness, p. 135). In an absolute sense, the seasteading "startup sector" ideal is inconsistent with Rand, who thought government should be small but a monopoly. In another respect, however, seasteaders are taking their cue from Rand, following her logic on the benefits of capitalist competition to its ultimate conclusion. The seasteading impulse explicitly appeals to individual empowerment and liberty, and individuals' stifled potential under current systems: "Currently ... it is hard for an individual to make much difference," because of the enormity of existing states and institutions: "Imagine unprecedented personal freedom, new economic opportunities ... and the chance to demonstrate a better way of living to the world" (Floating City Project, n.d.). This is an American, "new world" impulse for the twenty-first century: "All land on Earth is already claimed, making the oceans humanity's next frontier" (Seasteading Institute, "Why the World Needs Seasteading," n.d.). The connection between seasteading and transhumanism is implicit if not explicit. In theory, a seastead would be the ideal environment for transhumanist endeavors—free of existing governments' regulations, one could conduct unhindered experimentation, surrounded by like-minded individuals in a self-contained community. The philosophy behind seasteading is also commensurate with transhumanist goals: "We see experimentation as the source of all progress. Many innovations—on numerous seasteads—will allow humanity to rapidly improve how we live together" (Floating City Project, n.d.). This is humanity being improved through the application of science and innovation.

The seasteading impulse is a John Galt-ian impulse. The logic is as follows: The world is broken—existing governments are the problem. In order to save the world, we must remake it. Those of an entrepreneurial inclination will advance to a new frontier: Galt's Gulch/floating cities—"Atlantis," as Rand calls her own hub. Here, new ways of living are explored, free of the restraints that exist elsewhere. The new ways are explored in the expectation that they will be spread to the world at large, and the earth will be reformed. This is exactly the plot pattern that is followed in *The Transhumanist Wager*. Patri Friedman says he did not read

Atlas Shrugged until 2009, after the Seasteading Institute was already up and running. However, Rand's work and her ideals have such prevalence within libertarian culture, that showing a direct causal link between Rand and seasteading is unnecessary: philosophically, her fiction can be used to explain this drive; she put her finger on the nature of the desire. Friedman himself has boasted, in jest perhaps but in fact stating a truth: "[I]n cold objective fact, I am quite arguably the closest person to being John Galt in the world, since I am going around recruiting libertarians & entrepreneurs to leave our current outmoded systems and create innovative new societies elsewhere. Plus, superficially, I am taking them to the ocean, ie 'Atlantis'" (Friedman 2011).

In Istvan's novel, Knights's seastead, like BioShock's Rapture, is most definitely a version of Galt's Gulch: "Atlantis," utopia upon the ocean—a place where wholly new, Randian methods of social relations can be put into practice, away from the strictures and constrictions of existing countries, with their overbearing governments and altruistic cultures. Istvan explicitly labels Transhumania a "utopia for transhumanists"; it feels like "a remarkable new planet." It is a project bound up with the perfectibility of man-which in this case means the overcoming of flawed human biology, as well as an escape from altruistic morality; an Ayn Rand utopia married to transhumanism: "Whatever you wanted or needed, no matter how far-fetched; it would all be there. ... [A]n ideal, advanced society There were no labor unions allowed. No workers' compensation. No welfare. No freebies. ... There was just usefulness-or not" (Istvan 2013a, pp. 192, 197, 205). Knights courts the world's greatest innovators, inventors, and scientists, and gives them a chance at a new life in Transhumania. His promise is thus the same as Galt's: drop out of the world, and we will build it anew. Transhumania, like Galt's Gulch, "works" because it is populated by people who all share the same values. As Douglas J. Den Uyl explains, Rand's defense of liberty is one based on essentialist values—it is therefore opposed to the pluralism that comes with liberal democracy. In Rand's novels, "[t]he importance of liberty politically is depicted as a function of the kind of people it will not only allow to flourish, but encourage to flourish" (Den Uyl 2007, p. 369). Istvan too offers a portrait of liberty, a portrait of libertarianism, based on its being the purview of "the right kind of people"—it is thus the enemy of pluralism. BioShock injects plurality into the Randian experiment and finds it wanting. Wager keeps those with divergent values out of its utopia in order that the ideal society may be preserved: "Problems

occurred, but they were quickly worked out for the most part. These were not people who complained about a broken hot shower or a bad internet connection. These were professionals of the highest order These were people of action, of doing—and doing it right." Like Galt's Gulch, Transhumania is not the final resting place of utopia, but an experiment in miniature for utopia on a large scale. By the end of *Wager*, Knights has engineered the whole of earth as "a greater Transhumania" (Istvan 2013a, pp. 205, 265).

Transhumania exercises a consistent libertarian fantasy, a fantasy which lies at the heart of Rand's philosophy, and which lay at the heart of early Extropianism: the idea that, if only "government" could be got out of the way—along with its disincentivizing regulatory structure and redistributive tax system—free-thinking men of science would possess both the incentive and the resources to create exponential technological progress, far beyond what we have seen in human societies thus far. Galt's Gulch epitomizes this. The entire community gets its electricity from a new power source, Galt's motor, which harnesses static energy from the atmosphere. The community is also hidden from view by a protective "ray screen." These two technologies do not exist in outside economies, because their inventor (Galt) will not share them with the "parasites" who will leech his potential profits. The Gulch's medical care is also more advanced than the "socialized medicine" outside, since here a doctor can keep all the profit from the application of his skills, and so is incentivized to improve his care.4 The strongest sectors of the economy are thus supposed to experience rapid growth under Objectivist economics, once individual human potential is set free from the shackles of having to be its neighbor's keeper. As we have seen, BioShock plays with this libertarian fantasy—suggesting that a society free of regulation might result in more rapid progress in science and technology, but questioning whether this is a good thing. In Rapture, the posthuman vista that emerges from this results in a loss of individuality and a loss of humanity (the Splicers). Objectivism posits that the darker side of human nature can be transcended, or at least become irrelevant, through the application of strict philosophical principles by enough members of a given population. Under an Objectivist political system, everyone gets what they are independently capable of getting: if another person achieves more than you in a particular field—according to "Objective reality" he or she simply possesses greater faculties than you. Every follower of Objectivism, under an Objectivist political system, would thus be content

with their final lot in life. As Rand summarizes: "[T]here are no conflicts of interest among rational men" (*The Virtue of Selfishness*, p. 57). *BioShock* shows this up for what it is: a utopian pursuit of unrealizable harmony. The application of Randian philosophy in Rapture is not enough to overcome the "natural" jostling for power and resources that emerges in human societies, resulting in conflict. *BioShock*'s point is also that expecting masses of people to all adhere to the same set of philosophical principles, regardless of where they have come from or where they end up in life, is in itself unrealistic utopian thinking. Andrew Ryan could not transform the pluralist nature of humanity into a utopian singularity.

The case of Transhumania in The Transhumanist Wager works from the same first principle as Galt's Gulch and Rapture—and, indeed, reallife seasteading: that a "new" environment, free from the legacy of existing regulations, will result in exponential progress in science and technology. Existing governments are removed from the equation and then human potential is unleashed. In real life, innovation does not work as cleanly as this. In The Entrepreneurial State (2011), Mariana Mazzucato makes a compelling case that the "common sense," libertarian view of innovation is a fallacy. This is the idea that was also Rand's: that the best thing government can do for innovation is to get out of the way. Mazzucato argues, contrarily, that "in the most successful economies," government "is a leading agent in achieving the type of innovative breakthroughs that allow companies, and economies, to grow, not just by creating the 'conditions' that enable innovation." Many of the most important economic developments of recent decades have state funding at their root; they emerged out of an interplay between the public and private sectors, but began as projects only government saw a use for. Computers, the Internet, biotechnology, and nanotechnology are all sectors that Mazzucato cites (Mazzucato 2011, p. 18). These fields are integral to transhumanism. Wager, however, takes the "government needs to get out of the way" Randian fallacy and runs with it. Government is a force suppressing innovation, in Istvan's novel. This is a large part of the rationale for Transhumania, a utopia where inventors and scientists can go about their work without regulatory interference—and what government there is, is assistive rather than a hindrance. On Transhumania, a community of 10,000 scientists and innovators, working in three Roarkian skyscrapers, advances technologically far beyond the rest of the world, within a few short years. They develop better-than-biological

prosthetic limbs, new methods of human-machine interfacing, and their own more-advanced-than-America's drone weaponry. Medicinal methods of rejuvenating the body advance so far that effective immortality becomes possible.

BioShock portrays Randian absolutism in order to argue against it; The Transhumanist Wager embraces Randian absolutism as a path to a brighter future—and goes further than Rand ever did in suggesting what actions might be "necessary" in order to remake the world as a "libertarian" utopia. Istvan puts forward in his novel a vision of what can only be called libertarian totalitarianism. As the story reaches its climax, Transhumania's existence dwells on the minds of global leaders; they come to see this rapidly advancing new country as a major threat. Warships from the United States and other nations surround the floating community. The other nations attack first—ensuring Knights does not violate Rand's principle against initiating force. From here, however, Knights lays waste to the world. Four highly advanced drones (the four horsemen of the apocalypse?) are launched from Transhumania and destroy all the buildings housing the earth's political institutions; every major religious or historical monument is also blown up; countless men, women, and children are killed. The drones are named Trano, Cidro, Kijno, and Tabno—words for the elements that birthed life, in a new language Knights has invented: nitrogen, hydrogen, oxygen, and carbon. The description of the destruction is matter-of-fact:

Trano reached America's East Coast early in its evening and sent missiles to destroy the White House, the Capitol Building, and the Supreme Court. Centuries of legacy and past triumph were annihilated by three fiery explosions Kijno reached Europe early in the continent's morning. Its first missile was due to eradicate the Vatican at 8:20 A.M., local time. Catholic believers by the hundreds remained in the famous Saint Peter's Square, praying on their knees for a miracle. They were repeatedly warned by police and the media to depart the area. Along with the Pope, who was hiding below ground in the catacombs, all were incinerated by the single missile. ... Cidro soon crossed to Mecca, where the Kabba [sic] was obliterated. It continued to Jerusalem, where the Wailing Wall and Temple Mount were demolished In North America, Trano brought down ... the United Nations building in New York City.

Landscapes of destruction such as this—scorching the earth so a new beginning is needed—have a long history within radical and utopian political thought, as well as within science fiction; Wager is participating in this lineage. Istvan's deadpan accounts, dwelling little on the human cost, ironically make the destruction seem even more horrifying. Knights feels no remorse for his actions: "[H]e was not an archaeologist, but a futurist. And the relics of the past bore little value to him" (Istvan 2013a, pp. 266-67). He wants, of course, to surpass the human world. Rand stressed that she was not a conservative, but a radical for capitalism (Burns 2009, p. 195). Wager's protagonist takes Rand's privileging of innovation and futurity to a new extreme. He is a radical, and a violent one, for transhumanism.

The world conquered, re-formed in the image of how he'd like it to be, Knights docks Transhumania in New York City-the place Rand always saw as the locus of civilization—and assumes the role of dictator over the globe.⁶ He abolishes every former government and national border, naming all of earth as Transhumania. The wages of law enforcement officers are doubled and they are ordered to shoot looters on sight, as the transition to the new regime begins. It is reasonable to ask: If Knights becomes a dictator, how is his regime libertarian? It enacts as policy Randian and libertarian fantasies: the abolition of social welfare payments, for example. All healthcare is to be private, and there will be "no retirement options nor public pensions." Capitalism, private property, and free trade are to be the economics of everywhere, though government and compulsory taxation—"as little taxation as possible to reasonably govern"—will still exist. After the defeat of the old regimes, Knights gives a lengthy televised address, Wager's version of Galt's speech, where he announces the imminent end of death: the era of immortality is arriving. He also decrees, however, that certain individuals will be judged unfit to procreate in this new age: "People who can reasonably and successfully raise children will be allowed to procreate and encouraged to do so; all others will not be allowed to procreate." One aspect of socialism is associated with the new order: a global policy of free education, to prepare the world's populations for the era of transhumanity. Ignorance is to become a crime "punishable by excessive fines and hard labor in prison" (Istvan 2013a, pp. 281-82).

Jethro Knights remains as sole global ruler for 17 years. After this time, he feels that "everyone gets it," and so he allows the reintroduction of democracy (Istvan 2013a, p. 290). Jethro has engineered the world to suit himself, and so the masses do indeed now welcome their transhuman overlords: a long-time colleague of Knights is elected as president in his stead. *The Transhumanist Wager* involves a Randian fantasy write large: humanity's movement from diversity and pluralism, from contradictory impulses and complicated interrelations, to a singular set of ethics holding sway across the earth. The fact that Rand would not have endorsed certain of Knights's actions is irrelevant. Istvan received substantial impetus from Rand; he traces her work as he draws his own. Ayn Rand suffuses every page of Istvan's reverie.

Atlas Shrugged's revolution of the capitalists is fundamentally peaceful. Galt and his strikers know the economy cannot survive without them; they step aside, and allow the human world to bring about its own implosion. This is not to say that violence is never called for. Rescuing Galt from those who have captured him in order to torture him, toward the end of the novel, Dagny Taggart kills a guard who refuses to stand aside and let her into the compound where they are holding Galt. The guard's death is framed as his own fault, since he was unable even to make the simple choice to save his own life, when it was put to him that he would be killed if he didn't stand aside. The choice to kill-rather than simply wound or otherwise disable the antagonist—is made by a Randian hero, without remorse, because the antagonist has "brought it upon himself." That said, the fundamentals of the Galt revolution are non-violent: a strike rather than a coup. In Wager, Istvan does away with this Randian version of pacifism. Indeed, the "humanism" of Rand's final philosophy is stripped back entirely, so that its origin in simplistic Nietzschean will-to-power doctrine is laid bare—leading toward posthumanism. Andromeda implicitly critiques Rand on the basis of her philosophical association with Nietzschean Superman/social Darwinist doctrines. In Wager, the same creeds are presented as both inevitable and good: strength will out, and-evolutionarily-that is the way it is supposed to be. Transhumans will surpass humans and become posthumans. Wager includes many allusions to Nietzsche. The morality of the omnipotender is described as being "beyond a sense of good and evil." As Roark is mocked by Toohey as a Superman, Belinas mocks Knights as "this new transhuman superman." Most importantly, in terms of allusions to Nietzsche, the will to power is central in Knights's position:

[H]e believed he was an individual, self-sustaining entity, bent on acquiring as much power as possible. ... He wanted a universal dictatorship—or at least a draw—over everything and everyone. ... Deep down inside, it was the fabric of humankind, built into us from the start, millions of

years in the making: that we are each born unequal; that we are each born unfinished; that we are each born to conquer the other. Some may call it a *will to power*—though Jethro believed it was a *will to evolution*—an entity's most imbued trait, the DNA of the universe. (Istvan 2013a, pp. 52, 80, 136, emphases in original)

Knights only believes in "people's rights and actions if there's power behind it. ... The smarter and more powerful entity will triumph over others" (Istvan 2013a, p. 60). There is nothing new in using Rand to promote such a "brutal," "might is right," anti-egalitarian and anti-humanitarian view of existence. Indeed, in its overt rejection of a Christian God and its call to sacrifice the weak, Istvan's text is reminiscent of another ideology with similar tendencies—the Satanism of Anton LaVev and The Satanic Bible (1969), which LaVey himself described as "Avn Rand with trappings," "just Ayn Rand's philosophy with ceremony and ritual added" (qtd. in Peterson 2009, p. 2; and Lewis 2009, p. 50). According to one latter-day Satanist commentator, "Satanism has far more in common with Objectivism than with any other religion or philosophy" (Nemo, n.d.). However, it has even more in common with Knights's creed. Satanism, like the philosophy of the omnipotender, sees the strong dominating the weak as natural and inevitable, and incorporates this into the basis of its morality: "The Satanic view sees as ethical the reality of domination of the weak by the strong. The assertion in Objectivism is that the use of force to cause others to submit to the will of the stronger or cleverer individual is 'wrong' for the individual. This ... assertion ... Satanism finds unproven by the Objectivists" (Nemo, n.d.). Despite claiming that power, for her, did not involve control of other people, Rand's work, with its veneration of strength and its anti-altruistic proclamations, lends itself to such philosophies.

In terms of the specifically *posthuman* vision of *Wager*—the posthuman future to which its portrayal of transhumanity leads—it is a vision of minds conquering the universe. Knights yearns "for the universe that only his will forged"; Earth "is not a permanent home; it's just a starting point" (Istvan 2013a, pp. 171, 281). Bodily form matters less than immortality of the individual consciousness, and expansion of the individual consciousness. It is a vision of Extropy. Following Haraway, Knights suggests that we may become "androgynous" beings (Istvan 2013a, p. 145). But this is the only overlap with Haraway's posthuman concept. Randian individuality, "rationality," and the will to technology

are paramount. Echoing *Brave New World*—but stating its vision with sincerity—by the end of the novel, all human reproduction is accomplished via the test tube; it is more efficient and removes the chance of unwanted pregnancies: the mind takes total control of the bodily processes. The next step will be improved vessels for the mind. Genetic engineering of humans is already commonplace. The plan is that within a century, consciousness will no longer be biological; humans will transform into "cyborgs, conscious machines, and even artificial intelligences." Beyond that, life will become "all energy, or living software, or created quantum fields of probabilities." Knights's appeal in his "Galt speech" is to an evolution toward computerized rational accomplishment, in competition with other powerful entities: "You must strive to emulate the pure computational process of a goal-driven computer" (Istvan 2013a, pp. 178, 279, 283).

The Transhumanist Wager exemplifies Rand's view of art as a utopian space, which she expounded in her literary call-to-arms, The Romantic Manifesto: "[A]rt ... shows, it displays the full, concretized reality of the final goal." Rand reiterates the Aristotelian view that fiction is more philosophically potent than history, since fiction can present things as they might be and ought to be (The Romantic Manifesto, pp. 77, 163). Wager presents the completed vision of the ideal, which Istvan hopes his readers will put into practice (not necessarily the mass killing, one suspects, but a future where the transhuman imperative is paramount). Whatever else it is, Wager is a novel of big ideas about human destiny and the shape of the future. The ideas themselves are not original—transhumanism has been a presence on the cultural scene for several decades—but Istvan puts forward a position on them which is nothing if not provocative. As has been exposited, he uses Rand—one of the most influential philosophical writers of the latter twentieth century—as a basis for his twenty-first-century philosophy. As described in Chapter 3, Rand identified the primary moral choice as whether to live or not to live. Istvan elaborates on a choice which, we could say, comes after this primary Randian choice, in an era of transhuman possibilities. If one chooses to live, then the next choice—in transhuman time—is whether or not to live forever. Istvan's hero is prepared to do whatever it takes so that he can.

Rand's work supports a posthuman vision, because her work has been used to support posthuman visions: it has influenced technology entrepreneurs and transhumanists (whose works are precursors to posthuman futures) to do what they have done. On the level of the texts

themselves—as covered in Chapters 2 and 3—Rand's particular ideology of individual accomplishment, capitalism as an exciting environment, and technology as among the highest aims of man, must be considered crucial in terms of why she has had the impact she has. This is also why she continues to be brought into the science-fictional sphere. In the science fiction of Andromeda, BioShock, and Wager, Rand is being talked about, in the context of a more advanced technological moment, in a context of posthumanism. The Transhumanist Wager—and, indeed, all examples discussed in Chapters 4-6—demonstrate that Ayn Rand continues to be relevant in the twenty-first century, and especially within the culture of technology-fetishism that is particular to the twenty-first century.

Notes

- 1. Unsurprisingly, the Libertarian Party itself has a long association with Rand. It was founded in 1971 by a Rand admirer, David Nolan. Especially in the party's infancy, Rand's works were a vital driving and binding force—even if the philosopher herself denounced libertarians in general, and the Libertarian Party, as thieves; they had stolen her ideas and mangled her meaning, she argued. Burns describes Rand's writings as "a sort of ur-text" for modern American libertarianism: "They could be challenged, interpreted, reinterpreted, adopted, celebrated but never ignored" (Burns 2009, pp. 258, 266-68). Gary Johnson, the Libertarians' presidential candidate in 2012 and 2016 (who is also a former two-term Republican governor of New Mexico), once gave his fiancée a copy of Atlas Shrugged and said: "If you want to understand me, read this" (Daily Beast 2012). Electorally, the Libertarian Party is dwarfed by the dominance of the Republicans and the Democrats—though it remains America's third largest political party.
- 2. "There are strong parallels with Atlas Shrugged" (Prisco 2013); "[T]he universe created by Istvan gave me an experience highly reminiscent of my reading of *Atlas Shrugged* more than a decade ago" (Stolyarov 2013); "Many say The Transhumanist Wager is the new Atlas Shrugged" (Marin 2014).
- 3. "This story ... is the result of two decades of thought and inquiry into transhumanism and the quest for scientific immortality. I wrote it hoping to change people's ideas of what a human being is and what it can become" ("Author's Note," Istvan 2013a, p. 298).
- 4. This is the suggestion given by Dr. Hendricks's inspection of Dagny after her crash (Atlas Shrugged, p. 711).

- 5. "Rather the state can proactively create strategy around a new high growth area before the potential is understood by the business community (from the internet to nanotechnology), funding the most uncertain phase of the research that the private sector is too risk-averse to engage with, seeking and commissioning further developments, and even overseeing the commercialisation process" (Mazzucato 2011, pp. 15–17).
- 6. Rand called NYC "the greatest monument to the potency of man's mind" (qtd. in Heller 2009, p. 79).

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CHAPTER 7

Afterword: The Mind-Made Future

The "world" is no longer only this planet, but our solar system. The human sphere spans colonies from Luna to Mars to the Kuiper Belt. Earth has become a nature reserve and museum site, a tourist attraction billions visit every year to witness "where their remote ancestors came from, and how they lived." This future began in the twenty-first century. Socialism and religion had been discredited. People were searching for a new hope, and they found it in a code that rejected both of those altruistic ideals, and in turn celebrated the science and technologies that were integral to modern ways of life. In their masses, individuals turned toward Ayn Rand's Objectivism. The continuing march of capitalism and globalization created "[i]ust one First World." Humans settled the ocean—the surface and the seabed. Then came the off-world colonies. The state became less important in people's lives, since almost everyone was now following a rational ethics. Eventually government disappeared altogether, and individuals could deal with one another person-to-person, in complete confidence that Objective law would be followed. All the while, human life itself was being extended. We came to know that, one day, our descendants would live on other planets, and be immortal: "We have met God and he is us." Heaven was normal, and not part of any supernatural realm. Heaven was ourselves (Cookinham 2005, pp. 1–4, 217, 280–81, 352–53, 419–26, 436).

This is the vision of the future presented in Frederick Cookinham's creative treatise *The Age of Rand: Imagining an Objectivist Future World* (2005). Cookinham's vista encapsulates, in a different way, so many of

the points elaborated in this volume: Objectivism's science-fictional imagination, and its hope for homes in space; Rand's link, through libertarianism, to seasteading and transhumanism; the ultimate posthuman possibilities of a society that follows Randian philosophy: when the conquering of nature is paramount, and technological development enables us to choose different bodies for being, then it will be done. This book has been an attempt to place and to parse these visions in an academic context.

The century is young, and could take us many places. But one thing is certain: Ayn Rand is not going away. On the contrary, her presence in the world continues to grow. The Ayn Rand Institute in April 2015 launched a European arm in Copenhagen, taking the fight to the heart of the "Nordic model" of social democracy. A previously unpublished Rand novel from 1934 was released in the summer of 2015, while books which update her views for today's socio-political environment continue to be published by Objectivist commentators. Rand was added to the A-Level politics curriculum in the UK in 2017. More bizarrely, a former California real-estate agent has attempted to establish a community for American expatriates called Galt's Gulch Chile, "in a secluded valley 17 kilometres from Curacavi" (Economist 2013); a self-sustainable resort "with the same vision" a Rand's Atlantis (Galt's Gulch Chile, n.d.). Payments were accepted in Bitcoin—the cryptocurrency that has taken the financial world by storm, and itself has origins in Rand-fired Extropianism.¹

The major political-economic issue of the day, the biggest threat to the happiness and cohesion of societies, may be the level of income disparity between the wealthiest elite and the rest of the population. French economist Thomas Piketty set alight debate over the inequalities of capitalism with his 2014 bestseller Capital in the Twenty-First Century. Piketty, in Marxian style, argues that disparities in wealth are greater than at any time since the nineteenth century, and urges redistributive measures. The Randians have an answer on inequality too. In a 2016 book, Equal Is Unfair: America's Misguided Fight Against Income Inequality, the ARI's Don Watkins and Yaron Brook argue "that the key to protecting America's status as a land of opportunity, where individuals are free to rise as far as their ability and ambition will take them, is rejecting the immoral creed of the egalitarians."² Brook put the Objectivist view succinctly in a podcast: "Income inequality in a free society? Who cares?" (Brook 2012). It would be a major mistake to think that, because they

seem so out of tune with a certain consensus, Objectivist views can be ignored as irrelevant. Rand has seen off all detractors thus far; the foothold of her influence in the boardrooms, in the political offices, and on the main streets of America is as strong as ever. As Gary Weiss puts it, the "tragedy" of Objectivism is that it requires re-debating the "first principles" of modern social democracy, from the existence of child labor laws to publically funded education (Weiss 2013, p. 208). But this struggle is going on—and the opponents of Rand's worldview cannot win unless they are in it. In order to be countered, Rand's influence must first be understood.

Posthumanism, depending on how you look at it, is either already here or a sure thing for the future. To some, it is our mode of being in the twenty-first century, connected as we always are to technology that enhances our capacity and changes how we interact with each other and the world; natural biology has already been downgraded. To others, we must seize our technological moment in order to make the future a posthuman one, where our abilities are not just facilitated by technology but we are remade in its image. As we have seen, many who advocate the latter have sharpened their beliefs and arguments via Ayn Rand. From a certain point of view, transhumanism is a logical extension of Objectivism; according to this view, Ayn Rand points the way to the posthuman future.

Academia has been responding to Rand's rise in the culture. Burns writes that in particular, "[f]inally, Rand has begun to find her place within the literature about conservatism and the American right that has flourished of late in the historical profession" (Burns 2009, p. 297). That Rand is being taken seriously in the academy is a turnaround, and a welcome one. An author with such colossal reach should not go without scrutiny. Transhumanism, too, has made its way from a fringe discussion, into academia, joining its more radical cousin, the Harawayan posthuman, in the arena of scholarly respectability. A key moment was the publication by Wiley-Blackwell, in 2013, of *The Transhumanist Reader: Classical and Contemporary Essays on the Science, Technology, and Philosophy of the Human Future*, edited by Max More and Natasha Vita-More. Also that year, the number of references to transhumanism in mainstream media increased threefold.³

Battle lines have been drawn over the trans-/posthuman future. *Foreign Policy*, in 2004, asked well-known intellectuals to name "the world's most dangerous idea." For Eric Hobsbawm, as the wars raged in

Afghanistan and Iraq, it was the notion of "spreading democracy." For Francis Fukuyama, it was transhumanism.⁴ Fukuyama's Our Posthuman Future (2002) argues that if some individuals became radically enhanced through artificial means, the human race would be robbed of its essential equality: the fact that we are all naturally born humans. This could only have deleterious consequences for social cohesion. The period of George W. Bush's presidency was a low point for advocates of the transhuman, with conservative philosopher Leon Kass heading up the President's Council on Bioethics (PCB), to which Fukuyama was also appointed. James Hughes summarizes: "Kass's appointment was a reward to the pro-life religious conservatives as he had consistently opposed in vitro fertilization, cloning and other medical technologies on the grounds that they rob us of 'human dignity.' Kass made opposition to all human enhancement technologies, from pharmaceuticals to genetics, the principle agenda of the PCB." Transhumanists such as Hughes argue, on the contrary, that if we can prevent suffering with genetic engineering and other enhancement mechanisms, and afford people more choices over their own lives, then we must do so. "[W]e can never understand all the consequences of any technology," writes Hughes; therefore, we must proceed with caution—but proceed: "People will be happiest when they individually and collectively exercise rational control of the social and natural forces that affect their lives" (Hughes 2004, pp. xiii-xiv, xvii-xviii).

We may become posthuman, as the transhumanists see it, or we may not. The most epoch-altering developments have tended to get pushed farther and farther into the future. If we ever are able to remake completely our bodies and minds through choice, it remains to be seen if this will be greeted as a welcome opportunity by most people, or exist as a kind of fashion statement among a tech-savvy elite. In either case, the question of the posthuman looms large over our moment in history: "[T]he debate about human enhancement and posthumanity has moved from the fringes of cyberculture, science fiction and bioethics to the apex of the federal policy debate" (Hughes 2004, p. xiv). Similar issues are clearly playing on the minds of business leaders, when the CEOs of two of the world's most important companies—Elon Musk of SpaceX and Mark Zuckerberg of Facebook—are holding public arguments over whether artificial intelligence will benefit humankind or wipe us out (Wakefield 2017). What Rosi Braidotti writes in the inaugural issue of the Journal of Posthuman Studies, in 2017, is true of all senses of

posthumanism: "Whether we appreciate the term or not, these are posthuman times and scholarship in this field is in full expansion. Spectacular developments ... have altered our shared understanding of what counts as the basic unit of reference for the human" (Braidotti 2017, p. 9).

Personally, I have no desire currently to live forever. What makes life meaningful is the fact that it is limited. This is what lends a sublime urgency to our day-to-day. There is plenty of evidence to suggest—contra Rand and the transhumanists—that people are happiest and most driven only after, and as a consequence of, major suffering in their lives (Jim Rendon's Upside: The New Science of Post-Traumatic Growth [Touchstone, 2015] is a compendium of evidence on point). At the same time, the drive for human betterment—doing things smarter, faster, for longer—is deeply ingrained in individuals and societies. It cannot be snuffed out, and the push toward the posthuman must be seen in this tradition. The benefits of genetic engineering and other "transhuman" advances when it comes to curing diseases and prolonging life cannot be ignored, and seem likely to be looked on increasingly favorably by individuals and governments desperately seeking remedies for cancer, dementia, and other ailments, notwithstanding arguments about slippery slopes. For these reasons alone, outright prohibition on transhumanist technologies is likely to fail.

An important exercise as we address the question of the posthuman is that we "put Rand in her place." By this I mean, recognize her importance in the growth of the issue; equally, we must not be guided by absolutism such as Rand's as we look to set policy. Liberal democracy enables relative order and general freedom by accepting that not all conflicts of interest are resolvable, either within or between human beings. Liberal democracies recognize that competing ideologies and individual and group interests exist within a single polity, but it is nevertheless possible to establish common ground through institutions in which everyone in theory has a stake. The overarching ideology is multi-fit. Rand's ideal—that conflicts of interest can all be resolved—unrealistically depends upon the widespread acceptance of a mono-form ideology.

We must not be guided by any extremism when it comes to how our societies are run. In relation to the posthuman as much as anything else, what is important is to manage the future with liberal democratic principles, Popperian principles—sensible of both the limitations of government and its importance in our shared betterment, ever-mindful to check the utopian impulse and the impulse to despair. I am not an advocate of the transhuman agenda, but I do believe that government cannot hold

back all its consequences, and indeed can guide its use toward humane or humanist ends, even if those standards are themselves shifting. If we accomplish this, maybe the human, in whatever form it survives, will be okay.

Notes

1. Giulio Prisco has an illuminating article on this topic, demonstrating connections between Rand, Extropianism, and Bitcoin. For example, Hal Finney, "Bitcoin pioneer and the first person to ever receive a Bitcoin transaction," frequently participated in online discussions by Extropians, on transhumanist topics and on cryptography: "The discussions of cryptography ... were informed by a strong Libertarian stance that was characteristic of the early phase of Extropy, similar to the philosophy of Ayn Rand's hero John Galt." Prisco goes on: "At the Extropy Institute's fifth annual conference Extro-5, in 2001, Nick Szabo spoke of smart contracts which solved the problem of trust by being self-executing, and property embedded with information about who owns it. For example, the key to a car sold on credit might only operate if the monthly payments have been made. These ideas are clear precursors of 'Bitcoin 2.0' technologies [Extropy discussion group participants] Hal Finney, Nick Szabo, and Wei Dai have [all] been rumored to be Satoshi Nakamoto, the mystery man who announced Bitcoin in October 2008." Prisco concludes: "I suspect that Satoshi Nakamoto may have been lurking or even participating, under other pseudonyms, on the Extropy list." It's apparent that both Randian ideas and the arena of transhumanism contributed to the progress of Bitcoin (Prisco 2014).

Bitcoin is created when it is digitally "mined," with rewards accruing to those who discover new sources of it. The original currency was also set up in such a way that an upper limit exists on the number of Bitcoins that can ever be created (the digital mines will eventually be empty). These two facts call to mind not only a Randian/libertarian entrepreneurial spirit, but also Rand's fondness for the gold standard, something shared by many libertarians. In Galt's Gulch, the bank mints gold and silver coins, since precious metal can be the only true currency: a finite resource with "objective" value, as opposed to paper which can be printed endlessly. The aim of Galt's Gulch Chile was that its whole economy would be based on Bitcoin. Ken Johnson, founder of the project, said: "Bitcoin as the John Galt Coin? Why wouldn't it be?" (*Economist* 2013).

2. "Ayn Rand Enters the Inequality Debate," Ayn Rand Institute letter to subscribers (email received by author), July 18, 2015.

- 3. "'Articles and mentions of transhumanism and life extension science have tripled in 2013 in major media,' says Kris Notaro ... Managing Director of the Institute for Ethics and Emerging Technologies" (Istvan 2013).
- 4. The article appeared in the September–October 2004 issue of *Foreign Policy*, and is reproduced online (Fukuyama 2009).

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