STEAM MEN, EDISONS, CONNECTICUT YANKEES: TECHNOCRACY AND IMPERIAL IDENTITY IN NINETEENTH-CENTURY AMERICAN FICTION

By

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Abstract

This dissertation analyzes the representation of technology in U.S. popular fiction of the nineteenth century, particularly as it relates to concepts of imperial expansion that shore up the period's constructions of American identity. The proto-science fiction works of Edgar Allan Poe, Edward S. Ellis, Luis Senarens, Mark Twain, Pauline Hopkins, and Garrett P. Serviss all imagine technology's ability to facilitate expansion and construct an American technocratic ideal. As these dime novels and popular works establish the dominant template for the portrayal of technologically enhanced exploration, they articulate two mutually reinforcing narratives tied to U.S. empire-building and power. First, these works imagine scenarios in which technology enables the same kind of travel and violent conquest found in imperialism, but develops such ideas into a recurring motif that frequently resists or complicates outright jingoism or nationalism. Second, they consider the role that technologically enhanced exploration plays in supporting a broader U.S. imperial identity, frequently by reiterating earlier, prevailing articulations regarding what it meant to be American. What begins as a narrative that imagines the possibilities of technology becomes a means to imagine scenarios in which prevailing views of race, religion, and history can be examined and reasserted.

Table of Contents

Introduction: Steam Men, Edisons, Connecticut Yankees

The October 1920 issue of *Science and Invention* magazine features a three-page profile

of dime-novel author Luis P. Senarens entitled "An American Jules Verne." The magazine,

which had up to that point focused exclusively on articles showcasing practical experiments and

explaining mechanical processes, had just begun to publish fiction that featured scientists as the

main characters. In many ways, the Senarens article demonstrates an act of historical

contextualization on the part of the magazine's publisher, Hugo Gernsback, as he calls readers'

attention to the larger tradition of science-based fiction from the nineteenth century. It would

prove the beginning of a major publishing movement; in six years, Gernsback would create

Amazing Stories, the first American magazine devoted exclusively to science fiction and the

magazine that defined "science fiction" for many early twentieth century readers.[1] The

"American Jules Verne" article served to reintroduce Senarens to the American reading public,

noting him as a forgotten writer whose pseudonym, "Noname," prevented him from receiving

due credit for imagining in the nineteenth century the technology that *Science and Invention*'s

twentieth century audience took for granted, such as "the trolley car, the telephone, the

submarine, the aeroplane . . ." (622). The article states

> Lu Senarens, known to tens of thousands as "Noname," was perhaps the most
>
> prolific of these [dime-novel] writers, and one of the most prophetic. Not only
>
> did he turn out a host of these wonderful stories, but he wrote over one thousand
>
> of them, each of them containing from 35,000 to 50,000 words . . . . The hero of
>
> most of these stories was Frank Reade, Jr., "the boy inventor," who supposedly
>
> invented all of the many marvelous scientific inventions of that day. (622)

The article also reproduced the covers of the dime novels Senarens wrote during the 1880s and 90s, featuring extraordinary inventions such as an "electric horse," a submarine, and an airship with six helicopter-like propellers called "the Greyhound of the Air." It also focused on the prophetic nature of the author's work by claiming that "Nine-tenths of Lu Senarens' pictured predictions have actually come true" (623). The piece on Senarens, then, achieves two tasks: it promotes science-oriented fiction's ability to imagine concepts that will later become reality and it showcases an author from a previous era whose output resembled the kinds of fiction found in *Science and Invention*, defining the magazine's new direction by reinvigorating discussion about an exemplar from an earlier age.

Viewed on its own terms, the Senarens article provides insight into the development of the science-fiction genre. The story of nineteenth-century science fiction, however, has implications beyond its generic history, and *Science and Invention* points to this as well. The same issue features a cover story by Gernsback entitled "Science Explains the Great Flood." A full-color painting on the cover features an enormous tidal wave about to crash down on tiny, stick-figure people in the bottom, left corner of the page. This article stands out as a significant indicator of the state of science in the minds of American readers drawn to both practical invention and fictional accounts of science. It offers an explanation for the flood described in the book of Genesis, noting fossil evidence of a worldwide flood and anthropological reports detailing the prevalence of a flood myth across many religions; the article also mentions professors who assert the Biblical story of the deluge was founded in fact. The story culminates by presenting a "plausible reason" offered by the editor himself that posits

If some celestial body in its wanderings thru the heavens past [sic] sufficiently

close to the earth, that is within ten or twelve thousand miles, there is no question

of a doubt that such an encounter would have caused havoc on earth . . . . The

mutual gravitational influences would then raise tremendous tidal waves not only

upon earth, but upon the other heavenly body as well, providing there was water

on it.

Now if Noah had been, as he presumably was, a wise man, he no doubt

would have been able to foresee what was coming, just as any astronomer can

foretell the return of a comet years in advance. (667-668)

This example shows a major science magazine negotiating the terrain between scientific

fact and religious history. Gernsback's explanation is pure conjecture; the hypothesis simply

provides a *possible* explanation of the flood rather than a scientific verification of the event.

Despite its opening note that the flood was "not taken seriously" by previous scientists, the entire

article undertakes an approach in which science serves Biblical history, holding out the

possibility that hard evidence proving the Bible's accuracy can be found under the right

circumstances. For my purposes, the article is less important for the theory presented by

Gernsback the would-be scientist than for what it demonstrates about Gernsback the publisher.

Clearly, he had a sense that an article offering an allegedly scientific explanation of the Biblical

flood--presented as a factual, historical occurrence--would sell magazines, not merely as an

article but as the month's cover story. Gernsback understood that American audiences were

receptive to narratives in which science and Christianity were made to blend harmoniously.

This project examines how the use of technology envisioned by nineteenth century

writers facilitated the view of science, religion, and history in the United States that made

discussions such as Gernsback's 1920 flood article possible. In many ways, Gernsback's article

comes at the culmination of a longer narrative development in nineteenth-century proto-science

fiction. Stories created by authors such as Senarens established a template for the portrayal of

science and technology in the late nineteenth century, a template adapted and expanded upon by

writers such as Mark Twain, Pauline Hopkins, and Garrett Serviss. This study charts how these

narratives develop from tales focused predominantly on technological expansion on an

individual level to broader considerations of precisely what that type of expansion said about

Americans, how they conceived of themselves, and what they valued.

 Scholars generally understand that the technological stories that flourished in the

postbellum United States connect with larger socio-political transformations of that era. Most

critics agree that the "boy inventor" dime novels of nineteenth-century America participated in a

conversation about technology and American identity. By presenting their youthful,

predominantly male audience with stories of technological empowerment, these works

established a narrative in which independent young men could make a difference in the world

through applied science. In 1993's *Encyclopedia of Science Fiction,* John Clute dubbed such

works "Edisonades," evoking the spirit of inventor Thomas Alva Edison, who came to

prominence during roughly the same time frame.[2] Clute describes the components of the story,

defining an Edisonade as

> Any story which features a young US male inventor hero who uses his ingenuity
>
> to extricate himself from tight spots . . . . The invention by which he
>
> accomplishes this feat is not, however, simply a weapon, though it will almost
>
> certainly prove to be invincible against the foe and may also make the hero's
>
> fortune; it is also a means of transportation--for the Edisonade is not only about
>
> saving the country (or planet) through personal spunk and native wit, it is also
>
> about lighting out for the Territory. (368)

Edisonades portray an idealized version of independent technology creation that results in traveling to a distant location and engaging in combative adventures. In the standard dime-novel variant, the invention--be it aircraft, land rover, submarine, or other--offers protection from violent attack and serves as a staging ground for other advanced weapons, such as bombs or machine guns, that often far exceed the armaments of the traveling protagonist's opponents. Everett Bleiler, whose seminal research into dime-novel SF helped define the Edisonade sub-genre, finds these texts filled with "aggressive, exploitative capitalism, particularly at the expense of 'primitive' peoples [and] the frontier mentality, with slaughter of 'primitives'" ("Dime-Novel SF" 335). Bill Brown notes that "The inventor fantasy . . . not only satisfied the adolescent longing for autonomy and fabulous individual achievement; it expressed the jingoistic and racist longing for imperial conquest" (360). Brown succinctly relates the concepts expressed in the tales to the larger cultural movement toward U.S. empire that coincided with these tales' proliferation. Clute underscores this fact, taking it even further by noting that the Edisonade's "basic story has been an essential shaper of US realpolitik for more than a century" (370). As Clute suggests, the legacy of the Edisonade is still with us, part of a broader concept of American identity in which a blend of rugged individualism and technology commingle to allow expansion of power. Because of its promise that spirited individuals will create inventions to aid both mobility and martial capabilities, the Edisonade is by its nature pro-expansionist, militaristic, and technocratic.

But what *kind* of technocracy does it promote and how does that conception figure into late nineteenth-century Americans' views of themselves? On a very basic level, technology facilitates imperialism by providing the mobility needed to reach new territories and the military advantage needed to control populations. Moreover, it contributes to an imperial mindset by

fostering in technology users a sense of superiority that justifies and legitimates the imperial

endeavor. It reaffirms the sense that they have a more advanced culture worthy of leadership,

justified in controlling others outside their group. Certainly, Edisonades relate such a

technocratic mindset to their readers. They do this, however, while also focusing on the

autonomous actions of the single, independent technocrat, essentially celebrating technology's

ability to help an individual engage in larger actions without recourse to any larger civic body.

Technocracy, as it is portrayed in the texts covered here, valorizes the use of practical

engineering on an individual basis to achieve personal gain.[3] Thus, I suggest that while these

stories celebrate the tinkerer-hero and his problem-solving abilities, they do so in a manner that

complicates and sometimes confounds their function as allegories of nation- or empire-building.

While they may have fostered an imperial view in an indirect way, their narrative particulars

feature elements that resist or complicate outright nationalism or jingoism. The technocracy

found in these tales is skeptical of organized authority, including governments, and does little to

imagine the systematic use of technology to transform the larger status quo.

Instead, as it develops, American technocratic fiction concerns itself with the technocrat's

place in a broader U.S. identity and is more concerned with reestablishing existing definitions of

American identity rather than using technology as a springboard to consider alternative

possibilities or to re-imagine those definitions. All these works view technology as a positive,

enabling power, but they value it less for its ability to create change than for its ability to shore

up prevailing worldviews. The genre moves from the exclusively militaristic, individualistic

technology of early works, such as Edward Ellis's *The Steam Man of the Prairies* (1868) and

Senarens's Frank Reade, Jr. books to broader considerations of technology's role in shaping

national identity, as found in Twain, Hopkins, and Serviss. These books are significant as much

for their conceptions of the technocrat's role in the U.S. imperial identity than for their overt portrayals of territorial expansion and control.

When a nation extends its territory through imperial conquest, it necessarily understands and justifies this action though appeals to its prevailing values and identities. Edward Said has defined imperialism as "the practice, the theory, and the attitudes of a dominating metropolitan center ruling a distant center . . . . [Imperialism is] supported and perhaps even impelled by impressive ideological formations that include the notions that certain territories and people *require* and beseech domination" (9). The nineteenth-century U.S. imperialism addressed here contains some idiosyncrasies that require elaboration from Said's foundational definition. In general, U.S. imperialism deals with westward expansion on the North American continent--the well-known era of Manifest Destiny--by which new territories are brought into control and made part of the Union. The closing of the frontier in the 1890s coincides with stirrings to expand internationally, culminating with the Spanish-American war in 1898 and the acquisition of protectorates that followed. Shelly Streeby and Jesse Alemán have cautioned scholars of nineteenth-century literature against focusing studies of U.S. imperialism on the key date of 1898, noting that such an approach ignores the string of exploration and subsequent territorial acquisitions that occurred throughout the nineteenth century, punctuated by military excursions such as the Seminole Wars, the Mexican-American war, and others (xiv). In *Habits of Empire*, Walter Nugent addresses U.S. imperialism in such a context, emphasizing continuities between nineteenth-century expansion and imperialism and the earliest European colonization of the New World: "The frontier experience, ever since Plymouth and Jamestown, taught Americans . . . that they should expand the area of civilization and shrink the area of savagery, first on the North American continent, then across the Pacific and around the Caribbean, and then around the

world . . . . (304). While the post-1898 phase of U.S. empire conforms most closely to Said's description, that stage is merely a continuation of an already-established impulse that the literature of the era established, reflected, and refined.

By U.S. imperialism, then, I mean the ongoing expansion of the U.S. nation-state, with its predominantly Anglo-Protestant doctrines of nationalism, ethno-racial categories of citizenship, and market-based definitions of freedom, into new territories, frequently accompanied by the militaristic assertion of this worldview over the territory's original inhabitants. By focusing on frontier exploration and technocratic ideological formations, I am including the earliest stages of the kind of practice Said addresses, particularly the narrative portrayal of the actions that dramatize such a system prior to the actual domination. Heeding Streeby and Alemán's warning, my definition is not limited to the era of international expansion that occurred in the wake of the Spanish-American War, although that is indeed a significant moment in the growth of American empire. From this perspective, the Indian wars described in Edgar Allan Poe's antebellum science fiction and Ellis's frontier tales are articulations of the same impulse guiding the broader interventions addressed by Twain, Hopkins, and Serviss. These stories all imagine variants of this kind of technocratic expansionism, be the ultimate location of that action the American Southwest, Cuba, Camelot, Africa, or the planet Mars.

But empire requires more than simple territorial control. Imperialism involves the "ideological formations" mentioned by Said, new narratives, ideas, and norms concerned with both the imperial practices, the controlled Other, and the imperialists themselves. All of the fictions examined in this study reveal aspects of these new formations, particularly regarding how technology might enable territorial expansion, military might, and the dominant American values and viewpoints. When I discuss an American *imperial imaginary*, I am dealing not just

with the imagining of overt nationalism and militarism as means of extending cultural influence, or of imaginary technology that facilitates imperial designs in these stories, but also the self-vindicating conceptionalization of American identity behind it. As Benedict Anderson has asserted, the nation itself is an "imagined political community [that is] both inherently limited and sovereign" (6). Likewise, the imperial imaginary represents the place where concepts of race, religion, social class and other factors construct new forms of imperial consciousness. In the case of this study, I focus primarily on how concepts of technology use and exploration factor into Americans' understanding of such issues.

Simply put, these proto-SF works deal with how Americans perceived themselves, particularly in the context of technological interventions in the global order. Each of the fictional works I address represents imagined technology, and with those representations come a conception of how the world operates; the way that technology is used or not used in the narrative provides clues to the society's values. As American authors envision how their protagonists will use or react to these inventions, they establish a narrative template for this identity. Thus, I use the term "imperial imaginary" to define the Edisonades' technocratic expansionist values and their relation to the prevailing definitions of "American," including its well-documented assumptions concerning whiteness and Protestantism. While the stories do not all articulate precisely the same viewpoint on these subjects, nevertheless they utilize the same narrative template that emphasizes a common fascination with technology, invention, expansion, and the complexities of U.S. identity.

"Steam Men, Edisons, Connecticut Yankees" is guided by the idea that texts reflect the culture that produces them and in turn help shape that culture. I build on the foundations laid by other studies of the cultural significance of popular texts. Jane Tompkins characterizes this

approach in *Sensational Designs*, her study of popular nineteenth-century American works, by noting that the goal of such a study is "to explore the way that literature has power in the world, to see how it connects with the beliefs and attitudes of large masses of readers so as to impress or move them deeply" (xiv). The underlying tenets of her research into sentimental domestic fiction--that complexity and cultural resonance are not reserved for elite literary forms alone, and that popular literature can be simultaneously accessible and thematically complex--apply to the dime novels and popular texts addressed here. In addressing the larger cultural resonance of popular texts, Tompkins's method echoes the line of reasoning found in Anderson's *Imagined Communities*, which asserts that print culture shapes nationalism. Anderson argues that newspapers and novels helped create collective conceptual "simultaneity" that facilitated emerging national consciousness in the early modern world (37). The bourgeoisie were able "to visualize in a general way the existence of thousands and thousands like themselves through print-language" (77). Anderson gives the example of novels and newspapers as replicated forms that allow and encourage the reader to formulate a conception of his or her shared community. For example, someone reading a newspaper is "continually reassured that the imagined world is visibly rooted . . ." rather than an intellectual construction (35). As such, a nation's identity is founded, in part, through its popular literature; forms such as the mass-produced, youth-targeted dime novels of the Edisonade helped shape the way this ideology was conceived by young readers of the era preceding America's emergence as a global imperial power.

To understand how Edisonades operate, I utilize Michael Denning's *Mechanic Accents*, which defines strategies for analyzing dime-novels in which most of the genre's early articulation takes place. Denning points out that dime novels' working-class audiences engaged in a complex reading process; early dime novels presented a "contested terrain, a field of cultural conflict

where signs with wide appeal and resonance take on contradictory disguise and are spoken in contrary accents" (3). He concludes that dime novels were "neither vehicles for workers' self-expression, nor the propaganda tools of capitalists; they were a stage on which contradictory stories were produced" (81). Thus, *Mechanic Accents* highlights the complex relationship that popular texts have with their audience and the ways those audiences envisioned the world. Using Denning's approach helps articulate the multiplicity of ways narratives in popular texts can resonate culturally.

In their development, the technocratic novels studied here performed two major cultural actions. First, they served to separate science and technology in the minds of American readers, presenting plots that simultaneously underscored science's mutability and proposed technologically enhanced exploration as a means to recover an earlier historical status quo. While the distinction between "science" and "technology" may appear obvious to twenty-first century readers, it is important to consider the major role such a distinction played in the development of science in America, and how the boundaries between the two were frequently blurred. As historian of science Robert Bruce points out, during the nineteenth century, science moved out of the realm of the "self financed amateur" and into two differing professional roles (135). Pure or applied "science" became the domain of a professional class of scientists whose research was supported by academic posts and grants from government (135). "Technology," in contrast, developed from the work of middle-class engineers and inventors who "carried on no experimental research to derive new principles or generalizations" but "used well-known mechanical principles" to create tangible (and patentable, and lucrative) benefits (155). Despite this increasing split between the fields, many American scientists who hoped to vindicate their theoretical work "heartily endorsed the delusion" that all theoretical science would result in some

practical application, a trait which, as Bruce points out, continues in the sciences today (128).

The distinction carries an economic aspect as well, as theoretical scientists surely understood.

Bruce notes "In applied science . . . the basic theory is the child of curiosity whereas that of

technology stems from hope of material gain" (150).

The Edisonade overwhelmingly focuses on technology rather than theoretical science,

validating its use to extend individual power, dealing less with pure material gain than in the

extension of influence and autonomy that it can provide. While most real scientific work occurs

in some spectrum between the two poles of technology and science, most early American proto-

science fiction eschews the latter for the former. From the perspective of literary genre,

"technology" most obviously signifies the weapon and/or transportation mechanisms created and

assembled by inventors found in the Edisonade. Additionally, "technology" denotes the use of

existing scientific knowledge to create concrete results, including the invented object and its

impact on the real world. Technology in the Edisonade is both process and product. In these

stories, the protagonists are *technologists*, essentially middle-class, independently minded

inventors who build machines and weapons through hard work and ingenuity. In its admiring

portrayal of these individuals, the genre plays a role in defining the distinction between

"technology" and the more purely theoretical "science" in the minds of late nineteenth-century

American readers, with a clear preference for the figure of the technologist or inventor.

In addition to their importance in defining a technological ideal, Edisonades consider the

role of race and religion in the cultural identity that informs imperialism. Other scholars point

out that race and religion were key factors in American's understanding of who they were in the

nineteenth century. Edward J. Blum's *Reforging the White Republic* addresses their role in

constructing an U.S. identity after the Civil War. Protestant ministers led a call for forgiveness,

even at the expense of radical social reform, that ultimately re-established White Protestant privilege and legitimated Jim Crow. "Indeed," Blum states, "by 1875, the largest northern denominations had come out decidedly for sectional reconciliation over rights for African Americans" (91). Blum notes that "[B]y 1900, in the minds of many northerners, American nationalism, whiteness, and Protestant Christianity had been powerfully bound together once again . . ." (7). As Blum suggests, the period's burgeoning imperial consciousness was tied to these conceptions of race and religion. Jackson Lears finds similar connections, noting that "After Reconstruction, political leaders . . . redefined the [U.S. Civil] war as an epic expression of Anglo-Saxon marital virtue. Racism, often with scientific legitimacy, reinforced militarism" (2). After the turn of the century, "Jim Crow at home complemented imperialism abroad" (Lears 287). Even Eric T. L. Love--who has countered the prevailing understanding of U.S. imperialism by noting that many politicians' fear of interaction with different races actually *hindered* the U.S.'s entry into global empire--acknowledges that "both sides of the debates over empire shared an unshakable faith in white supremacy . . ." (7). Walter Benn Michaels has similarly shown how racist ideologies in America were often linked to anti-imperialist forces, while much of the rhetoric about racial history and the Bible's place in that history was shared by writers such as Hopkins and W. E. B. Du Bois who were directly attempting to counter such thinking (23-24). All sides of these issues were pervaded by a sense that America's imperial identity was inseparable from Anglo-Protestant Christian concerns.

As they imagine potential variants of U.S. imperialism, the novels addressed here consider technology's impact on categorizations of race and religion. Their technocracy, however, does not easily synchronize with the racial essentialism that framed discussions of American imperial identity. What we find in the Edisonade is a more varied conceptualization of

race and nationalism than Bleiler, Clute, and Brown have acknowledged. As the Edisonade genre proliferates, as its master narrative is utilized by additional authors outside the dime-novel markets, it constructs a more complex definition of "American." Edisonades attempt to at once celebrate technology's liberatory power and conform to the expectations of Anglo-Protestant citizenship. As they attempt to reconcile contradictory ideas embedded in technocracy, race, and religion, these novels establish a narrative that promises that technologically enhanced exploration can stabilize definitions of American identity.

These two basic concerns--distinguishing technology from science and emphasizing race and religion as significant categories of American identity--play out in Edisonades. As we can see, these two elements are not unrelated. For example, while mainstream white Protestantism and its conception of the Bible dominates postbellum struggles over American identity, the recent advent of evolutionary theory threatened to undermine claims to the Bible's historical authority. In this situation, the period's audiences were receptive to narratives in which characters enjoyed technology's benefits without accepting the implications of science. Historian E. J. Hobsbawm notes that, during this era, scientific discoveries countered religious belief, and that a "militant attack on religion" and counter-attacks by the faithful resulted (271). At the same time, technology flourished, creating labor-saving devices and quickening communication processes, opening new areas to economic expansion, and creating new, technologically based employment (railroads, telegraphs, munitions, et. al). Bruce points out that this resulted in a "swelling current of American faith in the unalloyed beneficence of technology" (130). Early science fiction, therefore, emerged in the midst of a major paradigm shift in mainstream America's conception of technology and its relation to science.

I organize this study around several key authors who flourished during the era in which technology's place in the U.S. imperial consciousness becomes an established narrative. Chapter 1 begins with Poe, who in 1839 uses allusions to the Second Seminole War and the hero worship surrounding Indian-fighting military men to create one of the first portrayals of a cyborg in literature. Poe's work demonstrates how an author writing before the era most associated with U.S. global empire understood how Americans conceived of expansion and how they would accept technology that enabled it. Poe's work sheds light on the first major, novel-length American science fiction novel, Edward S. Ellis's *The Steam Man of the Prairies* (1868), which understands American enthusiasm for prosthetic technology and expansion in the same manner as Poe's story, even as it suggestively approaches the subject with less ambivalence and more enthusiasm. Strikingly, these two works from different eras conceive of American technology and expansion in very similar ways despite their contrasting tones, and they demonstrate how the Edisonade's narrative foundation develops from earlier modes and tropes.

Chapter 2 deals with the major development of the Edisonade narrative as it was told and re-told over two decades in the pages of the Frank Reade, Jr. dime-novel series. Taking cues from Denning, Claude Lévi-Strauss, and Franco Moretti, I analyze these dime novels first as a recurring narrative, where repeated variants of their technocratic "boy adventurer" story defines the myth of the American inventor. I then address some of the earliest novels in the series by analyzing particulars in their portrayals of race and nationalism, along with 1896's *Frank Reade, Jr. in Cuba*, which explicitly deals with a U.S. inventor's interference in the Cuban Revolution against Spain. Taken collectively, the Reade, Jr. stories clearly outline a technocratic imperial allegory in which technology enables and justifies individuals in their travels to remote locations where they interfere with events as they see fit. Analysis of individual stories, however,

demonstrates that the series' representations of nationalism and racial essentialism are at odds

with the larger imperial project. Even from its inception, the Edisonade narrative had a complex

relationship with imperialism, presenting a recurring narrative that simultaneously justifies and

undermines the concept.

Chapter 3 examines Mark Twain's technocratic novels, focusing on Twain as a writer

who was equally fascinated by technology and by the American character. In *A Connecticut

Yankee in King Arthur's Court* and *Tom Sawyer Abroad*, Twain deals with how Americans use

technology to spread cultural norms they take for granted. While Twain celebrates the

improvements that his Yankee, Hank Morgan, makes in sixth-century England, he also draws

attention to the layers of manipulation and egotism behind his technocratic worldview.

Similarly, young Tom Sawyer, whose balloon journey in *Tom Sawyer Abroad* mirrors the similar

ventures found in Edisonade dime novels, approaches international travel in a similar way.

Twain conceives each of these characters as hampered by their somewhat narrow views,

particularly regarding religion. Morgan and Sawyer are both hampered by their reliance on a

prevailing understanding of religion in America, one that conceives of the United States as an

essentially Protestant Christian nation, and that understands Protestantism as innately superior to

other faiths, in a manner that facilitates assumptions of U.S. superiority over areas with different

beliefs or traditions. Twain's stories ask the reader to consider how appeals to the prevailing

view of religion in American could lend themselves to an imperial mindset.

If Twain understood that religion could be used to enable imperialism, subsequent works

suggest that the period's dominant form of Protestantism made up such a large portion of the

imperial mindset that the Edisonade formula could be deployed to create fictions where its

authority was vindicated. In Chapter 4, I address how the technocratic narrative is blended with

elements from the lost-race genre to create stories where exploration reestablishes an American identity with a mainstream Protestant conception of the Bible at its center. Garrett P. Serviss's *Edison's Conquest of Mars* and Pauline Hopkins's *Of One Blood* use Edisonade tropes to consider scenarios in which discoveries made by scientists in remote locations would reaffirm the Bible's portrayal of history. Both texts accomplish their tasks during an era when evolutionary science was calling into question these long-held understandings of history; similarly both works draw from the Bible for their ultimate definitions of race and ethnicity. Hopkins asserts an African-centric view of Christian history, while Serviss presents a conceptualization of whiteness that goes back to the Garden of Eden. Despite their radically different assertions about race, both stories demonstrate a longing to provide a narrative in which Biblical history and science coexist harmoniously in a way that reaffirms an earlier American identity.

By portraying the benefits of technology, Edisonades created a template for techno-expansionism that prefigured the U.S.'s foray into global imperialism, but they do this in a complex and sometimes contradictory manner that both undermines overt imperialist themes and highlights the fragility of racial definitions. The genre's most significant element comes in the way its technocratic approach can be used to widely divergent ends. The writers covered here showcase the ideological and cultural complexity of Edisonades and of nineteenth-century U.S. proto-science fiction. What begins as frontier power fantasy grows more varied as the century advances, creating a narrative that can be co-opted to suit new American identities, beyond the jingoistic, pro-imperialist viewpoints identified by previous scholars.

Ultimately, this study shows what proto-science fiction novels in nineteenth-century America reveal about U.S. identity during the decades approaching the country's move into

global empire. The mythic narrative of technocratic exploration quickly becomes a trope to address contradictory elements in the American understanding of empire. As writers use and develop the narrative, they necessarily consider factors of race, national sovereignty, and religion that were used to support the idea that Americans had a destiny, or a mission, or a right, to spread their influence outside borders. As Clute has pointed out, and as Gernsback understood in 1920, these narratives shaped Americans understanding of themselves during the nineteenth century. They offered a canvas on which to play out the contradictions embedded in their views of American identity.

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Chapter 1: "Prodigies of Valor" at the Edisonade's Edge:

Prosthetic Techno-Imperialism in Poe and Ellis

Edward S. Ellis's dime novel, *The Steam Man of the Prairies*, first appeared in 1868. In it, Johnny Brainerd, a boy from St. Louis, builds an enormous steam-driven automaton shaped like a giant metal man wearing a top hat. Brainerd hitches a wagon to his steam man and sets out for the American West, where he helps a group of miners protect their claim from Indians and outlaws who periodically confront them, using the steam man as a device to frighten would-be assailants and to quickly evade any attack. In many ways, the story embodies the dime-novel western in its portrayal of frontier violence and its focus on episodic adventure over character development or thematic nuance. Reprinted six times over the next two decades, *The Steam Man of the Prairies* became enormously influential; Everett F. Bleiler notes that it "set the pattern for future invention stories" in dime novels (Bleiler "Dime-Novel SF" 335). By establishing the template for technocratic frontier adventures, where imagined technology is used in the service of individual expansion, *The Steam Man of the Prairies* is significant as both the first novel-length work of American science fiction and as what John Clute calls a "proto-edisonade" novel that shapes the sub-genre (369). [1]

Ellis's work does more than simply recount a boy inventor's exploits. Brainerd's tale contains a further element of technological empowerment because the steam man serves as a prosthetic device designed to compensate for the inventor's physical form. Johnny is introduced as a "hump-backed, dwarfed" individual (18); he is later described as "mis-shapen" (21). The steam man enables Johnny--who is portrayed as intellectually, but not physically, fit for life on the frontier--to participate in expansion, particularly the violent confrontations that require

physical rigor. Part of the story's thrust comes from the way it tells of how an ingenious contraption such as the steam man can overcome physical deformity. This approach offers a promise of better living through technology at a key moment in U.S. history. *The Steam Man of the Prairies* is a post-Civil War novel that deals with, as Bill Brown points out, technology's ability to heal the "loss of slave labor [and] the notorious loss of limbs" resulting from that conflict (132).[2] This celebration of technology's potential is complicated by the circumstances in which it is portrayed: Ellis showcases Brainerd's empowerment through the steam man's ability to aid expansion by eradicating the native population.

Precisely how *The Steam Man of the Prairies*' conjoins overcoming disability with genocidal violence becomes clearer when contrasted to an earlier portrayal of the same themes. *The Steam Man of the Prairies* is not the first American work to showcase technology's ability to facilitate frontier advancement and prosthetically "improve" disabled bodies. Edgar Allan Poe's short story "The Man That Was Used Up" (1839) addresses the same concepts, ultimately performing the same cultural work despite a more negative approach to prosthetic possibility. Unlike *Steam Man*, which revels in un-ironic and visceral portrayal of frontier techno-violence, "The Man That Was Used Up" approaches technology ambivalently and mocks the same tropes that Edisonades later embrace. Poe roots his story in the Jacksonian policy of Indian removal; he satirizes the idea that frontier violence is heroic and satirizes the public's desire for stories of Indian warfare by presenting a tale in which the title character is a celebrated military general who has lost the majority of his body during battles against Native Americans and uses prosthetic devices to recapture his pre-conflict bodily form.[3]

In what follows, I will address how the notions of technocratic empire building are portrayed by Ellis and Poe. While both texts address similar concepts about disability,

expansionism, and technology in very different ways, they ultimately suggest that the inevitable end of technology is expansionist, with warfare against the native population portrayed as the natural outcome. Both authors articulate an understanding of American culture that embraces prosthetic technology, at least in part, because it enhances expansionist warfare and material gain. While Ellis's work enables subsequent Edisonades in this approach, Poe's work demonstrates that such notions were not always viewed unskeptically by nineteenth-century authors. Despite their dissimilar approaches, both works anticipate American acceptance of machine culture as a means to further geographical expansion and compensate for human "deformities" that prevented individuals from participating in this colonial exercise. As Poe and Ellis establish a template for techno-imperialist narratives of the Edisonade, they portray prosthetic technology as a democratizing force in the service of the United States, one that enables military conquest and widens the opportunity for it by removing the physical restraints for participation in exploration. The public acceptance of human-machine hybridity that is portrayed in these works achieves plausibility because of its ties to territorial conquest and material gain.

<u>Poe as SF Progenitor: Creating the Prosthetic Technological Approach</u>

Because they are examples of American writers articulating the possible blend of human and machine, both Poe and Ellis define the terms of later American technological romances. The later Edisonades of the 1880s and 90s tell and retell the same central narrative in which technologically enhanced expansion provides opportunities for material rewards and for low-risk, violent adventure against an outside "other." This repeated motif, with its attendant cultural concerns, fits Claude Lévi-Strauss's definition of myth wherein "the function of repetition is to render the structure of the myth apparent" (114). While the larger mythic ramifications of the

postbellum Edisonade have not been analyzed in light of Lévi-Strauss, Klaus Benesch connects

Poe to a larger, national mythological framework by utilizing Richard Slotkin's study of frontier

mythology in the United States.[4] Building on Slotkin, Benesch observes that "one of the most

powerful myths pertinent to the construction of American national identity is the notion that

technology represents progress and that the advancement of the sciences and their subsequent

practical application equal an advance in history" (117). Before the Edisonade becomes a myth

capable of encapsulating basic ideological contradictions related to American imperialism, its

ideas and limits must be defined. In "The Man That Was Used Up," Poe suggests how deeply

ingrained these concepts are, addressing America's thirst for warfare and its technophilia in ways

that Ellis's later text takes as givens.

Poe's fascination with the American culture of science and technology informed many of

his tales, and Poe's role as one of science fiction's progenitors has long been established.[5]

Despite this, "The Man That Was Used Up," is a recent entry into Poe's SF canon. Despite the

story's portrayal of gadgetry and human-machine hybridity, generations of SF scholars seem to

have overlooked it; H. Bruce Franklin's 1966 anthology of nineteenth-century American SF,

Future Perfect, does not mention it, nor does editor Harold Beaver reprint it in 1976's *The*

Science Fiction of Edgar Allan Poe. Even John Tresch's good-naturedly titled essay "Extra!

Extra! Poe Invents Science Fiction!" from 2002's *Cambridge Companion to Edgar Allan Poe*

does not mention it. Until recently, Poe's influence on later science fiction was assessed

primarily because of his portrayal of forays into space or time. In the "Voyages" chapter of his

work *Poe Poe Poe Poe Poe Poe Poe*, Daniel Hoffman addresses these stores that involve

exploration to the moon or sea ("The Unparalleled Adventure of One Hans Pfaall," "A Descent

into the Maelstrom"), or deal with time-travel or messages from the future or past ("Mellonta

Tauta," "Tale of the Ragged Mountains," "Some Words with a Mummy"). Hoffman highlights

the formulaic nature of these stories by declaring that Poe "simply took hold of a popular genre

of the day, the explorer's narrative, and made what was . . . legendary into a fable pregnant with

the meanings his own needs dictated" (155). Franklin focuses on a similar type of story for his

anthology; the three Poe tales in *Future Perfect* are "Facts in the Case of M. Valdemar,"

"Mellonta Tauta," and "Tale of the Ragged Mountains," which deal with mesmerism, futuristic

society, and astral projection respectively.

"The Man That Was Used Up" does something different, as its omission from Poe's SF

canon until recently suggests. Like the Edisonades, "The Man That Was Used Up," is rooted in a

hypothetical present in which imagined technology is applied to specific, contemporary events

such as Indian removal and the political candidacies of former military officers.[6] The story's

ultimate implication is that technology *already* exists that could allow the events in the story to

happen, that the world has already been transformed by technology and the change is ongoing,

an approach subsequently used by Verne and the American Edisonade dime novelists.[7] Subtitled

"A Tale of the Late Bugaboo and Kickapoo Campaign," the story's key inventive device involves

the titular character, General John A. B. C. Smith, an American military man who uses a variety

of technologically marvelous prosthetic devices to conceal the brutal dismemberment that

resulted from his battles against two Native American tribes.

The story has come to the forefront in the wake of studies of Poe's place in the nineteenth

century's culture of science.[8] Most significantly, Benesch's book *Romantic Cyborgs* draws its

title from his own assessment of "The Man That Was Used Up": "its protagonist is literally a

product of the wonder-working agency of modern technology, a Romantic cyborg wholly

dependent on its exquisitely manufactured replacement parts" (125). Subsequent works, such as

Martin Willis's *Mesmerists, Monsters and Machines*, designate it as a key early SF work because of this factor. Clayton Marsh's 2005 *American Literature* article states "Smith is a machine" (274) and James Berkley's 2004 *Comparative Literature* claims the story is really about how "Smith is debunked as a mechanic, cyborgian deception" (366). These analyses build on the work of Donna Haraway, who hypothesizes the benefits of human-machine hybridity as a way to move beyond nature. Taking human-machine hybridity as the current cultural norm, a given for nearly anyone in contemporary society, she sees the image of the cyborg as a "myth" for "mapping our social and bodily reality" that can overcome "the tradition of racist, male-dominant capitalism; the tradition of progress; the tradition of the appropriation of nature as a resource for the productions of culture . . ." (272). Seeing the disruption caused by a move away from nature as a positive force that can break up existing systems of domination, cyborgian hybridity indicates a broader movement "from an organic, industrial society to a polymorphous, information system" (281). Benesch particularly takes cues from Haraway, noting that even works from the American Renaissance use the human-machine hybrid as a "synechdochic representation of technology" (29).

The technology found in the human-machine combinations of Poe and Ellis, however, strays far from the utopian possibilities articulated in Haraway's work. While Haraway presents the cyborg as an image that promotes wider societal change, capable of creating an "ironic political myth" countering existing systems (272), the earlier Edisonade furthers a myth of American expansion, one that embraces, rather than resists, the "tradition of appropriation" that Haraway notes. Specifically, Poe's "The Man That Was Used Up" suggests that Americans will accept prosthetic technology precisely because it facilitates military expansion and genocide.

Prosthetic Technology and War Stories in "The Man That Was Used Up"

To do this, Poe crafts a narrative in which one member of the public, who sees himself as above the Jacksonian crowd, obsessively attempts to hear about a war hero's Indian-fighting campaign. In detailing the narrator and the public's fascination with Smith, "The Man That Was Used Up" mocks antebellum America's love of military expansion and conquest. The story relies on a twist ending, and technology's pivotal role in the plot is not revealed until the conclusion. The first-person narrator meets General Smith at a party. The General takes the lead in the conversation by repeatedly "commenting upon the rapid march of mechanical invention" (381). Impressed by the General's physical bearing and curious about his background, the narrator wants to know more about him, particularly because "the slightest appearance of a mystery--of any point I cannot exactly comprehend--puts me at once into a pitiable state of agitation" (378). He attempts to learn more by questioning friends at church, at the theater, at a fancy soiree, a game of Whist, and a local know-it-all's home. Each individual he questions appears to be prepared to tell the General's story, then is interrupted. Thwarted five times in this manner, the frustrated narrator resolves to ask the General himself, calling on him at home where he makes the shocking discovery that gives the story its title: the General has been so mutilated in wars against Native Americans that he must be assembled by prosthetic devices. The narrator mistakes the General for an "odd-looking bundle of something" on the floor, and then is shocked when the bundle speaks to him (386). He is further astounded when a slave enters and assembles the General before his eyes using cork legs, false teeth, wig, prosthetic palate, and more (387-389). During the whole encounter, Smith talks to the narrator as if all this is perfectly natural: "God bless me! My dear fellow . . . . I really believe you don't know me at all" says Smith in his bundle variant (387). Moreover, as he is assembled, he alternately curses his slave, Pompey, for

not working fast enough and explains to the narrator what company manufactured which prosthetic part:

> Thomas . . . is decidedly the best hand at a cork leg, but if you should ever want
>
> an arm, my dear fellow, you must really let me recommend you to Bishop . . . .
>
> Pompey, will you *never* be ready with that wig? Scalping is a rough process after
>
> all; but then you can procure such a capital scratch at De L'Orme's. (388)

Poe gives verisimilitude to his otherwise fanciful portrayal of prosthetic technology; the General provides the names of actual vendors who provided artificial limbs as he describes his reconstructive process to the narrator (Mabbot 391, Levine and Levine *Short Fiction* 452-453). The shocked narrator relates this discovery to the reader.

Poe's narrator frames the story as if he's discovered the truth about Smith, as if he is letting the reader in on a remarkable secret that has been hidden from Smith's adoring antebellum public. Poe's short fiction, particularly his proto-SF, often uses this type of "debunking" approach where a hoax is perpetrated and revealed.[9] Jonathan Elmer, for example, situates "The Man That Was Used Up" as primarily a mystery tale, in which the inquisitive narrator eventually discovers (and in the process of relating the tale, publicizes) the secret behind General Smith (48-50). As Elmer points out, Poe selected it to be published alongside "Murders in the Rue Morgue," in a two-story collection, perhaps indicating that the author saw a connection between the ratiocination in both tales, as their main characters gather facts and intuit connections to solve a riddle (Elmer 48-50). Unlike Dupin, the hero of "Murders in the Rue Morgue" who consistently displays flourishes of genius, the narrator of "The Man That Was Used Up" seems ill-informed. Joan Tyler Mead states that "the narrator himself is a figure of deception" who is "grotesquely restored" by his discovery that the General is a mass of prosthetic parts because it

reaffirms his own sense of status among the mob of Jacksonian voices portrayed in the tale

(286). The narrator believes he has set himself above the masses because of the special

knowledge he has discovered, but, as Martin Willis has shown, the narrator is connected to the

mob in many ways. Willis notes that the narrator's incorrect identification of Byron's Manfred

during a particularly genteel discussion "discredits him" and "obversely reinforces his obsessive

materialism" (106). While the narrator wishes to be better than the general public, his words and

actions indicate that he shares many of their characteristics.

Some readings have misinterpreted the narrator's desire for knowledge about Smith and

missed a portion of the story's critique of Americans' relationship with technology because of it.

Mead ties the narrator's desire to set himself above his peers to his search for information about

Smith, stating "he wants to confirm to himself that public opinion is foolish, and that the

General's false appearance has misled everyone but himself . . . to hear that the deception is

effective" (283). Such an interpretation implies that the narrator knows or suspects something is

wrong with the General's "false appearance." The framing of the story encourages such an

interpretation. The story is deliberately structured to begin and end with our narrator analyzing

Smith's body. The introduction establishes the normalized physical grandeur of Smith in two

deliberate paragraphs. The ending relies on this voyeuristic element; the story's *effect* can only

be achieved if the narrator is shocked by and precisely describes the General's reconstruction at

the story's climax. Benesch also thinks that the mystery of Smith's physicality inspires the

narrator's search, stating "The narrator's inquisitive stance is triggered equally by the colossal

proportions and impressive dignity of the General's physique and the persistent elusiveness of his

unusual personal appearance" (Benesch 120). Robert Beuka, who analyses the use of

dismemberment in Poe, similarly asserts "The narrator immediately becomes fascinated by

[Smith], and in particular his manly form" (28). Such examples demonstrate how critics who view the work's central feature to be a portrayal of a cyborg tend to overemphasize the general's body as the *cause* of our narrator's quest. They do this at the risk of underemphasizing the important colonial ramifications of the tale, particularly as they relate to the narrator's desire for information. The narrator is not obsessed by Smith's body, but by Smith's mysterious past. Simply put, he wants to hear war stories.

After describing Smith's physical appearance at their first meeting, the narrator shifts his focus from Smith's body to the real mystery behind Smith:

> I could not bring myself to believe that *the remarkable* something to which I alluded just now--that the odd air of *je ne sais quoi* which hung about my new acquaintance--lay altogether, or indeed at all, in the supreme excellence of his bodily endowments." (380)

The narrator has, by this point, moved away from Smith's form to consider the wider mystery of his character. Smith's physique, notably, is not the topic during the first interruption of the story. Rather, the narrator's friend mentions Smith's "high reputation for courage," and describes him:

> A downright fire-eater, and *no* mistake. Showed *that*, I should say, to some purpose, in the late tremendous swamp-fight away down South, with the Bugaboo and Kickapoo Indians." [Here my friend opened his eyes to some extent.] "Bless my soul!--blood and thunder, and all that!--*prodigies* of valor!-- heard of him of course?--you know he's the man--. (380)

Smith then cuts in and introduces himself before the friend can finish the story.

During the discussion, the narrator makes it plain where his interest lies, stating explicitly that the "theme I had just then most at heart [was] the mysterious circumstances attending the

Bugaboo war," and he does not bring up the subject himself out of a "sense of delicacy" although

he states "in truth, I was exceedingly tempted to do so" (381). Instead, he allows the General to

steer the topic of conversation, an act that establishes Smith's love of technology and his

opinions about the "wonderful age" (381). After their meeting, the narrator reasserts that his

primary reason for quizzing his friends about Smith is "particularly respecting the tremendous

events . . . during the Bugaboo and Kickapoo campaign" (382). A recounting of the bloody

events of Indian combat--not some clarification of details about Smith's physical appearance--is

the true object of his quest. Hence, his disappointment when Smith does not divulge such

information during their first meeting. Of course, the general's favored topic of conversation--

"the rapid march of mechanical invention"--is intimately connected to both the Bugaboo war and

the general's physique. The story implies that Smith's technophilia comes from his culture's

ability to reconstruct his body after the war, although the oblivious narrator does not see the

connection.

Poe assumes that the American public at large shares the narrator's thirst for stories of

brutal combat. As scholars such as Terrance Whalen have noted, Poe's less-than-sympathetic

portrayal of the public in many of his stories stemmed from his conflicted life in the capitalist

literary marketplace.[10] "The Man That Was Used Up" blends this hostility toward readers with

appeals to their existing interests. Tellingly, in "The Man That Was Used Up," Poe deliberately

thwarts his narrator's (and presumably his audience's) wishes by never revealing details of the

Kickapoo/Bugaboo war. David S. Reynolds sees it as a work of "stylized laughter" that

"overturns" the humorous, over-the-top violence found in popular Indian battle tales of Davy

Crockett and author John Neal (527). Familiar with the public's enjoyment of such tales, Poe

provides a narrative completely driven by its main character's desire to seek out such a tale. In contrast, Reynolds observes,

> Poe does not ask us to laugh at gory pictures of whites massacring Indians, as do several frontier humorists and novelists, but purifies the comedy by asking us to snicker at a ridiculous situation in which dismemberment is safely removed to the realm of the impossible. (527)

In the individuals questioned by the narrator, Poe portrays an audience accustomed to a steady diet of harrowing tales of Indian removal and frontier violence, who are able to speak of such horrors in trite language filled with mock refinements. As several scholars note, the interviewees speak in clichés, essentially repeating fragmented phrases devoid of real content, and are always interrupted before they are finished.[11] These fragments clue us in to which elements of Smith's story are prioritized by the individuals. When he asks "Miss Tabitha T." in church, she replies, "Bless me, I thought you *knew* all about *him*! This is a wonderfully inventive age! Horrid affair that!--a bloody set of wretches, those Kickapoos!--fought like a hero--prodigies of valor--immortal renown" (382). Every subsequent person recounts the story in the same fragmented way. Dashes come in abundance in Poe's portrayal of their speech, a narrative approach signifying that these individuals are not to be taken seriously. Levine and Levine argue that Poe frequently uses dashes to indicate insincerity or frivolity (*Eureka* 117, 139). Key clichés reappear. In fact, "prodigies of valor" repeats a phrase from the narrator's friend's introduction of Smith, while "wonderfully inventive age" repeats Smith's own phrase used during their first encounter. Both phrases reappear in some form during the narrator's subsequent interviews along with reference to "immortal renown." Repeated in equal measure is

the ferocity of Smith's Native American foes, who are consistently referred to as "wretches" or "creatures".[12] Poe's public describes genocide in breathless overgeneralizations.

Unlike the narrator, however, the public actually knows the truth about Smith. Their references to the "wonderfully inventive age" likely refer to Smith's prosthesis rather than the progress of technology in general. Unlike Smith, whose fascination with technology is more general, the citizens consulted by the narrator are speaking directly about the General. Similarly, a widespread public knowledge of Smith's cyborgean nature explains Smith's shock at not being recognized in his unassembled form by the narrator. "Strange you shouldn't know me though isn't it" he tells the narrator at a point in which he is "a single leg" (387). Smith expects recognition, even in his non-prosthetically enhanced form. Recent scholarship approaching the story from the perspective of disability studies tends to view the story in a similar way. Vanessa Warne reads the interviewees as representatives of their culture, noting that these characters' clichés and fragmented descriptions call attention to a society "in which disability is discussed with difficulty, if at all" (98). Warne's assessment relies on the assumption that the socialites *know* the facts about Smith, that they are not Poe's send-up of chattering public *pretending* to have information, but are actually adequately informed citizens rendered inarticulate by the circumstances. Similarly, William Etter's article on Poe and disability studies asserts that "General Smith's physical disabilities are widely known, while his prosthetics are regarded as aesthetically pleasing" (180). His body is impressive but normalized, both exceptional and the mean. While Warne and Etter both criticize the public need to normalize disabled bodies, they underscore the likelihood that Smith's public understands him and that his acceptance is rooted in the successfulness--rather than the secrecy--of his prosthetics.

Perhaps more importantly, Smith accepts his new body with zeal, and does so because he perceives it as one more in a series of steps that apply the wonder of technology to the problems of war. When he speaks approvingly of the "wonderful age," he does not mention prosthetics; he enthusiastically lists items related to colonial expansion and military conquest: "Parachutes and railroads--man-traps and spring-guns. Our steam-boats are upon every sea. . ." (381). Boats and railroads, along with the reference to parachutes used in hot-air balloon travel, suggest an interest in new modes of transport, while the other items are more obviously martial in nature. He focuses on these "*useful* mechanical contrivances" rather than the mechanisms most pertinent to his own bodily reconstruction (382). His genuine interest is not indicative of any subterfuge or unwillingness to discuss his condition. Indeed Smith later shows no reluctance to share specifics of his prosthetic body, listing each part as its assembled and recommending manufacturers (387-388). Smith seems equally pleased with all these items, whether part of his body or not. His general love of technology and his decision to discuss military and transportation developments instead of overt prosthetics show how Smith blends the two into a more general conception of technology as a force for expansion. In the end, we find Smith unaware of his unnatural appearance before he is "assembled" and enthused about not only his own prosthetic possibilities, but those of the nation as well.

Militarism and warfare become part of the normalization of the cyborg in the tale. Etter's disability study criticizes the portrayal of prosthetic technology in "The Man That Was Used Up," claiming that the short story is ultimately "an intolerant one that demands that bodies be--or at least strive to be--normal" (183). In fact, the story's thrust rests on technology's nearly miraculous ability to mimic, and perhaps even improve, the human form. Laura L. Behling, in assessing Poe's resonance for modern medical technology, proposes that "The perfect human

body, Poe's story suggests, may not be a divine but a mechanical creation. . ." (58). "The Man That Was Used Up" offers a vision of a contemporary society where the human/machine hybrid is a welcome member. Indeed, if Smith's society knows and approves of his reassembled form, it signals the emerging acceptance of a cyborgian reality in the service of conquest. Both the public and the narrator are held up for ridicule in the story: the narrator for pretentious debunking of events and circumstances that are commonly known, and the public for their ready embrace of a human-machine hybrid.

While it satirizes the public's desire for tales of Indian combat removed from the ugly realities of violence and the public's ability to grant celebrity and authority to a veteran of such affairs "The Man That Was Used Up" presumes that the U.S. public could readily accept Smith's hybridity if it were related to his military service, to his expeditions fighting Native Americans and engaging in violent--and undoubtedly unevenly matched--combat. Poe's story understands that technology, expansion, and warfare are intimately connected in American minds, so much so that they will accept and glorify an individual who physically embodies those concerns.

From "Used Up" Man to Steam Man: From Prosthetic Technology to Edisonade

In many ways, Poe foresees the way works such as *The Steam Man of the Prairies* will use technology and, in penning "The Man That Was Used Up," creates a tale that resists their technophilia. Poe's approach to such material reinforces what Whalen and others have said about him all along: he was an author with his finger on the pulse of his society, constantly gauging the type of stories his audience would find appealing while maintaining a good deal of elitist skepticism about that audience's taste and erudition. His willingness to write a story that willfully subverted his audience's presumed desires further indicates such skepticism.

The writers of later Edisonades were not consciously attempting to take up Poe's mantle or to duplicate his ideas. They were not, that is, engaging in the kind of deliberate genre-building exercise that Hugo Gernsback undertook when evoking Poe in the 1920s. Instead, writers such as Ellis take on the same dilemmas and scenarios Poe wrote about in the 1830s and 1840s, playing them out unironically. Beginning with Ellis, Edisonades recount the ability of technology to enable expansion and warfare, but they do so without Poe's skepticism about the masses and their motivations. Despite this difference, Ellis comes to similar conclusions about the inevitability of human-machine interconnectedness and its acceptance as a force serving American identity and empire.

Although it appears nearly thirty years after "The Man That Was Used Up," *The Steam Man of the Prairies* utilizes the same notions of cyborgian possibilities, warfare, and expansion as Poe's short story.[13] If Poe's story hints that prosthetic technology can be accepted by the masses primarily for its ability to influence military expansion, *The Steam Man of the Prairies* embraces this concept and plays it out on a wider, imperialist scale, shifting the focus from prosthetic technology that indirectly enables expansion by repairing the damage caused by military violence to prosthetic-expansionist technology that directly facilitates westward expansion and exploitation.

Bill Brown's essay, "Science Fiction, The World's Fair and the Prosthetics of Empire," charts the development of prosthetic technology and its ties to expansion by beginning with a close analysis of Ellis's 1868 text. Brown traces the shifting portrayal of prosthetic technology from Ellis's book, which he calls "the inaugural American science fiction novel" (133), to Gernsback's *Ralph 124C 41+*, treated for Brown's purposes as "America's first 'modern' science fiction novel" (134). Brown finds that cultural developments between 1868 and 1915 led to a

shift in the portrayal of prosthetic technology, moving to early science fiction novels (embodied by Gernsback's *Ralph 124C 41+* from 1911 and Burroughs *The Master Mind of Mars* from 1926) in which the hero enjoys both prosthetic, technological advantages in sight and travel *and* a normalized, physically imposing male body (134, 145-6). Brown interprets *The Steam Man of the Prairies* in a way very similar to Etter and Benesch's takes on Poe, presenting it as a work that "legitimizes prosthetic technology, normalizing the (white) individual's difference from, and artificial completion of, his body" (132).

Like Poe, Ellis wrote for the popular marketplace. In 1860, he penned the bestselling dime novel *Seth Jones; or, The Captives of the Frontier* for the dime novel publishers Beadle and Adams, and subsequently authored serialized fiction for a number of major publishers under both his own name and a variety of pseudonyms (Cox 96). *Seth Jones, or The Captives of the Frontier*, first published as *Dime Novel* No. 8 by Beadle, was written while he worked as a school teacher in New Jersey; it was heavily advertised before release and sold between 40,000 and 60,000 copies during its immediate release in October of 1860 (Johannsen 31, 33). Ellis's success with *Seth Jones* helped prove the marketability of the dime novel format, and he accepted Beadle and Adams's offer to write "no fewer than four novels a year" (Brown *Reading* 165). These novels primarily were frontier tales, built on plot and setting formulas derived from James Fenimore Cooper's oeuvre, and *The Steam Man of the Prairies* is certainly a frontier tale as well.

But it is more. Ellis allegedly based his story on a real steam engine, the Newark Steam Man, designed to look like a seven-foot-tall human with a smoke stack shaped like a top hat on its head; reports of the steam man were made in local papers around Newark.[14] Like the litany of real-life prosthetic suppliers tallied by General Smith at the end of "The Man That Was Used

Up," the steam man's technology is grounded by a reference to the contemporary world. This approach does more than simply create verisimilitude for a fictional portrayal of technology; it underscores the central tenants of science fiction by implying that change is natural and that technology can and does transform the world. Because, unlike Poe's story, Ellis's *The Steam Man of the Prairies* was enormously popular and influential on subsequent proto-SF dime novels, it provides the groundwork for the general approach of subsequent Edisonades, particularly in its celebration of technology's use in violent expansion.

The Steam Man of the Prairies begins in medias res, with two western prospectors named Mickey McSquiggle and Ethan Hopkins, shocked by the appearance of the steam man:

> Several miles to the north, something like a gigantic man could be seen approaching, apparently at a rapid gait . . . Occasionally, it changed its course, so that it went nearly at right angles. At such times, its colossal proportions were brought out in full relief, looking like some Titan as it took its giant strides over the prairie. (9)

Shortly after Mickey and Ethan determine that it is a "human contrivance" rather than some supernatural phantasm, they are shocked to find that the steam man pulls a carriage holding their friend, "Baldy" Bicknell, and a strange young boy who turns out to be the steam man's creator and manufacturer, Johnny Brainerd. After establishing the steam man's astounding appearance, the narrative tells how Baldy left the trio's claim and reached St. Louis, where he met the automaton's young inventor and brought him back to help them defend their mine.

In Johnny and Baldy, Ellis creates characters that encompass many of the same promises of prosthetic technology as Poe's Smith. Like Smith, "Baldy" is a victim of frontier violence; he received his nickname because he was scalped by Sioux Indians and hides his bald pate under a

hat (27). He is also the group's outdoorsman and embodies the normalized physique, a "strong, hardy, bronze trapper, powerful in all that goes to make up the physical man" (21). Johnny Brainerd, in contrast, is a non-normalized body, clearly portrayed as exceptional and problematic. He is described as "mis-shapen" when compared to Baldy (21). The book's presentation of Johnny's physical form melds his body's deformity with his technical inventiveness. He is

> . . . hump-backed, dwarfed, but with an amiable disposition that made him a favorite with all whom he came in contact.
>
> If nature afflicts in one direction, she frequently makes amends in another direction, and this dwarf, small and misshapen as he was, was gifted with a most wonderful mind. His mechanical ingenuity bordered on the marvelous. (18)

If Baldy is a Smith-like frontier survivor/hero, Johnny is the "bundle" variant of Smith, the disabled body. Yet, like Smith, prosthetic technology normalizes Johnny Brainerd in a way that facilitates public acceptance and physical achievement. Technological advances enable him to participate in frontier activities, including violent adventure and the search for fortune.

The steam man becomes a completion of Johnny's body. Moreover, Johnny's identification with the steam man is complex and complete. Poe's Smith relies on prosthesis but doesn't understand how he couldn't be recognized without his devices. Johnny, on the contrary, is always physically himself; he never attempts to disguise or hide his "misshapen" physical attributes, but also fully identifies himself with the external technology of the steam man that makes his adventure possible. For example, when Indians encounter the steam man while Johnny hides from them in a tree, one of the men swings a tomahawk into the steam man's stomach. We are told "This blow hurt the boy far more than it did the iron man, and he could

hardly repress a cry of pain" (63). Johnny perceives his creation as a supplemental body, at once

less intimate and more essential than Smith's prosthetics are to him. While Smith's cyborg body

enables him to hide his injuries and appear normalized for polite society, Johnny Brainerd does

not alter his appearance. Nor does he need to, for the steam man provides a fearsome and

powerful tool that is actually an improvement over the human body. After all, as Brown points

out, Johnny Brainerd and his steam man--not the physically idealized Baldy--ultimately solve the

miners' problems (130).

In this application of Brainerd's invention, *The Steam Man of the Prairies* cuts to the

heart of prosthetic-expansionist technology. Primarily, the steam man seems created for only

one use. While it is a massive improvement in transportation--moving at "railroad speed"

without the confinement rails (10)--this benefit quickly becomes secondary to the steam man's

ability to provoke fear and awe in Native Americans who threaten the miners. The two hardiest

frontiersmen in the book have identical reactions upon seeing the steam man. Baldy Bicknell,

knowing his friends are defending their claim, offers to purchase the steam man when he first

encounters Johnny. Johnny questions how he would use it, and Baldy replies, "Thar's three of us

goin' out to hunt fur gold, and that's jist the thing to keep the Injins back and scart. I've been out

thar afore, and know what's the matter with the darned skunks. So tell me how much money will

buy it" (25). Baldy's impulse to use the steam man for scare tactics comes into even fuller focus

past the novel's midpoint in Chapter XIV, with the appearance of a character called the "Huge

Hunter."[15] Left alone to guard his machine, Johnny finds himself confronted by a "white man, in

the garb of a hunter" who is "nearly six feet and a half high" (69). This imposing figure further

exaggerates the ideal of Western manliness found in Baldy. Unlike Baldy, the hunter is less

scrupulous in dealing with young Brainerd; his impulse, however, is precisely the same as

Baldy's upon seeing the steam man and hearing Johnny's description of how it works. He announces his intent to steal it from Johnny, stating "I'm goin' to take it myself to chase redskins in" (71). Johnny barely escapes the Huge Hunter and keeps his steam man. This episode seems to have no other purpose in the grand narrative of *The Steam Man of the Prairies* than to highlight an additional white frontiersman's reaction to Johnny's creation. The scene solidifies the book's central conceit. The two most physically imposing characters in the novel immediately perceive the steam man as a device for frightening and hunting Indians. That both men limit its potential use to chasing Indians shows not a limit on the part of Ellis's or the character's imagination, but rather an approach to technology and expansion pervasive in their cultures.

If the steam man's use is portrayed as inevitable, his very creation is portrayed as a second and similarly important predestined outcome. Upon seeing it, Ethan Hopkins states, "Do you know I've been thinking of that thing for ten years, ever since I went through Colt's pistol factory in Hartford, when I was a youngster" (14).[16] Exposure to nineteenth century American military technology has planted the seed of such a contraption into multiple individuals' imaginations, making its construction likely. Similarly, Johnny gets the idea for his invention from his mother, when he asks her for something to which he can apply his mechanical talents. "Yes there is something I have often thought of," she replies "and wonder why it was not made long ago . . . . It is a man that shall go by steam" (20). Ellis's novel consistently gives plausibility to its central SF motif by portraying it as a concept that would be easily conceived in the face of technological progress and that will easily find applicable use, an idea that simply waits for a clever engineer to bring it into reality.

From this perspective, the overarching theme of Steam Man deals with technology's ability to transcend limits and enable adventurous activities that lead to material gain. The numerous buffalo hunts and Indian encounters related in the text's midsection showcase how Johnny Brainerd participates in expansion. The novel's ending reinforces this idea, even as it portrays the destruction of the device that makes it possible. Johnny falls asleep at his post as night watchmen--dreaming up "improvements" to his creation--while the group is camped in a canyon on their trip home with their gold (92). Confronted by Indians who barricade their escape route with boulders, Johnny increases the fire in the steam man to enable it to become a hybrid battering ram/bomb:

> The steam man was turned directly toward the wall, and a full head of steam let on. It started away with a bound, instantly reaching a speed of forty miles an hour.

> The next moment it struck the boulders with a terrific crash . . . and the instant of touching ground upon the opposite side directly among the thunderstruck Indians, it exploded its boiler! The shock of the explosion was terrible . . . the steam man being blown into thousands of fragments, that scattered death and destruction in every direction. (99)

Ellis recounts this mayhem approvingly, underscoring the way the steam man facilitates frontier violence. Gregory Pfitzer has read such events as an indication that *The Steam Man of the Prairies* has a clear moral that "Power, especially technological power, still clearly corrupts" (53).[17] The elements of empowerment and the ending's focus on Brainerd's sacrifice and subsequent wealth seem to counter such an interpretation. The explosion of the steam man

represents a way for Johnny to make up for his delinquency as a watchman, giving up his prosthetic body for the protection of his friends.

Cyborgian bodies, however, can be modified and reproduced, and the novel's technocratic enthusiasm extends beyond the steam man's destruction. Rather than offering skepticism or moralizing against technological power, the novel celebrates that power and anticipates its further use with unremitting optimism. The book ends with a promise that Johnny, now wealthy from the gold mine, "is educating himself at one of the best schools in the country" and upon completing his formal education "it is his intention to construct another steam man, capable of more wonderful performances than the first" (100). Johnny's loss of his prosthetic body is traumatic but ultimately *temporary* because of the inherently replaceable nature of his prosthetic mechanism. Such recreation, it should be noted, is implicitly possible because of the enormous wealth Johnny is able to gain because of his Western adventure enabled by the steam man. The same money used to pay for "one of the best schools in the country" can be applied to rebuild his mechanical counterpart body when the time comes.

Ellis shows prosthetic technology as a tool that enables conflict on a military scale by individuals whose physicality might otherwise not permit them to engage in such adventures. Poe, in contrast, shows the cyborg as a method for concealing the physical damage sustained by bodies during war. In both cases, bodies can be rebuilt in a way that may indeed be an improvement over the natural body, similar to the manner Haraway suggests but with extremely different goals and consequences. Haraway notes "The main trouble with cyborgs, of course, is that they are the illegitimate offspring of militarism and patriarchal capitalism, not to mention state socialism. But illegitimate offspring are often exceedingly unfaithful to their origins" (273). Haraway's viewpoint offers utopian promise that is not found in Poe and Ellis. In neither

story do we find the human/machine hybrid as anything but an extension of militarism and traditional Western views of gender, race, and economics.

While their content differs, their cultural resonance is the same. Ellis's text delivers what Poe's story withholds. We get the kind of detailed account of violent conflict that Poe's narrator sought. Ellis and Poe's approaches to technology share a similar complexity, in that neither author envisions a scenario in which a technology is created with the specifically intended purpose of use in warfare. Instead, technology blends with the human form, becoming a potentially transformational, multipurpose tool. Yet, in both texts, the inevitable end of this technology is expansionist, with warfare against the native population portrayed as the natural outcome. Whether it is found in Smith's adoring, gossiping public or Brainerd's physically inclined comrades, both authors articulate an understanding of American culture that embraces prosthetic technology, at least in part, because it is enhances expansionist warfare and material gain.

Chapter 2: Dime-Novel Technology and the American Imperial Imaginary

in the Frank Reade, Jr. Series

Between 1876 and 1898, the Tousey publishing house printed a series of dime novels featuring the characters Frank Reade and his son, Frank Reade, Jr. Each of these stories contains a recurring formula: the hero invents a fantastic, technologically enhanced form of transportation and uses it to travel to some remote destination where he has a series of adventures. The Reade series proved so popular that it went into weekly publication during its heyday in the early 1890s, ultimately producing 192 different novels (Ashley 20). The Reade dime novels make up the backbone of the Edisonade genre, the loose assemblage of American proto-science fiction novels published during the latter half of the nineteenth century that showcased inventor protagonists engaged in technologically enhanced exploration tied to empire building.[1] While other notable works such as Ellis's *The Steam Man of the Prairies* (1868) and Twain's *A Connecticut Yankee in King Arthur's Court* (1889) are Edisonades in the broader sense, dime novel series such as the Frank Reade stories make up the bulk of its content and provide the best indication of its motifs. Currently, the prevailing understanding of Edisonade dime-novels highlights their blend of technocracy and U.S. imperialism. From this perspective, these works provided a predominantly young, white, male, working-class readership with fantasies of colonial power enabled by technology, ultimately performing the cultural work of preparing U.S. readers for their country's subsequent forays into imperial conquest.[2]

The portrayal of imperialism in the Frank Reade novels is complicated by their authorship. Tousey's company attributed all the Frank Reade novels to "Noname," a pseudonym used by a variety of authors, a common technique in dime-novel publishing meant to ensure that

readers could associate series with a particular author, even if the individual texts were produced by a stable of writers. In the case of the Frank Reade, Jr. novels, the majority of the material actually was written by a single author, Luis P. Senarens, a Cuban-American writer who began composing dime novels while in his teens ("Biography" 10).[3] The Frank Reade, Jr. tales make up only a fraction of the 1,500 dime novels that Senarens wrote under various pseudonyms, an achievement that makes him one of the most prolific writers of late nineteenth century America ("L. P. Senarens" 21). Because he rapidly produced texts for mass consumption under a pseudonym, Senarens's success has been rarely acknowledged outside a few comprehensive studies of early science fiction.[4] By 1920, Senarens's identity had become known among early SF readers who dubbed him "The American Jules Verne," and such accolades were given credence by the oft-repeated but unsubstantiated claim that Verne himself wrote at least one complimentary letter to "Noname" praising his inventiveness.[5] Senarens's career represents more than a footnote in the genre's development; it paints an intriguing picture of nineteenth-century publishing, American empire, and the first-generation citizen's experience. Simply put, a vast number of these technocratic tales of a young Anglo-American hero encountering and frequently exploiting native cultures around the globe were composed by a Cuban tobacco merchant's son who was born and rooted in metropolitan New York. It seems perhaps ironic, then, that during a time when the U.S.'s imperial interests were focused, among other places, on his father's native country of Cuba, Senarens accumulated a literary pedigree that consisted predominantly of narratives in which American influence expanded across the globe.

In what follows, I will investigate the Frank Reade series' connection to U.S. conceptions of race and empire in two key ways. First, taking cues from Michael Denning and Franco Moretti, I will examine trends in the first decade of the series. Part of such a reading necessarily

entails addressing problems of authorship and historical evidence when dealing with mass-produced literature of the late nineteenth century, and Senarens provides an excellent case study. Reading the Frank Reade novels from a distance sheds light on the way they commingle technological progress and imperial expansion in a manner addressed to young, predominantly male audiences. Second, I will look specifically at portrayals of race and imperial expansion in several key, individual Frank Reade, Jr. stories, focusing particularly on the first four novels (1882-1883) featuring young Frank Reade, Jr., and then specifically on 1896's *Frank Reade, Jr. in Cuba; or, Helping the Patriots with His Latest Air-Ship*. Most dime-novel historians and early SF scholars concur that the early 1882-1883 novels were written by Senarens, providing a rare occurrence where dime-novel authorial attribution is fairly certain and giving insight into Senarens's approach to the technocratic dime-novel narrative. The latter 1896 novel, which I contend is the work of Senarens, represents a curious case in which the dime-novels' recurrent technological narrative is applied to real-life events, presenting the fictional hero aiding the contemporaneous war for independence in Cuba and interacting with fictionalized portrayals of Máximo Gómez, Antonio Maceo and other Cuban revolutionaries.

Close analysis of Senarens's Frank Reade, Jr. stories challenges some of the notions about how Edisonade dime novels operated within their era. In fact, these novels present a somewhat conflicted portrayal of empire, one that is extremely technocratic but not fully jingoistic, and in which the categories of race and nationalism inherent in empire are more fluid than previous dime-novel historians may have reckoned. At their core, these novels present an imperial imaginary that allows for individual technological empowerment without larger cultural implications.[6] Rather than portray the long-term, wider impact of the invention, the Frank Reade Jr. dime novels focus on serial adventure, setting up a strange, repeated formula where

transformative technology is constructed, used on a personal scale, and then withdrawn from society with no real impact on the status quo. In this approach, the Reade stories are radically dissimilar to the type of science fiction that addresses what Raymond Williams calls "the technological transformation," where utopian possibilities are opened up by a new technology that changes the world around it (53-54). The absence of this larger element from Senarens's novels actually facilitates their use as political commentary when contemporary events are incorporated into the plot, an approach that is most evident in *Frank Reade, Jr. in Cuba*. Because the very nature of these dime novels involves a celebration of self-determination and a promise of technological empowerment that operates on an independent level, they are uniquely suited for such cultural work. When their narrative is applied to contemporary events directly related to U.S. empire building, such as the Cuban crisis, the Frank Reade novels' technocratic expansionist motifs ultimately undermine the very notions of race and nationalism that enable imperialism.

<div align="center">Investigating Dime Novels: The Case of Frank Reade, Jr.</div>

The Frank Reade series provides an interesting case study for examining serial fiction and how its themes play out over long timeframes. The earliest Frank Reade adventures appeared in dime-novel monthlies aimed at a younger, male readership, such as *The Boys of New York* and *Happy Days*. The first of the series, *The Steam Man of the Plains; or, The Terror of the West*, appeared in 1876 and was composed at publisher Frank Tousey's request after he saw a reprint of Edward S. Ellis's *The Steam Man of The Prairies* (retitled *The Huge Hunter* in 1876) and determined that copying its formula might have lucrative results (Bleiler *Science-Fiction* 548). While these novels began as serialized tales running concurrently with other serial adventures in monthly periodicals, the Frank Reade, Jr. dime novels have a particular

significance because in September 1892 they went into weekly publication in a periodical

bearing the character's name--*The Frank Reade Library*--and thus achieved significance to

science-fiction historians by becoming the first SF series in regular publication (Ashley 21).[7]

Scholars such as Everett F. Bleiler, J. Randolph Cox, and Edward T. Le Blanc have

catalogued these novels over their many reprints, an exhaustive endeavor that allows

historicization of the first appearance of concepts or tropes in the series. Unfortunately,

additional background about the Reade novels is lost because they have suffered the same fate as

other popular, cheaply printed, and ephemeral commercial literary forms. Business records,

correspondence with readers, authorial notes--items essential to the literary historian's body of

evidence--are non-extant for Tousey's press.[8] While a large body of collectors and fans-turned-

scholars investigated such matters throughout the twentieth century, records are missing, and

hard evidence for who wrote what story or why specific business or narrative decisions were

made does not exist.

Despite the lack of historical artifacts from the publishing arena, scholars such as Michael

Denning and Franco Moretti provide methods for assessing the relevance of mass-produced,

serialized texts such as the Reade dime novels. Denning's *Mechanic Accents: Dime Novels and*

Working-Class Culture in America counters earlier studies that presumed dime novels provided

"escapist" leisure reading for working-class audiences.[9] Denning cautiously avoids any

assumption that these readers used narrative reading practices identical to today's audiences.

Instead, Denning asserts that these works were read by their working-class audiences

allegorically rather than narratively. Denning explains the way working-class readers

understood such texts:

> Thus the households and families in dime novels that would be interpreted as typical households if read novelistically are interpreted as microcosms of the social world when read allegorically; individual characters are less individuals than figures for social groups. (72)

Working class readers, then, understood that characters embodied specific social types and that they worked less as representations of individuals than as representations of groups who shared their concerns. The elements of "longing for autonomy" and "individual achievement" that Brown finds in inventor dime novels are read, from Denning's perspective, allegorically. Indeed, Denning explains how this mode operates:

> For an allegorical mode of reading to shape a system of reading, there is usually a master plot, or body of narratives, that are shared by a culture . . . . [S]uch a single tale, a master plot, existed in nineteenth-century working-class culture . . . . This plot was made up of nationalist, class-infected stories of the American Republic [and] sometimes contradictory tales of its origins and threats (72-73)

For Denning, these texts offered a single master plot of American idealism and individual justice that figured the "utopian longings" of a lower class (212).

The earliest Reade novels play out exactly this sort of allegory, particularly in the first four titles in the series, which appeared between 1878 and 1881 and were written by Harry Enton.[10] In these books, Frank Reade epitomizes all independent, hard-working individuals who achieve success through a blend of discipline, applied technological skill, and physical prowess.[11] Senarens sums up this element in *Frank Reade Jr. and His Steam Wonder* (1882), his first work for the series, by reintroducing Reade, who had last appeared in a *Boys of New York* serial in 1881.

> No reader of the *Boys of New York* has forgotten Frank Reade. He well
> remembers the great genius that invented the world-renowned *Steam Man* of the
> plains . . . . [A]fter making an ample fortune out of his invention, [Reade]
> married the girl of his choice, brought a large tract of plain-land out west, [and]
> settled down to farming by steam . . . He used one-fourth only the force his
> neighbors did, and thus made four times as much money (2).

Reade's ability to transform technological know-how into income is highlighted, aligning the
narrative of the early Reade dime-novels with the kind of working-class allegory Denning
studies.

When Senarens took over the writing, he shifted the focus to Frank Reade, Jr., the son of
the elder Reade. These novels flourish at the end of the nineteenth century, a transitional
moment in which Denning finds an "eclipse of the plebian, producer narratives of the dime
novel, and the ascendancy of stories of upper-class schoolboys and heroic all-American
detectives" (205). Indeed, Reade, Jr. is not a plebian producer, but the son of the successful
inventor, essentially a privileged scion groomed to take over the family business of inventing and
adventuring.[12] This is not to say the novels do not appeal to the same work ethic found in the
rags-to-riches variant of dime novels; in fact, approving mentions of Reade, Jr.'s hard work and
dedication appear repeatedly in the series. Nevertheless, Reade, Jr. begins with material
resources available to him from the outset. *Frank Reade, Jr., and His Steam Wonder* tells the
audience that Reade, Jr. has constructed his new device "in the farm carpenter-shop" using
"many of the tools and implements his father had used years ago" (2). When the son proudly
exhibits his new invention--a steam-powered wagon that travels on land like a modern-day van
or recreational vehicle--the elder Reade states "I had no precedents, and you had" (2). Unlike his

father, then, Frank Reade, Jr. represents a different inventive class, one that already possesses accumulated capital and an established infrastructure that facilitates success.

The focal transition from Frank Reade to Frank Reade, Jr. represents a move away from the master narrative recognized by Denning and toward a different kind of recurring plot. While the earlier stories can be discerned as empowerment fantasies that highlight the technological skill of an independent producer class, the Frank Reade, Jr. stories focus instead on the hero's ability to use his technological creation to journey to ever-more distant locales and intervene in circumstances there as he sees fit. In these stories, we find a variant of the frontier myth studied by Slotkin, where adventurous rugged individualism plays out the "contradictory attitudes of Americans" who are both "committed to equality but thirsting for distinction; ambitious for progress but lamenting the loss of that world of pure potential" (501). Reade, Jr.'s goal is to challenge himself through frontier adventures, not explicitly to advance economically or socially. As such, he represents the burgeoning imperialist technocrat who has both inventive know-how and enormous financial resources at his disposal.

Rather than portray how technological skill provides an opportunity to join the middle class, the Frank Reade, Jr. stories focus instead on the hero's ability to use his technological creation to interfere in events. Many of the Frank Reade, Jr. novels begin with the hero at home, reading a newspaper, or a letter that either requests help or issues a challenge. Often this coincides with a visit from an acquaintance. A good example comes from *Over the Andes with Frank Reade, Jr., in His New Air-Ship*, first published in 1894 as part of the *Frank Reade Library* and recently republished as part of J. Randolph Cox's paperback collection, *Dashing Diamond Dick and Other Classic Dime Novels* (2007). In this story, Reade, Jr. publicly announces his intent "to build an air-ship which will be able to carry a dozen or more persons

around the world if need be" (73). He receives thousands of letters from individuals hoping to accompany him on this flight. After a lengthy description of how the air-ship works, coincidence strikes: Reade, Jr. discovers that his assistant Barney's cousin, Patrick De Frontenac, has explored the Andes and wants to return to an "unexplored region" that only the air-ship can reach, and Reade, Jr. agrees to take him there (78). The hero's technological skill allows him an opportunity to be part of an adventure, enabling someone else (in this case, De Frontenac) to achieve some goal.

In each story, Reade, Jr. uses technology to visit remote settings, where he becomes embroiled in problems that his invention helps him fix. As John Clute points out, each invention in an Edisonade story is both a "weapon" and a "means of transportation," and this is the case with the series of steam-driven and electric tricycles, air-ships, submarines, and boats created by Reade, Jr. (368). Each invention allows him to interfere with events that would otherwise be wholly outside his sphere of control, often in foreign territories. In the first Senarens-authored tale, Reade, Jr. helps a man rescue his sister who has been kidnapped by Indians. In the second, he helps stop Canadian bootleggers. In the fourth, he saves a kidnapped woman and helps the Mexican army defeat bandits. Each story follows this trajectory of invention, travel, and subsequent violent conflict. These repeated elements reveal the Edisonade myth, acting as what Lévi-Strauss calls "constituent units" that, through their repetition of story elements and in the multiple retellings and variants, work to "render the structure of the myth apparent" (114). Edisonade texts use repeated tropes of scientific exploration, adventure, and the consistent reward of inventiveness to articulate an American myth in the Lévi-Straussian sense.[13]

To see how this master plot develops in Senarens's dime novels over decades of publication, it is helpful to consider Franco Moretti's insights into mass-produced literature.

Moretti proposes "distant reading" that studies groups of texts, analyzing or quantifying

significant elements, rather than closely reading isolated texts in order to reveal long-term

development of "devices, themes, or tropes." ("Conjectures" 57). This approach encourages

scholars to look at "patterns as a whole" rather than individual texts (*Graphs* 13). Moretti's work

lends itself to dime-novel research, demonstrating how conventional wisdom about genres can be

challenged or confirmed by looking at texts *en masse*, observing key elements as they recur in

many texts over long periods.[14]

In the case of the Frank Reade, Jr. stories, this method may be applied to observe the

American imperial imaginary and the conjoined variants of technocracy and expansion that

inform it. Each of the 192 novels has a similar approach in terms of narrative, following the

same aforementioned pattern of invention, travel, and episodic adventure. Almost all feature

damsels to rescue, outlaws to capture, and numerous recurring events that are encountered when

the heroes reach their remote destination, or during the trip.[15] The main differences between

stories come from the *type of invention* and the *locale* of the action. Other studies have

catalogued the series and established the order and manner in which the stories appeared.[16] To

fully demonstrate how the Frank Reade, Jr. tales operate, such chronologies must include

information about the actual setting of each narrative. If they are indeed archetypal or allegorical

portrayals of American techno-imperialism in action, then these two elements--locale and

invention--should provide clues as to how technocratic imperial conquest was conceived by

dime-novel writers and readers.

As Figure 1 shows, the first decade of Frank Reade novels consists of stories set in the

American West. The first five (beginning in 1876 with the original Frank Reade stories and the

first Frank Reade, Jr. tale) deal with steam-driven prime movers. While no Frank Reade stories

appeared in 1877 or 1878, the first two were reprinted in 1879. The series then grows

exponentially: one story per year in 1880 and 1881, then two stories per year from 1882-1884,

then four Frank Reade, Jr. stories in 1885. The last story covered in this period ends serialization

on April 3, 1886, three weeks shy of the tenth anniversary of the first Reade story's conclusion.

Even when the series takes its first major leap in science--from steam to electrical power

in 1882's *Frank Reade, Jr. and His Electric Boat*--the North American setting remains. Most of

the action in that adventure occurs on Lake Michigan, where Reade, Jr. fights U.S.-Canadian

bootlegging. Similarly, the series presents another major nautical invention in the submarine

from 1884's *Frank Reade, Jr.'s Marvel*. In that story, the adventure takes place in Louisiana's

Red River. Unlike the *Nautilus* of Verne's Captain Nemo in *20,000 Leagues under the Sea*

(1869), Reade's *Marvel* does not circle the globe or even venture outside U.S. waters. Only in

1884, with *Frank Reade, Jr. in the Clouds*, does the series leave North America. Within two

months, that story is followed by *Frank Reade, Jr. with His Air-Ship in Africa*, the first of many

African expeditions in the series; subsequently, three more North American adventures appear

before the setting moves abroad again. Significantly, the adventures from 1876 to 1885 that

occur outside the United States all feature air-ships. As the Reade novels shift from steam-

driven prime movers to rapid, heavier-than-air craft, the scope for the stories expands into

international territory. Imagined technology begets imagined imperialism.

Thus, by the time the series entered weekly publication as *The Frank Reade Library* in

September 1892, Reade, Jr.'s exploits were truly international affairs. Reprints of older material

made up part of the first year's weekly issues, making it difficult to assess these changes because

international adventures were interspersed with earlier tales. Figure 2 lists all the stories that

appeared in the *Frank Reade Library* during 1894, when the series was predominantly a bi-

weekly affair of original material, providing a stark contrast to the American West-dominated tales of the 1870s and 1880s. Of the 25 separate novels, North America narrowly dominates with five tales set in the western U.S., two in Canada, and two in Mexico. Beyond those, three stories are set in Africa, three in South America, one in Australia, and one in India. Electrical vehicles--the Electric Prairie Schooner, the Electric Caravan--figure heavily. Air-ships appear in several stories where the action takes place outside the U.S. (Peru and Canada), but just as often Reade, Jr.'s adventures in foreign locales feature land vehicles, such as the Electric Buckboard used in Australia or the Electric Wagon used to combat ivory hunters in Africa. Several of the stories featuring submarines have no precise location other than the ocean, but in the one year covered here, Reade, Jr. has adventures in the Pacific and Atlantic Oceans, the Arctic and the Yellow (East China) Seas. Just as interesting are the four arctic tales of technologically enhanced polar expeditions. Clearly, in this era Frank Reade, Jr.'s canvas is the world. All this demonstrates that, on their surface, the Reade dime novels play out key elements of technocratic imperialism. The U.S. imperial endeavor has a clear analogue in Reade, Jr.'s travels and his subsequent involvement in adventures, first in the American frontier and later on foreign soil.

<div align="center">Locating the Imperial Imaginary</div>

Despite their clear portrayal of a U.S. imperial imaginary, some tropes of the novels subvert the imperialist underpinnings of the Edisonade. To see this, we must shift from the quantitative body of evidence to textual particulars. The following examples, primarily from the first four portrayals of Frank Reade, Jr., demonstrate how Senarens conceives and develops a Reade plot. As is the case with many pseudonymous dime novels, authorship is disputed; however, the first four Frank Reade, Jr. adventures are traditionally recognized as Senarens's

work. By looking closely at these novels, it becomes clear that Senarens did not approach

technocratic expansion in an exclusively imperialistic or nationalistic way.

Reade, Jr.'s interaction with other characters shows that the series' central allegory comes

from its celebration of individual technological achievement without large-scale cultural impact,

an element that obscures the logic of imperialism. The Senarens novels repeatedly demonstrate

how technology empowers the individual to act as final arbiter. For the Frank Reade, Jr. novels

to work as allegories of such individual power, they must also constantly resist the temptation to

display the larger cultural impact of Reade, Jr.'s inventions. Technology provides opportunities

for personal adventurism, but it has no tangible, long-term effects. A good example comes in

Steam Wonder (1882) when Reade, Jr.'s companion Jack notes that the Steam Wonder will

"create a revolution in Western travel" (6). Shortly afterwards, they encounter a wagon train and

frighten its horses. The guide denounces Reade:

> "Git out!" growled the old guide. "That Union Pacific Railroad drove us guides
>
> away down hyer, and now *you* come snortin' erlong with that blasted ole steam
>
> machine to break us up. Git out, I say, or by the great prairie I'll fill yer skin
>
> chock full of lead." (6)

Frank pilots the Steam Wonder away, noting to Jack that the guide is an "old crank" who has

undoubtedly lost business to the railroad and thinks the Steam Wonder will "kill his business

completely" (6). Reade, Jr. later saves the same wagon train from Indian attack, and discussion

of the Steam Wonder's potential to create social change is dropped completely. While the novels

do not shirk from mentioning the potential disruption to the status quo that Reade's contraptions

may create, they resist overt portrayal of such consequences and instead highlight

technologically enabled acts of heroism.

Senarens also portrays individuals who immediately perceive the Steam Wonder's benefit and want to buy it, only to be rebuffed. Such rejected offers are a constituent element of the Reade myth. Sara Berrey has shown that Reade, Jr.'s insistence on refusing to sell his technology and keeping its inner workings a secret demonstrates how the books constantly assert the hero's independence and the pleasure he takes in it (121). In *Steam Wonder*, Reade turns down a postmaster who encourages him to use his device to deliver mail (19). He also rejects an offer from a wealthy stockbroker, Mr. Gregory, who asks to buy the Steam Wonder after their final attack on the Comanche village (23). In *Electric Boat*, he turns down a Government offer to buy his work for "millions" (10). As the wealthy son of an inventor, Reade, Jr. does not need additional capital. He possesses knowledge and resources, so the construction of new technology serves primarily to enable his adventures without the interference from individuals or social bodies that could hamper his goals. A similar scene in 1883's *Air-Ship* underscores this point. Reade, Jr. aids a wealthy Mexican landowner who wants to buy the heavier-than-air craft. Frank replies, "Your offer is ten times greater than the cost of the air-ship . . . . But it's the only one in existence, and I am on a pleasure-trip. Some day I may either sell you this one or have one made for you" (14).

"Some day" never comes in the Frank Reade, Jr. novels. His technology produces no repercussions and, while they frequently make lucrative discoveries of hidden mines or lost cities, Reade, Jr. and his friends do not seek a fortune by patenting or selling technology. If the novels suggested that Reade, Jr.'s inventions had repercussions beyond his "fun," they would need to address implications of the power inherent in his expansionist technologies. Reade, Jr. would have to deal with consequences of his technology, rather than taking pleasure in displaying its thrilling power. In the example of the wagon train, resistance to the (hypothetical)

job loss caused by his invention is easily overcome by its martial utility in confronting

sensationalized Indian violence, derailing any consideration of larger social ramifications. Such

examples help explain why the dénouements of Reade novels frequently include his rejection of

offers to buy his craft. If Reade, Jr. commodifies his technologies, he relinquishes the autonomy

so highly valued in the tales.

This allegorical turn contradicts claims that the stories are inherently nationalistic. A

later Frank Reade, Jr. story illustrates this point. In *Frank Reade, Jr., Exploring a Submarine*

Mountain from April 7, 1894, Reade, Jr. has this exchange with a government representative

who wants to buy Reade's invention:

>"I do not approve of war or its horrible engines. I don't wish my invention
>
>to ever be turned to such a purpose. For that reason and the good of humanity at
>
>large I prefer to keep my secret."
>
>"But think of its value," protested the agent.
>
>"That may be. But money is no object to me at all. The government has
>
>enough to defend itself with now."
>
>"You are not patriotic!"
>
>"Just the same I am not lending myself to the invention of engines of
>
>destruction . . . ." (3)

By 1894, Reade, Jr. disdains the use of his inventions as "engines of destruction" by government,

after over a decade of stories in which he frequently chooses to use his inventions for this very

end. The issue, then, is less about *how* the technology is used than about *who* controls it. Reade,

Jr.'s decisions throughout the series--to punish outlaws, to aid people in need, and to refuse to

sell his items--all underscore the series' enthusiastic individualism. Technology enables not only

travel but expansion of influence, not only military power but its judicious use on an personal

level without recourse to a larger body (government, Church, etc.), even leading to accusations

of being "unpatriotic" for not relinquishing his weapon to the U.S. government.

<div align="center">Race and Imperialism in Frank Reade, Jr. Novels</div>

The Frank Reade, Jr. books have an additional element--race--that further complicates

their treatment of imperialism. It is important to consider their treatment of race for two reasons.

First, it clarifies how the stories presented the American identity tied to technocratic exploration

to their U.S. audience. As scholars such as Edward J. Blum have shown, postbellum Americans

frequently promoted a notion of whiteness that aligned the concept of "American" with an

exclusively Northern European-descended, Protestant identity. Similarly, Walter Benn Michaels

has analyzed how such a conception of whiteness played out in the era leading up to the Spanish-

American war and the beginning of international U.S. imperialism.[17] If the Reade series'

approach to nation-building is more complex than earlier studies have suggested, then the books'

portrayal of race is equally complex in a manner that does not, ultimately, facilitate imperialism

as it was constructed in the minds of Americans of this era.

Second, the portrayal of race in the Frank Reade, Jr. novels factors into determinations of

authorship. Senarens's own background as a Cuban-American would have put him outside the

narrow definitions of American identity mentioned above. In *Science-Fiction: The Early Years*

(1990), Bleiler notes that "Senarens, whose father was Cuban, might have been expected to be

sympathetic with Latin Americans" but instead he finds them portrayed as villains and

stereotypes (550). With this in mind, Bleiler stepped away from earlier claims that "Senarens

wrote them all" when he attempted to discern which individual Reade novels were penned by

Senarens ("Introduction" ix). Instead, he assesses Senarens's authorship by looking at "certain

common elements" of the stories "particularly those that there is reason to think may be the work

of Senarens" (549). He begins his list by noting that

> In many ways Senarens's work typified the dime novel at its worst, with
> weak or no plotting, repetitiousness, bad writing, deliberate lowering of level,
> sloppy research . . . jingoism, sadism, and outrageous racial prejudice focused on
> blacks, Mexicans, and Jews. (549)

From this perspective, Bleiler frequently asserts that novels without these elements of racism and

sadism are likely *not* the work of Senarens, including *Frank Reade, Jr. in Cuba*. No less than

seven of the twenty-eight Frank Reade stories profiled in *Science Fiction: The Early Years* are

posited as probably not by Senarens (549-558). Although Bleiler's claims are helpful in

furthering the discussion about authorship in dime-novel publishing, they do not fully address the

full spectrum of how the Reade novels deal with race and characterization. Close examination of

the story content demonstrates that the portrayal of race in the Frank Reade, Jr. tales is anything

but stable. By looking at the first four Frank Reade, Jr. novels--the ones scholars generally agree

are the work of Luis Senarens--it becomes clear that Senarens did not demonstrate the

"outrageous racial prejudice" that Bleiler claims. Rather, the Frank Reade, Jr. series features the

same kind of conflicted portrayal of race found in other nineteenth century popular works.

Race plays a key role in the frontier myth that enabled westward expansion and that

fundamentally informed the plots of early Edisonades. Slotkin's *The Fatal Environment*

discusses the "Myth of the Frontier" as "arguably the longest-lived of American myths," tracing

it to the early colonies. Slotkin addresses the economic and technological "underpinnings" that,

added to the self-justifying racist impulse, make up the myth; these are "laws of capitalist

competition, of supply and demand, of Social Darwinism 'survival of the fittest' as a rationale for

social order, and of 'Manifest Destiny' . . . " (15). Like Slotkin, Richard Drinnon traces these

ideas back to colonial America and wars against Native American populations. Drinnon defines

racism as the "Habitual practice by a people of treating, feeling, and viewing physically

dissimilar peoples--identified as such by skin color and other shared hereditary characteristics--

as less than persons" (51) He identifies this trend in the Americas as far back as 1638, in Philip

Vincent's response to the Pequot War, which is an early articulation of a key concept in later

imperialism: the "'one bloody good lesson' view of teaching natives how to behave" (50). From

the earliest colonial history, Indian populations were not only considered "less than persons," but

also groups against whom violence was justified in the effort to control any unwanted actions

toward the expanding European colonists.

Slotkin's and Drinnon's definitions point to the way Eurocentric conceptions of race

among early White, Protestant colonists facilitated expansion, enabling the later waves of

regional imperialism in North America as U.S. citizens moved westward. Additionally, they

show how such ideas continued into the late nineteenth century, into the era just preceding the

Spanish-American war and during the height of the Frank Reade, Jr. series. They clarify how the

frontier myth is used in the Frank Reade novels. The Western hero goes forth, equipped with

technological and financial resources and a European ethnic heritage that gives him cultural

authority to appropriate new lands and their resources.

The first four Frank Reade, Jr. novels take place in the West, featuring multiple

encounters between Frank and a variety of Native American tribes. In its predecessors, Ellis's

Steam Man of the Prairies and the Harry Enton-authored Frank Reade stories, violent battles

with Indians occur frequently. Senarens's Frank Reade, Jr. stories follow in this tradition.[18]

When Reade, his cousin Jack, and his black servant Pomp set out across the prairies in "an

engine and car that doesn't need any track" in the *Frank Reade, Jr., and His Steam Wonder*, they quickly encounter Indians as they camp and sleep inside the vehicle (3). The narrator explains:

> The reader will remember that Frank Reade, Jr., and his cousin, Jack Russell, were both under eighteen years of age, and had never seen hostile Indians in their lives. It is true that Frank had seen a great many red-skins, having been born in the West, yet he had never seen them in war-paint, nor heard their war-whoop. He and Jack . . . were, therefore, greatly excited when they were so unexpectedly awakened by the yells of the red demons outside their car (4).

The Indians climb atop the Steam Wonder and try to get inside. The Steam Wonder, however, is portrayed as a bullet-proof, indestructible fortress, and the protagonists are never truly threatened.[19] Frank temporarily frightens them by blowing the Steam Wonder's whistle. When they return, Frank fires up his vehicle and gives chase. "I'll give 'em a scare," he announces, before turning a hose on the Indians that pumps "a stream of boiling water upon them" (5). Such actions are typical of the treatment of Indians in the Frank Reade series: the heroes rarely face the threat of genuine harm, but rather use their technological marvel to humiliate and punish the Indians who encounter them. *Frank Reade, Jr. and His Steam Wonder* features several such encounters, including an early episode when Frank and company assist a young man, Dick Morgan, in rescuing two white girls captured by the Indians (7), prevent an Indian threat to a U.S. mail train (15), and finally enable a revenge attack by whites against a frontier family's Comanche captors that ends with the burning of an entire Comanche village (22-23).

Sadistic scenes such as this frequently come with odd rhetorical flourishes. When Jack sees the Indians and suggests that they "give 'em a few bullets," Reade, Jr. replies, "No--shed no blood unless compelled to. Father warned me against firing on Indians just because they were

Indians. They are human beings as well as ourselves" (5). Jack is "astonished" by this reply, because he "had been reared in New York, where he had got the idea in his head that white men on the plains shot Indians as they did deer . . . every time they got the chance" (5). The line resonates with self-parody, potentially aimed at the young, urban audience of dime novels who were frequently titillated by portrayals of bloody frontier battles and gunfights. It may even be Luis Senarens's self-deprecating acknowledgement of his own position writing such tales; he too was a New Yorker who had never been to the plains.

Such examples highlight the strange, pendulum-like swings between sadism and sympathy found in the Reade novels. Throughout *Frank Reade, Jr. and his Steam Wonder*, the protagonist struggles with such impulses.[20] He humiliates one captured Indian by shearing off his hair, sending him back to his people with the admonition that "you Indians must let all wagons alone . . . . We are not your enemies. We cut off your hair to show you that we could cut off your head just as well. Tell your people to let us alone and we'll not bother them" (5). They perform a similar shearing on another captured Indian, but when one of the rescued girls claims she is "almost sorry you didn't take his scalp off with his hair," Reade replies: "I don't want to hurt them . . . unless compelled to in self-defense"(8).

Frequently, Senarens's stories suggest that technology can provide the "one good lesson" approach that Drinnon sees as pervasive in American imperialism. After expressing with frustration that "The Indians have been receiving such lessons at the hands of whites for the last hundred years, and they don't seem to learn anything by it" (9), Reade, Jr. and company help a man named Mr. Gregory attack the Comanche who burned his ranch and kidnapped his wife and daughters (22). Because they are protected by the Steam Wonder's bullet-proof shell, they can attack without ever revealing themselves to danger; we are told that "Twenty minute passed, and

the Comanches found that over one-half their number were down, and yet they had not seen a white-face . . ." (22). In *Frank Reade and His Adventures with His Latest Invention* (1883), Reade, Jr. goes west in an electric tricycle that can travel at thirty miles an hour and is encased by a bulletproof mesh cage to protect the passengers. (3). When attacked by Indians, Reade, Jr. runs an electric current through the wire cage around the tricycle, making it a brutally efficient killing device: "The six savages who had laid hands on the tricycle were instantly killed. They dropped to the ground in their tracks, and remained as motionless as only the dead can" (6).[21] The deployment of this technology frequently comes with Reade, Jr.'s appeal that he is using violence to teach his attackers that subsequent violence will not benefit them. *Frank Reade, Jr. and His Air-Ship* (1883), which famously portrays heavier-than-air flight for the first of many times in the series, features a scene where Reade captures an aggressive Indian chief, ties him by the heels to the air-ship, then takes flight, stating "You know very well that the Indian is no match for the white man. He has been driven towards the setting sun until great tribes are now nothing but small villages of old men and squaws. A few more years and the red man will be no more . . . " (10). The story ends with a break from its usual format by implying that this use of technology has a large-scale impact. The last sentence states, "The good effects of the severe chastisement the tricycle had inflicted on the Indians of the plains were seen long afterwards, for the reds never forgot the young inventor and his Latest Invention" (21).

Even these moments of frontier violence come with flourishes on Reade, Jr.'s part that Indians should be treated with respect. *Latest Invention* points to this paradox. Reade, Jr. provokes a fight with Chief Red Horse, explaining his method to his traveling companion, Jack, in the electric tricycle by stating, "Oh, I want a little fun out of them, and teach 'em a lesson that will have a tendency to let white people alone. Do you know, Jack, that while they are much

sinned against, they are incorrigible thieves and murderers . . ." (5). The lines embody how Senarens's early Reade stories veer sharply--sometimes even within the same paragraph--into vague gestures of racial sympathy. Reade at once calls Indians "incorrigible" in the same sentence he explains that they are "much sinned against." The Reade novels portray U.S. expansionism as inevitable, while straining to show their hero's sympathy on some level with the individuals he is torturing and killing. What we find in the Frank Reade, Jr. stories, then, is a continual alternation between sadistic action and heroic restraint, a trope that reinforces the role of the technologically empowered individual as the final regulatory force on the frontier but that is tempered by these appeals to sympathy.

One brief interlude from *Electric Boat* (1882) demonstrates how far out of the way Senarens goes to address racial sympathy in the context of these technocratic, expansionist tales. *Electric Boat* features a strange episode between Reade, Jr. and an "Indian maiden" he meets on the lake shore, in which she and Frank discuss the relative merits of each of their respective cultures. She says of her tribe, the Nipigons:

> "They are very simple-minded people, and never say or do anything they do not mean."
>
> "Ah! How I wish my people were *all* that way," said Frank.
>
> "They would be better if they were," she remarked. "But the whites are a grand people, and no other race in the world can withstand them." (18)

In a series that thrives on such episodic, out-of-nowhere encounters that have no bearing on plot, this interchange stands out. Each respective party critiques his or her own people. The Nipigon woman expresses dissatisfaction with her own people, voicing the notion of her own people's inevitable decline because they cannot "withstand" white expansion. Frank, in contrast,

expresses the wish that his people could be more like the Nipigons in terms of their forthrightness, specifically wishing whites were collectively more honest. This scene underscores the problematic portrayal of racially informed imperialism in the Reade novels. Contrary to earlier views that found the novels filled with empire-enabling racism, Senarens's earliest Frank Reade stories struggle to portray the Indian as both adversary and object of pity.[22] He also occasionally critiques whites' understanding of their place in the world, as the exchange with the Nipigon maiden shows.

Much of the misconception that the Reade novels envision imperialism on racial terms comes from Senarens' treatment of Pomp, Reade's African-American assistant. Everett Bleiler called the portrayal of Pomp an appeal to the "folk myths of the day," noting that Pomp is "an embodied slur" whose traits include "stupidity, slyness, pompous illiteracy, superstition, laziness, and a razor in his footgear" (x). More recently, Bleiler has been more pointedly critical of Senarens's portrayal of Pomp as "an ignorant, pretentious, stupid black" (Science-Fiction 550). He also notes that the racial tone is "somewhat softened" by the Issue 27 of the *Frank Reade Library* ("Introduction" x). Examination of the first four Senarens-authored Frank Reade, Jr. novels shows that, even from its onset, the Reade novels contain contradictory tones in their portrayal of the main, recurring African-American character.[23] In the early Senarens-authored novels, Pomp is presented with the same disconcerting mixture of sadism and sympathy found in their treatment of Native Americans. This tone is established when Pomp is introduced on page three of *Steam Wonder* as a worker at Reade's farm who is a "privileged character" because he is the only African-American in town. Pomp immediately runs into trouble as he guards the Reade household to prevent "red-shirt" cowboys from breaking into the workshop to see Reade Jr.'s invention. One red-shirt shows a revolver and threatens Pomp:

"I ain't killed er nigger in a month," he said, "an' I'm itchin' to shoot one.

Ef that ar door ain't open in two minutes, thar'll be a funeral in Africa for sure."

. . .

"I ant' got de key," said Pomp.

"Get it, then."

"Well, hole up dat pistol, den."

The red-shirt did "hole up" the pistol, and the next moment Pomp darted

forward, like an old ram, and butted him in the stomach with such tremendous

force as to lay him out as limber as a wet rag some twenty feet (3).

The red-shirt voices a deliberately racialized threat, and Pomp responds with the same kind of

justified-when-threatened code of violence that Reade, Jr. displays throughout the series. Pomp's

head butt can easily be seen as degrading, an example of a black character acting like an animal

when faced with trouble. It also, however, is the first of many incidents of Pomp enacting

violence toward white law-breakers throughout the series: during the first three Frank Reade, Jr.

stories, Pomp shoots and kills no fewer than four white men, always to the approval of his

companions.

In fact, Senarens frequently treats Pomp heroically in the early Frank Reade, Jr. tales.

Reade, Jr. takes Pomp on his first journey west because "Pomp has forgotten more about such

trips than I will learn in a year" (*Steam Wonder* 4). Indeed, Pomp is able to predict Indian

attacks because he carefully observes buffalo migration along the way (8-9). Rather than being

portrayed exclusively as a comic stereotype, Pomp is more often than not portrayed as, in Reade,

Jr.'s words, "a man worth having around in a scrimmage" (*Frank Reade and His Electric Boat* 8).

One scene in *Steam Wonder* perhaps best demonstrates the tone. Two white outlaws attempt to

steal the invention by capturing Reade at night, then leading him through the darkness to the

door of the Steam Wonder. They make him call out to Pomp to open the door. Ever vigilant,

Pomp has observed the proceedings and is more than prepared:

> . . . [Pomp] promptly opened the door of the car.
>
> One of the outlaws sprang into the door, but Pomp planted his revolver
> against his head and pulled the trigger.
>
> He fell into a heap at Pomp's feet.
>
> "That settles the nigger," said the other outlaw, and even Frank himself
> thought Pomp was done for.
>
> . . .
>
> The second outlaw put one foot on the step and was about to spring in,
> when a second shot broke his arm. His revolver dropped to the ground, and he
> sprang back with an oath.
>
> "Who fired that shot?" he angrily demanded.
>
> "De niggar did!" replied Pomp, leaping out and confronting him with his
> smoking revolver in his hand. (16)

These actions make Pomp "a hero" to all the folks back in town (16).[24] A similar scene plays out

in *Frank Reade and his Latest Invention*, where Pomp shoots and kills a renegade white

masquerading as an Indian chief who has attacked Reade's group. Frank looks approvingly on

this, noting that Pomp is capable of necessary violence in a way he is not. "By George that saves

us a great deal of trouble" exclaimed Frank. "I could not shoot him down in cold blood. Bully

for you, Pomp" (10).

This is not to say that Pomp is consistently portrayed with dignity. One incident in *Steam Wonder* involves him winning a barrel of whiskey in a head-butting contest with a "red-shirt" and becoming uproariously drunk. Even this scene eventually ends with Pomp appearing in a positive light. When Frank suggests he auction off the barrel of whiskey and give the proceeds to the two rescued Indian captives, Pomp immediately does so. As a result, "Black Pomp was recognized as a white man after that, and every red-shirt in town took him by the hand and asked him to drink it with him" (13)

The notion that a black man would be recognized as "white" by his fellow townsfolk is reminiscent of Twain's *Huckleberry Finn* (1884), particularly the titular character's growing sense that his black companion, the escaped slave Jim, is "white inside" because of his unselfish behavior (305). The comparison between *Huckleberry Finn* and the first Senarens Frank Reade, Jr. story may be apt. *Huckleberry Finn*, published two years after *Steam Wonder*, shares many elements with dime-novels in terms of race and attitude, as Steven Mailloux has shown in his study of Twain, *Rhetorical Power*. Mailloux argues that much of the public furor around *Huckleberry Finn* came from its relationship to "bad boy boom" of dime novels (117). Mailloux ties this to the lack of contemporary response to Twain's portrayal of race in the novel, intimating that "The contemporary readers of Huckleberry Finn were much more preoccupied by literature's effect on the 'Bad-Boy Boom' than they were on its relation to the 'Negro Problem'" (103-104). Mailloux's observations are a response to long-running twentieth-century debates over race in *Huckleberry Finn*, particularly Leo Marx's assertion that Twain abandons his sympathetic portrayal of Jim in order to bring the story to its close (93) and Ralph Ellison's critique of Jim's minstrel-inflected behavior (84).

The comparison to Twain suggests that conflicted portrayal of race is not limited to dime novels. Critics of dime novels and the Edisonade particularly tend to lament the books' racism without approaching them with the level of scrutiny or sympathy that an author such as Twain receives. In the case of Pomp, the black servant of Frank Reade, Jr., the racism is both palpable and conflicted. Just as the text alternates between sympathy for and sadism toward Indians, it oscillates sharply between portraying Pomp as a noble figure and as a caricature used for comic purposes, not unlike Twain's Jim as read by Marx, Ellison and others.

The conflicted portrayal of non-white characters in the Reade novels comes from an element specific to Edisonades; such appeals to common racial stereotypes are frequently at odds with the technocratic nature of the stories. For example, in *Air-Ship*, Pomp is mocked for his superstition, a hallmark of the era's African-American caricature. In this case, the caricature is used to emphasize science's ability to dispel superstition and encourage rationality. Pomp begins the scene terrified of the clouds they encounter as the airship rises:

> Negro-like, he had a queer conception as to what constituted a cloud, and so he waited with bated breath, staring eyes, and rigid silence, awaiting the coming contact of the air-ship with the cloud. . . . His superstition was so great that he could not but believe that they were about to invade the mysteries of the life beyond the sky. He believed that heaven was just beyond the clouds, and that the young inventor was audaciously intruding on sacred country. (13)

As they pass through the cloud, Pomp is shocked not to see or hear angels. We are told "Pomp's face was a study. All the superstitions of a life-time were thus suddenly knocked in the head. He was doing some tall thinking" (13). Pomp processes this new knowledge quickly, although he blames his own racial background for his ignorance. His final reaction is to tell Reade,

"Niggers doan' know nuffin nohow." Reade, Jr. replies, "There are a great many white people who don't know any more." Pomp agrees (13). The exchange shares an obvious similarity with Reade, Jr.'s exchange with the Nipigon maiden; in each case, he responds to both individuals' assessments of their own cultures by pointing out the failure of many whites to be peaceful or well-informed. More importantly, the scene holds out the possibility that superstition can be overcome through the type of technocratic exploration that Reade, Pomp, and O'Shea undertake.

As he does with the Nipigon maiden, Reade, Jr. critiques whites. In fact, the early Reade, Jr. novels are filled with white characters who are ill-informed, superstitious, or just behind-the-times. At the same time, the novels portray non-white characters as having the capacity for the nobility and intellectual rigor. From this perspective, the Frank Reade, Jr. novels do not portray an American imperial imaginary that finds central authority in state, nationalism, or race. Just as their celebration of individual agency enabled by invention undermines overt nationalism or jingoism, their treatment of race situates them somewhat outside the overtly Anglo-Protestant nation-building rhetoric of their time. While they certainly contribute to an imperial mindset by vindicating a technocracy in which the right to lead is a function of science and force, they also subvert that mindset by calling into question these other elements of the American imperialist identity.

Frank Reade, Jr. in Cuba: Dime Novel Technology Expands to Real Circumstances

The Frank Reade, Jr. series features at least one novel that applies this formula to real circumstances tied directly to American empire building. *Frank Reade, Jr. in Cuba; or, Helping the Patriots with His Latest Air-Ship,* serialized in *Happy Days* from 27 June to 8 August 1896, takes the recurring myth established under Senarens's authorship and blends it with an expose of international politics, revealing the possibilities and limits of its allegory. While the

incorporation of current political events was not unusual in earlier dime novels studied by Denning, *Frank Reade, Jr. in Cuba* operates in a unique way because it shows how the Edisonade's treatment of imaginary imperialism narratively interacts with the realities of empire and U.S. intervention (Denning 24).[25] The story explores Reade, Jr.'s participation in the war for Cuban independence, just over a year after Cubans began a war against their Spanish colonial rulers and two years before the United States declared war on Spain after the sinking of the battleship *Maine* in February 1898. In keeping with the Reade myth, Frank's invention--an air-ship called the *Jupiter*--has only limited effects and his actions are devoid of long-term social consequences. The relatively benign and altruistic nature of Reade, Jr.'s interference underscores the text's appeals to Cuban patriotism: the Cubans are the heroes, while Reade, Jr. assists their leaders with his technology. Appeals to Cuban sovereignty--the ostensible justification for U.S. interference that ultimately occurred two years after the novel's first publication--occur frequently in the text. Several other key, contemporary debates involving U.S./Cuban relations and American international cultural and political expansion--potential annexation of Cuba or the establishment of a U.S. protectorate--are never mentioned in the text.

Frank Reade, Jr. in Cuba presents numerous, discrete adventures which feature historical personages. Reade, Jr. becomes a volunteer in the Cuban rebel's war against Spain, swayed by news reports of the Cuban patriots and their fight against General Weyler, who was sent from Spain in 1896 specifically to put down the most recent insurgency. The story begins with Reade, Jr. perusing a newspaper and lamenting that "The savage brutality of Gen. Weyler's troops is becoming unbearable. Perhaps I may hasten the cessation of this cruel war. . ." (2). Reade, Jr. requests and receives permission to intervene in the conflict, presenting a "big letter from the Cuban junta in New York" to his cohorts:

> See--it contains my commission to act for the army of liberation, and letters to
>
> Antonio Maceo, Gen. Maximo Gomez and Senor Betancourt, the first president of
>
> Cuba libre. . . . It is an acceptance of my recent offer to use my air-ship in behalf
>
> of the patriots. (2)

Clearly, Senarens followed the events in Cuba closely and incorporated stories from the press that appeared immediately prior to the novel's serialization beginning in June 1896 into the novel. A number of U.S. papers, particularly those owned by publisher William Randolph Hearst, criticized Weyler's tactics against Cuban civilians; the Spanish general was denounced repeatedly in the U.S. press in early 1896. His proclamation of many anti-democratic measures, which included extending the death penalty to anyone circulating news "favorable to the rebellion" or who would "belittle the prestige of Spain," were reported derisively by the February 17, 1896 *New York Times* ("Weyler's Draconian Laws").[26] On February 24, the *Times* quoted one unidentified "American planter" in Cuba who reported that Cubans were being "shot and no questions asked about internment the next morning" in an article headlined "Weyler Rules Like a Despot."[27]

Three days later, such policies hit home for Americans as the *Times* reported the liberation of an American reporter, Charles Michelson of the *New York Journal,* who had been held by Weyler under the new laws. The U.S. Consul General appealed for the newsman and his interpreter's release. ("American Newspaper Man"). Thus, the portrayal of Reade, Jr.'s anger at such information seems typical of the times. An editorial from April 2, 1896 criticizes Weyler's "repeated assertions" that the Cuban rebels were "simple bandits. . . [which] justified him in shooting or hanging them like dogs whenever opportunity offered" and suggests circumstances will change when "the patriots can meet their foes on equal terms" ("Editorial"). Weyler's tactics

seem to have elicited sympathy from Americans toward the rebels, particularly when American lives were in jeopardy because of Spanish laws.

Another incident factors even more directly into *Frank Reade, Jr. in Cuba*'s plot. Reade, Jr. tells his companions Barney and Pomp that, while he abhors Spain's "barbarous mode of warfare," his trip is also inspired by his desire to rescue his captive friend, Walter Dagmore. He explains:

> Walter was a newspaper reporter, sent to Cuba by the journal he represented. For sending truthful reports of the war to his paper, and for exposing the real facts of a frightful massacre of non-combatants he was seized, thrown into prison, tried by a drum-head court-martial and sentenced to death. The U.S. Consul General filed a vigorous protest . . . but no heed was paid to it, and poor Dagmore is to be shot . . . (2).

While the narrative use of a captive newspaper reporter seems to reference the Michelson incident, the name "Walter Dagmore" alludes to Walter Dygert (reported variously as "Dygart" by the *N.Y. Times* and "Dygatt" by the *Chicago Tribune*), an American who was imprisoned in Cuba in the months prior to the story's publication.[28] Dygert's case seems to have been overshadowed by the broader results of Weyler's policies, the sinking of the *Maine*, and the subsequent war; he is mentioned in many early century studies of the conflict but is not mentioned by more recent accounts that focus on recovering the Cuban perspective and the broader development of American imperialism.[29] Dygert was arrested in Cuba after he moved there from Tampa to "find profitable employment." Allegedly, Spanish authorities mistook him for Alfredo Gold, an Englishman nicknamed "Inglesita" who was helping the revolutionaries. Spanish authorities reportedly beat Dygert during interrogation and imprisonment. According to

one paper in Dygert's home state of Illinois, authorities were "evidently afraid to tell the truth for fear of the consequences" once the case of mistaken identity came to their attention ("Rumor"). Similarly, the *Chicago Daily Tribune* reported that Dygert had been in Illinois during the same period when the acts of conspiracy he was accused of took place ("Must Tell"). He was eventually released by Weyler after U.S. Consulate appeals (Wisan 151). The Dygert case presented another example of Weyler's brutal methods, particularly directed at an American citizen rather than at Cuban insurgents. The entire text of *Frank Reade, Jr. in Cuba* ups its rhetorical ante by incorporating references to the Michelson and Dygert cases to build its case for Cuban independence.

Senarens's fictionalized portrayals of Cuban leaders underscore this approach. Gómez, Maceo, and other leaders are portrayed heroically in Senarens's 1896 dime novel, but perhaps it is the spirit of José Martí that looms largest. Although Martí was killed in battle on May 19, 1895, a year before *Frank Reade, Jr. in Cuba* was published, his understanding of nationalism and the threat of U.S. interference come to bear in the novel. Martí feared that Americans could justify interference in Cuba because their Anglo-Saxon conception of manifest destiny encouraged disdain for the ethnically diverse culture of Cuba.[30] The landmark essay "Our America," which articulates the differences between the United States and the Latin American countries by valorizing the latter, emphasizes "The disdain of our formidable neighbor [the U.S.] who does not know [Latin America] is our America's greatest danger . . ." (295). As Laura Lomas has shown, Martí's writing counters pro-expansionist narratives, such as Frederick Jackson Turner's frontier essays, by highlighting the United States' history of lynchings, riots, and systematized racism in popular media, such as plays and wild west shows (221-224).[31] Such writings exemplified what Lomas defines as Martí's "alternative modernity" written inside an

imperial power to challenge its cultural definitions (11). She notes his "strategy" for writing as an outsider within America, including his assertion that "One must be perennially inside the corpulent race, and convince it little by little" (qtd. in Lomas 221). This approach represents Martí's attempt to help the United States understand Latin America in general and Cuba in particular.

Frank Reade, Jr. in Cuba represents a strange blend of the techno-expansionist tale established by the earlier Frank Reade, Jr. stories and the inflammatory, persuasive statement written "inside the corpulent race" that Martí suggested was needed for the U.S. to understand and respect Latin America. In light of the post-war limits placed on Cuba by the U.S., Frank Reade, Jr.'s affirmation of Cuban insurgency presents an optimistic view of Cuban-American relations and plays out the imperial imaginary in its most benign, altruistic sense. The Cuban insurgents embody the same independent spirit valorized by the Edisonade's master narrative. At one point, Reade, Jr. observes

> Very few people make their way in the world by inactively waiting for good fortune to come their way and favor them. The Cubans are a good example. See all they have accomplished by their own exertions. Hard work, good judgment, plenty courage and a liberal amount of perseverance have made them practically masters of this island (17).

To Reade, Jr., the Cubans are kindred spirits who share his values of "courage" and "hard work." The character explicitly connects the two peoples and delineates where U.S. readers' sympathies should lie, matter-of-factly explaining to one insurgent, "As we are Americans, we are Cuban sympathizers" (11). Senarens makes the point repeatedly. When Frank rescues Dagmore from his prison, utilizing "air guns" that throw "explosive bullets," he announces "*Viva Cuba libre*!

You are saved, my friends" (5). Frank's allegiance with "*Cuba libre*" and willingness to participate in the insurgency are key elements of this particular narrative.

Reade, Jr. does not, however, dominate the heroics of the first major skirmish. From above in the air-ship, Reade, Jr. and his crew watch Cuban leader Máximo Gómez lead his troops in a thoroughly romanticized fashion: "With an ensign upon each side of him, bearing the colors of the new Cuban republic, Gómez brandished his sword, dug spurs into the flank of his horse, and dashed away" (7). Frank notes from the air-ship that he "never saw such noble courage and such grand generalship before" (5). Such descriptions idealize Gómez, while the prominence of the Cuban flag underscores the country's sovereignty. The text's heroic presentation of Gómez secures the allegorical linking between Cuban and U.S. patriotism. In the final showdown, Reade, Jr. uses his air-ship not primarily as a weapon, but as a means of transportation to help Gómez infiltrate a pro-Spanish speech by Weyler, interrupt the proceedings, and proclaim Cuba's right to freedom (17). When Weyler's troops attempt to execute Gómez, Reade, Jr. drops exploding bags of flash powder from the air-ship, blinding the Spanish troops and allowing Gómez's escape (17).[32] Gómez acknowledges the "sensation" that Frank has helped him create, stating "It showed my enemies that I had no fear of them. . . and it gained me many recruits" (17).

The positive portrayal of Cuban patriots extends to both the Cuban junta in New York and to Antonio Maceo, the black Cuban revolutionary who makes an appearance in a chapter entitled "The Great Mulatto."[33] Maceo attacks and disperses a Spanish force when Frank is injured, helping the American narrowly avoid capture. Maceo is first described as "a mulatto of military bearing" (8). Oddly, in a series frequently criticized for racial insensitivity, Maceo's mixed-race status is emphasized. The novel affirms Maceo's racial heritage and bravery,

extending the approach found in the occasional heroic portrayals of Pomp in Senarens's early stories. When Reade, Jr. provides Maceo secret letters informing him of "several filibustering expeditions" from the U.S. with "arms, ammunition, and medicines," the general declares,

> We need all the aid we can get, for you must be aware that there are less than fifty thousand rebels pitted against nearly four times as many Spaniards. However, it is a common saying among my men that one Cuban is the equal to ten Spaniards. (8)

Similarly, when Maceo sees Reade's air-ship, he notes that "it is a wonder. With several such machines we could drive every Spaniard from the island and win the war in a week" (8). He does not subsequently make a plea for such machines, nor does he make the monetary offer that appears so frequently in the Reade novels. This disruption of a repeated motif in the Reade novels emphasizes the Cuban patriots' independent spirit. The implication is clear: the Cubans need aid, such as the junta's deliveries, but are formidable enough without it.

Frank Reade, Jr. in Cuba, then, seems to present a polemic in which Senarens fosters his white, working-class readers' sympathy for the Cuban patriots. Interestingly, although its plot relates directly to Senarens's father's homeland, authorship of the novel has been disputed.[34] An earlier novel by Senarens, however, suggests that he had already displayed an interest in crafting a story about Cuban patriotism. In 1879, Senarens wrote *Ralph, the Rover; or, The Cuban Patriots* for the Nickel Library.[35] Although his name was incorrectly spelled "Senarnes" on the cover, the novel is one of a handful that appeared under his own name rather than a pseudonym. Like *Frank Reade, Jr. in Cuba*, it recounts a tale of individual American intervention in the Cuban struggle for independence, in this case set during the Little War of 1879-1880 that followed the Ten Years' War. Like Frank Reade, Jr., the hero is a young, adventurous Anglo,

Ralph Seabright, who has no ethno-national ties to Cuba. Seabright becomes embroiled in the war when he is kidnapped and sent abroad.

The two dime novels have striking similarities. Both involve the workings of the junta. Both present the Cuban patriots in an overwhelmingly favorable manner:

> They fought for their country, with no pay--fought as heroes, suffering untold privations; starving at times, destitute of clothing at others; fought on, with no encouragement, no applause to their efforts, save that given to one another; their battle-cry, "*Vive la Cuba y libertad*!" (Cuba forever, and liberty). (*Ralph* 20)

Both narratives feature a Spanish spy masquerading as a Cuban patriot who sabotages the mission. Both feature a heroic but heavily caricatured African-American who speaks in heavy dialect and engages in melee by head-butting his opponents. Finally, both narratives feature hair-breath rescues of prisoners from Spanish firing squads. While these similarities do not definitively prove that Senarens wrote *Frank Reade, Jr. in Cuba*, they suggest him as the most likely candidate. Both novels use parallel elements to achieve the same ends, positively portraying the Cuban insurgency using the tropes familiar to dime-novel audiences. *Ralph the Rover* demonstrates that the young Cuban-American author had already shown a desire to incorporate the struggle for sovereignty in his father's homeland into popular fiction, and did so using motifs that are repeated in *Frank Reade, Jr. in Cuba*.

Unlike *Ralph the Rover*, *Frank Reade, Jr. in Cuba* draws on a long, preexisting mythic structure developed over decades of serialized retellings of the same essential technocratic story. Its assertions of Cuban independence are even stronger than *Ralph*'s because *Frank Reade, Jr. in Cuba* utilizes the same resolution as the other Reade novels. Reade, Jr. does not win the Cuban war for independence with his aerial war technology, and indeed such circumstances cannot

occur in the plot without violating the series' established trope of celebrating independent action without larger consequence. Out of narrative necessity, Reade, Jr.'s intervention in the Cuban war is limited to supporting a few battles, saving Dagmore, and assisting Gómez's theatrical speech to gain more Cuban recruits. Ultimately, the novel bypasses discussion of the larger, U.S.-led intervention that Martí foresaw, and that ultimately occurred after the Spanish-American War via the Platt Amendment of 1902, because outright consideration of such repercussions runs counter to the series' established narrative. The very nature of the Reade myth makes it resistant to outright portrayal of imperial intervention.

On one level, the Reade novels do precisely what Brown, Bleiler, and others have already noted: they create a recurring narrative that conceptualizes U.S. interference in foreign affairs and justifies such actions on technocratic terms. They conceive of scenarios in which new technology enables expansion to ever-more-remote locales, in which superior technology and military might become self-evident justifications for interference in those area's events. On another level, however, these novels' idiosyncratic celebration of personal heroism resists such analogues. The texts, particularly those authored by Senarens, do not consistently offer stories that readily conform to imperialist views regarding race or nationalism. Their repeated, conflicted articulations of sympathy with Native Americans, their portrayal of a heroic African-American, and their hero's resistance to governmental interference all counter the notion that they work as precise allegories of American empire.

The Reade novels help us understand how nineteenth-century, technocratic dime novels operated as serial narratives, as imperial allegories, as American myth. They represent only one of many Edisonade series that flourished in the same time frame aimed at the same audience, all of which would benefit from further cataloguing and analysis. Similarly, Senarens demonstrates

the plight of the dime novel author, whose anonymous work entertained the contradiction between individualist enterprise in support of political ends without resolving it. Without lapsing into simple jingoism, yet profiting from popular tropes of the imperialist imaginary, the Frank Reade, Jr. dime novels offer narratives in which technology creates opportunity for the expansion of personal control. Reade, Jr.'s episodic adventures hint at a technological-political potential to transform the world without ever truly playing out such implications. As such, the Reade novels exist within the American imperial imaginary without fully affirming a U.S. imperial agenda.

Chapter 3: Mark Twain's Edisonade Empire: Hank Morgan and Tom Sawyer

In the dime novel *Frank Reade, Jr. and His Air-Ship*, serialized in Tousey's *Boys of New York* between December 1883 and March 1884, boy inventor Frank Reade, Jr. invents a heavier-than-air craft, the *Meteor*, and embarks on an aerial voyage. He discovers an ancient, sunken city--with an intact silver mine--under a lake in remote Mexican mountains. Along with his companions, Irishman Barney O'Shea and African-American Pomp, Frank attempts to find a way to access the silver, a feat made easier because of their aerial transportation. Searching for information, he lands his air-ship in a Mexican village where the craft frightens everyone until Frank spots a priest and orders Barney to make the sign of the cross. To get answers, he implies that he is some kind of heavenly visitor. "'Come here father . . . and answer my questions as you value your soul . . ." (17). Frank gets the information he needs from the priest and returns to the *Meteor*. As they rise into the air, he describes these events to Barney and Pomp:

> "That old fellow thinks he had been talking to one of the people of the sunken
>
> city," said Frank, "and he will always tell his people so. They will hereafter
>
> regard him as a wonderful man. It may be that he will tell them a cock-and-bull
>
> story about visitors from heaven, and what they said to him." (17)

Frank somewhat wryly understands that his own "cock-and-bull" story of allowing the priest to think he is a supernatural visitor from the lost city may result in further misrepresentation of the events in question. Regardless, he has the information he needs, and goes on with his expedition.

In this episode, we find the major hallmarks of the Edisonade novels that define much of nineteenth-century science fiction.[1] In them, the American hero invents a new mode of transportation that enables him to reach a remote location where he can access wealth (Clute

368). The native population of the remote location is portrayed as a remote "Other," awed by

technology and easily manipulated. In essence, this story--and the many others like it in

Edisonades--plays out the motifs of Western expansion and conquest in the United States, adding

the element of new technology and transportation to an already well-established narrative of

"Manifest Destiny," pioneer spirit, and duping the natives .[2]

Not all novels written in the Edisonade mode faded into obscurity, particularly when

established authors utilized its tropes. In his attempts to democratize Arthurian England by

forcefully introducing nineteenth-century technology and political concepts, Hank Morgan, the

protagonist and narrator of Mark Twain's *A Connecticut Yankee in King Arthur's Court* (1889),

embodies the confident, technologically savvy, and imperialistically minded hero of the

Edisonade.[3] SF scholar John Clute mentions the book's primacy in defining the Edisonade,

particularly the rhapsodic language Mark Twain's character uses when he describes technology,

stating "the resemblance between the Boss protagonist of that novel and the self-image of Edison

expressed in his writings is most striking" (369). Morgan's technological shenanigans include

using blasting powder and lightning rods to destroy the tower of court magician Merlin and

gaining prestige by ascribing the pyrotechnics to his own, superior "enchantments" (56-59).

Morgan plays the same game that Frank Reade, Jr. plays, and he does it on a larger scale enabled

by Twain's novel format. Dime novel authors worked hurriedly, generating thousands of words

in days and weeks for regular, monthly publications, while Twain spent over five years--the

better portion of the late 1880s--working on-and-off at writing *A Connecticut Yankee*. Similarly,

the dime novels' narrative canvas was necessarily episodic, presenting adventures in installments

with little consistent, long-term character development. Twain's longer, first-person narrative

allows frequent moments of interior reflection by the protagonist, including instances where he elaborates on the broader, cultural ideas that inform his grand schemes.

In what follows, I will address Twain's place in the Edisonade genre by first examining his perception of science fiction, both in terms of how he approaches writing that uses technology and in terms of how that approach aligns with other proto-SF of his era. I will then examine how technocratic imperialism plays out not only in *A Connecticut Yankee*, but in two Tom Sawyer stories that bookend it: the unfinished *Huck Finn and Tom Sawyer among the Indians* (drafted in 1884) and *Tom Sawyer Abroad* (1894). The latter texts find Twain overtly dealing with the same portrayal of scientifically enabled expansion found in Edisonades, even if historical documents provide no hard proof that Twain himself was aware of the burgeoning proto-SF genre. In each of these three works, Twain critiques the construction of an American technocratic identity. Unlike the unabashed enthusiasm for technology found in earlier Edisonade novels such as Ellis's *The Steam Man of the Prairies* (1868) or the Frank Reade, Jr. dime novels, Twain's work frequently addresses the problems of empire *at length*, grounding it in his characters' understanding of their actions and their willingness (or unwillingness) to use technology to achieve their goals. Early Edisonades, such as Luis Senarens's Frank Reade, Jr. stories, are episodic tales that contain sudden bursts of sympathy for the native peoples met during the journey and celebration of independent action that suggest a critique of their own imperialist tendencies. Twain's approach to the same material is more overtly critical. His technocratic protagonists are limited by their own prejudices and their desire for control, and they are willing to manipulate outsiders in order to gain power. Because of these tendencies, Twain's technocrats undermine the alleged benefits of their own endeavors and, by extension, critique imperialism in general for its similar approach.

Twain augments this skeptical view by adding a new element to the stories: religion. As a keen observer of American faith and morality, Twain seems to have understood that technocracy writ large would have implications for religious authority. His portrayal of this head-to-head confrontation makes up much of *A Connecticut Yankee's* text and provides the entire impetus for its denouement. By adding religion to the lists of concepts that the technocrat can either reinforce or oppose, Twain's stories focus on technology's ability to create stasis rather than revolution. In Twain's work, technology and religion blend uneasily to present an American identity that values technology as a means to reinforce established views and beliefs. Technology does not challenge the status quo; rather, Twain demonstrates the imperialist tendency to use technology to recreate existing social circumstances and reinforce prevailing Protestant American beliefs. In this view, technology does not open up new possibilities so much as it allows the technocrat to gain power and wield it in very traditional ways.

<u>Contextualizing Twain, Dime Novels, and Early Science Fiction</u>

Twain approaches his science fiction narrative from this perspective partly because of his skepticism and partly because of his writing process, but not because he was specifically attempting to write "science fiction." For many Americans, Twain's place as progenitor of SF rests on *A Connecticut Yankee.* Ron Powers, in his 2005 biography *Mark Twain: A Life*, identifies *A Connecticut Yankee* as "the first American science-fiction novel, among other things" (523). While such an attribution ignores the two decades of dime-novel SF that came before Twain's book, beginning with *The Steam Man of the Prairies* and including the Frank Reade, Jr. series, it also provides a good example of the importance placed on *A Connecticut Yankee* in the American literary canon generally and the SF canon specifically. David Ketterer's *The Science Fiction of Mark Twain* anthology calls *A Connecticut Yankee* the author's "best and

most influential work of science fiction" (xx). H. Bruce Franklin's *Future Perfect*, while it

focuses on Twain's lesser-known SF-related work, acknowledges that *A Connecticut Yankee*

"alone establishes his importance to the genre" (370). Samuel Clemens had a lifelong fascination

with technology and a late-life passion for international politics that flourished when he became

involved with the Anti-Imperialist League. His outspokenness regarding U.S. involvement in

foreign countries and his essentially realist literary core lend gravitas to his technological novels,

providing a level of characterization that explicitly wrestles with the imperial ramifications of

technology and expansion.

So how much did Samuel Clemens know about these techno-imperialist, proto-science

fiction dime novels that flourished from the late 1870s until the end of the century? Probably

only as much as the casual American reader of his era. An illuminating example of Twain's

understanding of early science fiction can be found in his correspondence with his older brother,

Orion Clemens. Contrary to the then-prevailing American familial standard, Samuel Clemens,

rather than his eldest brother, became the de facto head of his extended family. Over the years,

he grew increasingly frustrated by Orion's financial and emotional dependence. In 1877, Orion

wrote to his famous literary sibling asking him for help constructing and publishing an adventure

novel entitled *The Kingdom of Sir John Franklin*. Orion based his idea on the real-life British

explorer who died in 1845 while trying to discover the Northwest Passage (Fanning 170). In

Orion's fictional tale, Franklin's expedition culminates in "an expedition to the core of the earth"

(Gribben 726). Twain told his mother, "Orion sends his hero down Symmes's Hole in to the

interior of the earth . . . he meets & talks with a very gentlemanly gorilla; he sees & elaborately

describes a pterodactyl, &c &c" (SLC to Jane Lampton Clemens, 23 Feb 1878). What Orion

proposes sounds like a variant on the proto-science fiction tales of travelers who encounter exotic

and often prehistoric cultures in uncharted regions of the globe.[4] In the letter, Orion requests his

brother's help, hoping that his successful sibling can lend some writerly advice and literary

publishing influence. Orion asks his brother to use his idea and

> send it out in your name and mine (with some nom de plume, if that is best) (or all
>
> in your own name, if you prefer that) [and] give me such part of the profits as you
>
> please. . . . Couldn't you imagine lots of queer adventures and romances under
>
> such circumstances?" (qtd. in Fanning 170)

Orion requests help finishing his idea, hoping that the literary muscle of the famous "Mark

Twain" will aid in not only the completion of the project but in the marketing and money-making

arenas. Orion's suggestion appears to have miffed Sam Clemens. His reply pointed out the

similarity between Orion's idea and the work of Jules Verne, the internationally known author of

technological and scientific tales who wrote *Journey to the Center of the Earth* in 1864. In his

February 21, 1878 reply, Sam began by telling Orion that "You make it appear that you are re-

writing a portion of Jules Verne's book . . . . Everybody would say the ideas were Verne's &

nothing but the expansion & elaboration of them yours." After outright accusing him of

"poaching on Verne's peculiar preserve," Clemens gave his brother the following advice: "I think

the world has suffered so much from that French idiot that they could enjoy seeing him

burlesqued--but I doubt they want to see him imitated" (SLC to Orion Clemens, 21 Feb 1878).[5]

Clemens's letters to Orion temper notions that he consciously wrote science fiction;

despite his own fascination with science and technology, clearly he saw a distinction between his

work and Verne's. His uncomplimentary assessment of Verne as "that French idiot" indicates a

lack of respect for the kind of technophilic storytelling that Verne used.[6] In fact, despite his

interest in technology, Clemens had mixed feelings about science in general. "Science" for

Samuel Clemens represented many things, as it probably did for most nineteenth century Americans. Sherwood Cummings's *Mark Twain and Science*, for example, has examined Twain's own struggles with the philosophy of science and how it informed his views of human nature, finding the author frequently "of two minds" as he went from being "ambivalent" about science to increasingly deterministic in his thinking, from hugely enthusiastic about the promise of technology to exhausted and bankrupt after failed technological investments (14-15). Susan K. Harris has addressed how Olivia Langdon's formal tutoring in science may have made Samuel Clemens ill at ease as he courted her because "his uneasiness with scientific discourse became a sign of one more difference between Langdon and himself" (*Courtship* 48). More recently, Shelley Fisher Fishkin has reinvigorated interest in Twain's anti-vivisectionist writings, presenting a Twain who actively protested against common scientific practices of his age (26-30). Connecting this to the same disillusionment with the human race that Cummings finds, Fishkin states that "Twain's awareness of his fellow human beings' willingness to disregard the welfare of animals became an integral part of [his] broader disillusionment" (33). Clemens was not an exuberant enthusiast of science, despite his ability to write enthusiastically pro-science characters.

And yet, by suggesting that his brother "burlesque" Verne, Clemens reveals a great deal about his own artistic approach. In fact, Twain would eventually heed his own advice. During 1878, Twain began writing *A Connecticut Yankee*, originally conceived as a burlesque of Mallory's *Le Morte D'Arthur*. G.W. Cable had recommended that Clemens read the book during the "Twins of Genius" tour in 1884-1885, and Clemens's first response was pure enjoyment. In his study of *A Connecticut Yankee*'s composition process, Howard Baetzhold notes how Clemens was taken with Mallory's text, joking with Cable and others in mock-Arthurian language and

referring to each other as "Sir Mark Twain" or "Sir George W. Cable" (43-4). Shortly thereafter,

Clemens wrote a note that an upcoming story should "Have a battle between a modern army,

with gattling guns . . . [and] Middle Age Crusaders" (qtd. in Smith 43). He also made his famous

notebook entry about a

> Dream of being a knight errant in armor in the Middle Ages. Have the notions
>
> and habits of thought of the present day mixed with the necessities of that. No
>
> pockets in the armor. No way to manage certain requirements of nature. Cant
>
> scratch. . . . Always getting struck by lightning. (qtd. in Baetzhold 44)

The notebook entry shows Clemens thinking through the comic possibilities of approaching a

work such as Mallory's logistically from a contemporary perspective. His logistics veer from

practical ("no pockets") to the somewhat absurd ("always getting struck by lightning"). As this

example shows, Clemens used a process that was not driven to write a set formula so much as it

was driven by a desire to play with, and frequently mock, the formulas he found elsewhere.

Knowing that Twain took this approach makes it tempting to think that he was mocking

Edisonade dime novels when he wrote *A Connecticut Yankee* and *Tom Sawyer Abroad*; this is

probably not the case. Twain at least knew *something* about dime novels in general. He was

aware of dime-novelist Ned Buntline's work, for example, and name-dropped the title of

Buntline's non-Edisonade *The Black Avenger of the Spanish Main* in *The Adventures of Tom*

Sawyer (1876) (Weldon 105).[7] There is little real evidence, however, that he read inventor

series, such as Frank Reade, Jr. and Jack Wright. Alan Gribben's reconstruction of Twain's

library does not include any of the Tousey proto-SF dime novels. Other studies have connected

Twain to dime novels more forcefully, but not necessarily convincingly. In 1994, Gregory

Pfitzer specifically connected *A Connecticut Yankee* to Ellis's *Steam Man of the Prairies*, arguing

that Twain likely read Ellis's work while he was researching *Huck Finn and Tom Sawyer among the Indians* (47-50). Pfitzer relies on Twain's "well publicized reputation as an avid reader of dime novels" (45). More recently, Michelle Ann Abate's 2010 article on Twain's unfinished "Hellfire Hotchkiss" story argues that the tale "subverts . . . the common gender coordinates of the dime novel western " (115). Abate asserts that "Twain's knowledge of western dime novels has been well-documented," but does not offer hard evidence to further support the claim (120).

While this recent scholarship assumes Twain's dime novel savviness as a legitimate fact, a closer examination of Twain's documented use of "dime novel" materials challenges the notion that he was acquainted with Steam Men, boy inventors, and their ilk. Pfitzer draws from Albert Stone's study *The Innocent Eye: Childhood in Mark Twain's Imagination* (1961), which again contextualizes Twain in relation to the debate of dime-novels and their perceived negative influence on juvenile, male readers.[8] Both Pfitzer and Stone mention Twain's request to his nephew/publisher Charles Webster:

> Send to me, right away, a book by *Lieut. Col. Dodge U.S.A.,* called '25 Years on the Frontier'--or some such title . . . I want several other *personal narratives* of life & adventure out yonder on the Plains & in the mountains, if you can run across them--especially life *among the Indians . . . .* I mean to take Huck Finn out there. (qtd. in Stone 159)

Pfitzer suggests that "Twain may well have been reading dime-novels again in preparation for the writing of *Among the Indians* (45).

But there are dime novels, and then there are *dime novels*. Clemens requested "personal narratives" from Webster, and these appear to be his primary source material for *Among the Indians*. While accounts such as Dodge's may be lumped in with the cheap frontier accounts of

dime novels, these first-person narratives--while often sensationalized--operate quite differently from fictional works. Dodge's book, *Our Wild Indians: Thirty-Three Years' Personal Experience among the Red Men of the Great West* (1883), represents the kind of overt debunking of Cooperesque notions of the frontier that Clemens surely appreciated. Dodge's somewhat sensationalized chapter on the fates of white captives specifically names Cooper, stating "Cooper, and some other novelists, knew nothing of Indian character and customs when they placed their heroines in their hands" (529). Dodge's accusation no doubt applies to not only Cooper but the dime novelists, including Ellis and Senarens, who emulated him.[9] Far from ever using actual dime novels as source material, Twain instead crafted his tale with an understanding of Cooper paired with a vindication found in the pages of personal narratives from Western explorers.

Twain's use and critique of the Edisonade narrative demonstrates how much it had pervaded American culture. While there is no proof that Twain read Edisonade dime novels, he understood their conventions and adds to the myth by bringing a new factor into focus: his assessment of how individuals would approach technologically enabled exploration comes embedded with the notion that individuals desire to have their existing ideas reaffirmed. Twain's trio of novels, the unfinished *Among the Indians*, *A Connecticut Yankee*, and *Tom Sawyer Abroad*, use the same frontier exploratory tropes found in the dime novels and expand on them by assessing the role of both religion and technology in facilitating such expansion. In Twain's SF, technology's ability to create new knowledge is hampered by people's established conception of the world. His technocratic protagonists cling to their own prejudices and their existing conceptions of identity, finding ways to use technology so that it reinforces these ideas. In this manner, Twain's work critiques American technocrats by consistently presenting narrative

situations in which they fail at grand schemes because of their reliance on prevailing views of history and identity.

<center>Among the Indians: Religion on the Frontier</center>

Before he fully utilized this approach, Twain drafted a story that addressed how exploration could actually shape a traveler's worldview and change him. Begun in 1884 and left unfinished in August of that same year, Twain's *Huck Finn and Tom Sawyer among the Indians* represents something of a first draft toward *A Connecticut Yankee*. Gregory Pfitzer notes that while Twain eventually abandoned his draft featuring Huck and Tom, he "made eventual use of his western research and manuscript by dramatically adjusting the setting and thematic trajectory" by working it into *A Connecticut Yankee* (47).[10] The two works share a common theme in their portrayal of a self-confident protagonist who ventures into unknown territory and has his core values challenged by the harsh realities of that new environment. A*mong the Indians* begins with Tom Sawyer, Huck Finn, and Jim preparing to leave their town to see the West. Huckleberry Finn narrates the tale. Tom desires to light out for the territory, but must convince Huck and Jim to join him. Jim protests the most, noting that he has no desire to make acquaintance with Indians. He says "Ef dey ketches a body out, dey'll take en skin him same as dey would a dog. Dat's what I knows 'bout 'em." Tom's reply is "All fol-de-rol" (34). Twain sets the stage, one he will repeat in *Tom Sawyer Abroad*, with Tom presenting his romanticized outlook and Jim voicing practical concerns that are immediately dismissed by the book-smart white youth. In fact, the impression of Indians that Jim voices coincides directly with the portrayal of Indians in Dodge's book.[11] Tom responds with a page-long description of how Indians are "the noblest human beings that's ever been in the world" (35). Jim is won over,

concluding emphatically "I doan' want no likelier folks aroun' me d'n what dem *Injuns* is" (37).

Off to the Plains they go.

Huck, Tom, and Jim meet up with a family, the Mills, and request to join them during

their journey to Oregon (40). One of the Mills daughters, Peggy, is the sweetheart of a skilled

frontiersman named Brace Johnson, who is scheduled to join their party later. Johnson is an

experienced Indian fighter, a "big, and fine, and brave, and good" young Anglo-American in the

tradition of Leatherstocking and Baldy Bicknell from *Steam Man of the Prairies* (42). When the

group encounters an Indian party--much to Tom's delight--Peggy explains Johnson's dislike of

Indians, noting that she wishes "he could see that Injuns was just like other people" (46). The

Indians they have met, however, eventually kill the Mills parents and kidnap Peggy and Jim.

When Johnson arrives, Huck and Tom follow him in a revenge/rescue mission that is not unlike

the one at the end of the first Frank Reade, Jr. story. As they begin tracking the Indians, Huck

wonders about the small dagger Peggy had shown him--a gift from Brace Johnson to be used for

suicide in case of Indian attack--and asks Johnson why "He actually hoped Peggy *was* dead"

(54). Huck spares the reader the details, saying nothing more than "He explained it to me, and

then it was all clear" (54).

Johnson's hard-earned frontier knowledge sets the contrast to Tom Sawyer's naiveté.

Johnson, Huck tells us, "talked about Injuns . . . the same as if he was talking about animals"

(61). Tom must confront his misconceptions. After the raid, Huck asks a seemingly innocent

question and receives a telling reply:

> "Tom, where did you learn about Injuns--how noble they was, and all
>
> that?"

He gave me a look that showed me I had hit him hard, very hard, and so I

wished I hadn't said the words. He turned away his head, and after a minute he

said "Cooper's novels," and didn't say anything more . . . ." (50)

Just as *A Connecticut Yankee* pokes fun at Mallory's *Le Morte D'Arthur*, *Huck Finn and Tom*

Sawyer among the Indians sends up Cooper and in the process numerous dime novels that used

Cooper's formula, first by burlesquing their frontier tropes and then by explicitly stating how

incorrect their portrayals of the frontier are when compared to perceived reality. In many ways,

the unfinished novel works through the ideas that would become his later essay "Fenimore

Cooper's Literary Offenses," written for the *North American Review* in 1894 (Powers 560).

One might suspect that, given his focus on debunking Cooper, Twain would highlight the

negative portrayals of Native Americans presented by Dodge. Instead, Twain found something

in his research that piqued his interest: Dodge's portrayal of Native American spiritual beliefs.

Twain wrote the following note in his copy of Dodge's *Our Wild Indians* in preparation for *Huck*

Finn and Tom Sawyer among the Indians: "Our illogical God is all-powerful in name, but

impotent in fact; the Great Spirit is not all-powerful but does the very best he can for his injun

and does it free of charge" (qtd. in Gribben 197). Twain's portrayal of Native American faith

obviously oversimplifies the wide range of actual beliefs across Native American tribes; that is,

in Axel Knoenagel's terms, it is "only replacing one stereotype for another" (98). Nevertheless,

in Dodge's work, Clemens found at least one area where the Indian outlook represented what he

viewed as an improvement on the white Protestant worldview he had inherited.

The influence of this idea seeps into Twain's portrayal of Brace Johnson who, despite his

distrust and hatred of Indians, has nevertheless adopted their religious views. Huck explains that

Johnson has lived with Plains Indians long enough to have "some of their ways" including, to

Johnson's own surprise, their spiritual beliefs:

> And one of the things that puzzled him was how such animals ever struck such a
> sensible religion. He said the Injuns hadn't only but two Gods, a good one and a
> bad one, and they never paid no attention to the good one, nor ever prayed to him
> or worried about him at all, but only tried their level best to flatter up the bad god
> and keep on the good side of him; because the good one loved them . . . . Brace
> thought more of the Great Spirit than he did his own mother, but he never fretted
> about him. (60-61)

Johnson's attempt to "flatter up the bad god" impacts their adventure. Johnson loses track of the

day it is and eats meat on a Friday. Swearing off meat on certain days is one way Johnson hopes

to appease the unnamable "Bad God," and he tells Huck and Tom that the "best way" to appease

the Bad God is through self-denial, "same as you do in any religion" (62). When Tom goes

missing later, Johnson attributes it to the Bad God getting his revenge.

Despite the jab at religion's tendency to equate self-denial with appeasing God, Brace

Johnson's faith is clearly not the "same as" the religion of Huck, Tom, Jim, or the Mills family,

or any of the numerous Oregon Trail pioneers they represent. Indeed, Johnson is the only

character who, in Twain's terms, actually knows the score. He is the man Peggy Mills and her

family plan to rely on during their journey West until the Indians attack before he arrives; he is

the man the boys rely on after tragedy strikes. Huck recounts Peggy's description of him as a

man who learned all about "trapping, hunting, scouting, fighting . . . [and] knowed the plains and

mountains and the whole country, from Texas to Oregon" (42). Johnson's common sense and

know-how lend credibility to his decision to practice "injun" religion. He has traveled and

experienced the full spectrum of frontier life in a way that Tom and Huck have not. Stone notes that Brace Johnson's spiritual beliefs "provide excuse for voicing the marked relativism [Twain] felt" (178). In fact, Johnson's decision is echoed in the sentiments of the Connecticut Yankee himself, Twain's protagonist Hank Morgan, who declares "man is only at his best, morally, when he is equipped with the religious garment whose color and shape and size most nicely accommodate themselves to the spiritual complexion, angularities and stature of the individual who wears it" (81). In Brace Johnson, we find these ideas played out on an individual level. While Johnson never explicitly states why he has converted to "injun" religion, Huck's summary of his ideas makes a few things clear. In its ability to provide a clear explanation of good and evil, the religion suits Johnson's needs. The Indian religion simply extends into the spiritual realm the kind of physical activities that define Johnson's character. Its systematic approach, where the good occurs naturally and the bad can be circumvented through skilled action that appeases a "Bad God," surely appeals to the self-reliant outdoorsman whose entire survival relies on reading the natural environment and knowing what to do in dire circumstances.

In *Huck Finn and Tom Sawyer among the Indians*, the frontier represents a landscape where beliefs are challenged and, in some cases, refined. Tom loses his romanticized vision of Native Americans; Brace Johnson, in contrast, discovers a religious view that he finds superior to white Christianity. He allows the frontier to change his worldview. But Brace Johnson is not a Twainian technocrat. In many ways, Johnson presents a stark contrast to the heroes of *A Connecticut Yankee* and *Tom Sawyer Abroad*, whose reliance on their prior understanding of history and their own American identity actually thwart their technocratic plans.

<u>*A Connecticut Yankee*</u>: <u>Adding Technology to the Mix</u>

The transition between *Among the Indians* and *A Connecticut Yankee* involves two

elements. First, it presents what Tom Quirk has called "Twain's shift of interest from individual

moral nature to a social psychology" (164). It is one thing for Brace Johnson to change religious

"garments;" it is quite another thing for Hank Morgan to enact nationwide religious reform, to

surreptitiously attack the Church and expound at length on the best methods to undermine it.

Second, Twain makes technophilia one of the defining elements of his protagonist, and Hank

Morgan's reforms stem from his desire--and his ability--to reproduce nineteenth-century

technology in sixth-century Britain.[12] Underlying *A Connecticut Yankee* is the notion that these

two elements are tied together, that reform means simultaneously undercutting spiritual authority

and introducing new technology, and more importantly that the Church will be threatened--

perhaps quite justifiably--by science and technology and will attempt to quash it.

Hank Morgan reaches Camelot through the very unscientific means of "transmission of

epochs--and bodies" that occurs after he is knocked in the head by an angry subordinate at his

job at the Colt Arms Factory in Hartford (2-5). Once there, he brazenly concludes that he is

uniquely suited to lead:

> If . . . it really was the sixth century, all right, I didn't want any softer thing: I
>
> would boss the whole country inside of three months; for I judged I would have
>
> the start of the best educated man in the kingdom by a matter of thirteen hundred
>
> years. (17)

Morgan first uses his knowledge to predict an eclipse, declaring it to be a demonstration of his

magical powers (46-48).[13] He appeals to the Arthurians' superstitions to gain clout and

persuades them to recognize him as "The Boss," a position "equal to the king" in power (63).

Morgan then puts into use his skills from the Colt Arms Factory where, he tells us, "I could make anything a body wanted . . . and if there wasn't any quick and new-fangled way to make a thing, I could invent one" (4). He creates a patent office and a regular newspaper. Near the end of the book, after he has spent multiple years transforming Camelot, he notes that he has brought to the kingdom "the telegraph, the telephone, the phonograph, the type-writer, the sewing machine" and a fleet of steamships, with which he hopes to launch an expedition "to discover America" (397-398). Along with these come institutions of social reform, including "a teacher-factory and a lot of Sunday schools" (81). His ultimate plan involves two elements: first, "to overthrow the Catholic Church and set up the Protestant faith on its ruins," and second, "unlimited suffrage . . . given to men and women alike" culminating in a "Republic" after King Arthur's death (398-399).[14]

As a number of scholars have observed, the story above plays out a remarkably straightforward imperialist narrative: an outsider--armed with science and technology superior to the culture he has entered--proceeds to set up a system wherein he has all authority and then reaps the benefits of that authority, all the while shaping the culture so that it more closely resembles his own. Even the earliest nineteenth-century reviews, by writers such as W.D. Howells and José Martí, addressed the text's criticism of the contemporary U.S.[15] In *The Fatal Environment* (1985), Slotkin concludes that *A Connecticut Yankee* portrays the "limitless expectation that went with the first approaches to the Frontier" (501). Slotkin finds in Hank Morgan's story a variant of the American frontier myth; Morgan's endeavor culminates in a technologically-enabled variant of "Custer's Last Stand," a final battle of "extermination" against amassed foes of the expansionist hero that ultimately ends in tragedy (528-529). John Carlos Rowe brings these ideas closer to the expansionism of Twain's late nineteenth century, reading in

A Connecticut Yankee an early stirring of Clemens's anti-imperialist sympathies. Essentially,

Rowe sees the book as criticizing the very technophilic approach to expansion found in the

Edisonade, stating that it portrays "the degree to which science and technology will contribute to

the economic and political forms of human exploitation and territorial conquest that [Twain]

believes have always plagued the 'damned human race'" (Rowe *Literary Culture* 133). Similarly,

David Sewell declares the book a "cautionary tale about any utopian impulse that seeks to

supplant actual or yet-unrealized history with what it considers a superior version" (150). Such

readings indicate that we must read Morgan's assertions critically and skeptically, much the way

we see Tom Sawyer's faith in "Cooper's Indians" as a belief to be dismantled rather than

vindicated. *A Connecticut Yankee*'s approach toward such imperialist practices is complex.

The tale's conclusion highlights these complexities by showing the results of Morgan's

attempts at progress. Ultimately, his reforms fail. The Church issues an Interdict, quickly

bringing England back to status quo despite Morgan's small and technologically enabled armed

resistance. Rowe states that this ending calls into question the entire imperial enterprise: "There

is little evidence that the boys and teachers 'trained' under the new educational regime have

learned anything . . ." ("How the Boss Played" 186). Similarly, as Kerry Driscoll has noted, "the

"man factories" that Morgan creates resemble contemporaneous attempts at Native American

education enacted by the U.S. government, giving the story's theme of failed reform an "ominous

resonance as a cautionary tale about the futility of 'Americanizing' the country's indigenous

inhabitants" (12). By tying the novel to Twain's own epistolary comments about Indian

education, Driscoll reads Hank Morgan's pontifications as proxy for Twain's own views.[16] Even

so, this approach leads Driscoll to the same assessment made by scholars who assume *A

Connecticut Yankee* is an anti-imperialist work. For both viewpoints, the book is about the

futility of imperial endeavor rather than a justification of it. Despite Morgan's supreme confidence, his technocratic plans are doomed.

One example showcases Morgan's overconfidence in technology and his perception of how it can and should act as a cultural force. Near the end of the book, Morgan wins a jousting tournament by shooting knights with a makeshift revolver. Hank sees this as a victory over not only "knight errantry" but over Merlin, who has publicly offered his magical services to Morgan's challengers. Morgan gloats, "Somehow, every time the magic of fol-de-rol tried conclusions with the magic of science, the magic of fol-de-rol got left" (393). Interestingly, Twain's has his Yankee protagonist use the same dismissive term--"fol-de-rol"--used by Tom Sawyer in *Huck Finn and Tom Sawyer among the Indians* to counter Jim's views of Indians, views that later turn out to be quite closer to reality than Tom's book-driven knowledge. Both Tom and Hank are charismatic figures, performers and dreamers who don't have full grasp of the limits of their own knowledge. For Hank Morgan, the narrative that he has consumed is not a Cooperesque version of the noble savage myth but a post-Enlightenment narrative of science and progress in which technologically advanced individuals (or countries) have the right to be "the Boss."

From this cultural assumption about the power of science and technology comes a perception of science's enemies. Morgan's biggest threat is not Merlin, or the knights, but the Church. "I was afraid of the Church," he plainly states, " . . . it makes a mighty power, the mightiest conceivable, and then when it by and by gets into selfish hands, as it is always bound to do, it means death to human liberty, and paralysis to human thought" (81). Morgan's sense of inevitability, of his playing out some master narrative, becomes clear here. Just as "the magic of science" will win out "every time," so too is religion "always bound to" be used by "selfish

hands" to crush freethinking individuals. Because of his commitment to this conception of the world, Hank presumes that he must inevitably fight the Church. For Hank, the Church is consistently aligned with the "magic of fol-de-rol;" it exists to be undermined, and this must be done in small, careful steps through the deployment of science and dissemination of information facilitated by technology. As a result, Hank Morgan undertakes many of these reforms in *secret*, attempting to slowly roll out his nineteenth-century technology and to undertake his program of religious and political reeducation in "various quiet nooks and corners" (80). By portraying this explicitly, by making it both the suspense for the novel's plot and the ultimate downfall of its protagonist's plans, Twain lays out an element that the broader Edisonade only provides in small glimpses. Twain's Yankee assumes, with no real evidence from Arthur's times, that the Church will be hostile to his plans and perceive him as a threat to its power.

Morgan's model to counter the church comes directly from his experience as a nineteenth-century American, particularly a Protestant in a nation where the press and public opinion were frequently anti-Catholic.[17] For Morgan, an established church stands in the way of progress, and he establishes "a complete variety of Protestant congregations" as a solution (81).[18] As Harris has demonstrated, Morgan thinks that Protestant sects can solve the problem by providing a diverse number of faiths to counter the Church's monopoly.[19] Morgan sticks to his beliefs about religion doggedly. The possibility that he will somehow have a Brace Johnson-like conversion to his new world's religious views is highly unlikely and never even suggested. Clearly, Twain understood that frontier exploration could change a person's views about mainstream Protestant Christianity; he had worked that out partly in *Among the Indians*. Such is not the case for Hank Morgan on the Arthurian frontier. Instead, he acts out in the manner that embodies his nineteenth-century training and his expectations.[20]

If we view the book as both inherently critical of the imperial venture and presciently aware of the way technology enables that endeavor, then it becomes particularly essential to consider exactly how Hank Morgan enacts his plans. Morgan plainly understands that the correct deployment of technology can expand power on an individual scale; mirroring a view shared by the Frank Reade novels. Two of Morgan's reforms reveal his conceptualization regarding precisely *how* technology can, or should, be utilized. When Morgan restores the fountain in the Valley of Holiness and when he establishes a newspaper, he operates in a methodical manner with elaborate digressions into the philosophy behind his actions. Both cases illustrate Hank Morgan's perception that science and religion must conflict and how that impacts an imperial enterprise facilitated by technology.

During his knight-errant mission, Morgan prepares to visit a holy site with an allegedly miraculous fountain. Upon arrival, he finds out that the fountain is dry, and must confront an unusual Church policy as a result. Morgan learns that the Church treats bathing as a sin, and has promoted the idea that the drying up of the fountain was caused by bathing (201). In her study of the development of hygiene and germ theory in the U.S., Nancy Tomes states "Over the course of the nineteenth century, a meticulous attention to personal and domestic cleanliness became an important marker of high class standing" (62). By the 1880s, bathing had cultural connotations of hygiene, class, and even religiosity; Tomes notes that public health appeal often bound cleanliness to Christianity. She calls attention to the frequent use of the phrase "whited sepulchers" by public health activists to convey the idea that even apparently clean homes could harbor disease; the phrase comes from the New Testament reference to the Pharisees who "appeared righteous, but were actually riddled with sin" (48.) For Morgan, the notion that the organized Church would prevent bathing is not just an example of its unyielding and tyrannical

influence on the minutia of sixth-century lives, but potentially an affront to his understanding of Christianity's connection to hygiene.

Morgan uses the situation with the fountain as an opportunity to build up his technocratic reputation. He secretly sends off to his "Chemical Department, Laboratory Extension" at Camelot for plumbing supplies and two assistants (202). Although he works with the priests, Morgan appeals to their superstition rather than their scientific curiosity by outright encouraging their notion that he is working "enchantments." (205).[21] He does this with the performative flourishes noted by Seth Lerer and other scholars. Morgan tells the reader "As a matter of business it was a good idea to get the notion around that the thing was difficult. Many a small thing has been made large by the right kind of advertising" (210-211). His small crew installs a pump and some lead pipe surreptitiously, then places colored rockets wired to a battery; the latter is necessary only for show (219). Rather than simply repair the fountain, Morgan sets up a noisy charade, stating "When you are going to do a miracle for an ignorant race . . . play your effects for all they are worth" (219). And so, he performs his work in public, launching the rockets in sequence each time he speaks one of a series of German tongue-twisters he claims are spells (221-224). In the endeavor then, Hank Morgan uses two types of technology--plumbing and fireworks, technology-as-repair and technology-as-pageant respectively--and maintains the public illusion that they are magic that only he can control. Just as he has discretely sent for assistants with supplies from his secret factories, so too does he secretly let some of the monks in on the mechanism behind his performance. He states, "I took along a nightshift of monks, and taught them the mystery of the pump, and set them to work . . . . To those monks, that pump was a good deal of a miracle itself" (224). At best, this action shows Morgan's willingness to spread information about science and technology to groups who need it while he reserves any large

scale revelations about where his "enchantments" come from in order to lessen possible resistance to the status quo.

        After fixing the fountain, however, Morgan takes an extra step by using the prestige he has gained to further undermine the Church's authority. By this point in the book, he has already attempted to undermine knighthood by turning knights into walking billboards for products like soap and toothpaste. He ties his latest plan to that strategy:

> My influence in the Valley of Holiness was something prodigious, now. It
> seemed worthwhile to try to turn it to some valuable account. The thought came
> to me the next morning, and was suggested by one of my knights who was in the
> soap line come riding in . . . . So I sounded a brother:
>
> "Wouldn't you like a bath?" (226).

He invites the Abbot and monks to take baths in the water, despite their fear that this behavior will "drive away the blessed water again" (227). Morgan promises that he has "knowledge" that informs him that bathing is not the sin that caused the water to stop. The technological improvements he has made have established his reputation as an enchanter so much that he can claim special information about sin, essentially giving him the role reserved for priests. Driscoll notes Clemens had discussed a "conjoining of soap and civilization" as early at 1867, in a essay presented as a mock letter to President Grant from a Senate clerk who proposes that the U.S. government should enforce Indian bathing because the worst thing one can do to an Indian is to wash him (11). In contrast, *A Connecticut Yankee'*s focus appears to be about helping the locals rather than punishing them. The priests *want* to bathe, but their religious faith forbids it. Morgan uses his technological feat of fixing the fountain--passed off as supernatural power--to erode the priests' faith in the Church's authority on supernatural matters. Morgan helps them do

what they want to do only by shifting their reliance on the church to reliance on him. In *A Connecticut Yankee*, Twain makes cleanliness an outward example of colonial power that vindicates the individual's rights over the Church's rights, but also shows how such reforms fail when enacted by an Edisonian technocrat who is more interested in enforcing his own view of history than on genuinely assisting the individuals in question.

Morgan's subsequent acts build on this character flaw. He reports the restoration of the fountain in one of his other great technological undertakings: the newspaper. The establishment of a newspaper further demonstrates how Morgan uses technology to divergent means, hoping to simultaneously enact reform and maintain exclusive control over the kingdom. Morgan engages in many of his most florid descriptions of democracy's value when he speaks about newspapers. Morgan has, as Thomas Zlatic asserts, "complete faith in literacy's redeeming potential" (468). Bruce Michelson has pointed out that Morgan understands news primarily as a consumer; while he has training in munitions and mechanics, he is not a trained printer or journalist (178).[22] Merely by being a reader of American newspapers, Morgan thinks that he can bring journalism to Arthur's England. Newspapers figure into one of the book's passages where Morgan most clearly outlines his plans: "The first thing you want in a new country, is a patent office; then work up your school system; and after that, out with your paper. A newspaper has its faults, and plenty of them, but . . . You can't resurrect a dead nation without it . . . " (74). Because of this worldview, the paper becomes a central part of Morgan's reform plan. Indeed, Morgan holds a faith in the newspaper's place in society typical of nineteenth-century Americans. Paul Star explains that the number of daily newspapers quadrupled from 1870 to 1900, partly due to the foundations laid in the early republic to encourage a free press (251-2). Such foundations included colonial arguments limiting libel, the First Amendment, and low postal rates to support

a free press during the 1790s.[23] Fokerts and Teeter's *Voices of the Nation* demonstrates that, while muckraking and jingoism informed the 1890s period best known for Hearst's and Pulitzer's sensationalized press, "in the late 1800s journalists concerned themselves more than before with 'facts' and 'reality'" and "partially justified their role in society as providers of information designed to solve problems" (262-3). As an 1880s news consumer, Hank Morgan conceives of newspapers as a tool to right social wrongs and a vital emblem of democratic society.

Samuel Clemens's fascination with the press, particularly technology's ability to aid or limit free speech, extends back to his days as a printer's assistant in Hannibal. John F. Kasson has noted that Twain "beheld technology with his culture's most uncritical fascination and yet uttered some of his era's gravest forebodings over the course it was taking" (202). By the time he wrote *A Connecticut Yankee*, Twain had become entangled in investments into a new printing technology, James Paige's compositor, designed to facilitate printing. Twain's unbridled enthusiasm for the compositor represents the "uncritical" side of the equation for many Twain scholars.[24] Ron Powers states that Twain's "esteem for the tinkerer-hero Paige" informs *A Connecticut Yankee* (521). Twain began writing the book enthused about the compositor's financial prospects and even considered retiring from writing to live off the profits of his investment (Powers 530). But the machine never worked correctly and required constant infusions of money to retool it. Near the end of 1888, Twain's frustration grew and he noted "the thing has gone straight downhill toward sure destruction" (qtd. in Powers 526). Bruce Michelson calls the Paige compositor the "Vicksburg siege in a fiscal terrain so baffling that charting it in detail would require a Corps of Engineers" (15), and indeed it was the culmination of these bad investments that bankrupted him. The near-mythic failure of this investment and its effect on Twain's faith in print technology haunts many scholars' readings of *A Connecticut Yankee*.

In practice, however, Morgan's re-creation of modern journalism rests on technology's ability to undermine the church, essentially replacing one type of supernatural belief with another. Surprisingly, Morgan begins his endeavor by finding an "intelligent priest" to begin writing information about tournaments (74). Morgan notes that the priest is detailed and precise because his work in the Church directly related to swindling mourners out of money:

> . . . [H]e had kept books for the undertaker-department of his church when he was younger, and there, you know, the money's in the details; the more details, the more swag: bearers, mutes, candles, prayers--everything counts; and if the bereaved don't buy prayers enough, you mark-up your candles with a forked pencil, and your bill shows up all right" (74).[25]

From its very inception, then, the newspaper operates as a method to transfer power away from a Church that is assumed to be corrupted by money and power and reallocate its resources to a more democratic institution: the free press.

How free is Hank Morgan's press? Tellingly, one of his first actions in the book's latter portion is a darkly comic act of prior restraint. It comes after Morgan has ended knight-errantry and publicly revealed the secret elements of his master plan, including schools, mines, and factories. Sir Dinadan the Humorist prepares a book of jokes, including one "gray-headed" joke that has plagued Morgan for his entire stay in Camelot. "I suppressed the book and hanged the author," he announces (397). While this occurrence represents a comic culmination of Morgan's frustration with stale humor, it also presents a dictatorial action against free press and a truly self-contradictory act on the protagonist's part. The joke may be too good to pass up, but it also underscores Morgan's unreliability as a democratic role model. Such an action further supports the notion of Rowe and others that Morgan represents Twain's mockery of the would-be

democratic imperialist. Morgan, then, does not have a consistent view on the press's power or the liberatory aspects of a free press.

Between these two events--the use of the priest to cover a tournament and the hanging of Sir Dinadan--the actual newspaper is published. In a chapter entitled "The First Newspaper," Morgan is overjoyed to hear the shout of a boy selling newspapers; "One greater than kings had arrived--the newsboy. But I was the only person in all that throng who knew the meaning of this mighty birth" (257). Morgan appears to enjoy this moment both for the way it reconnects him to his nineteenth-century roots--"It was delicious to see a newspaper again" (260)--and the special way it reinforces his unique position in sixth century as the "only person" who understands the significance of a daily newspaper. As he sits and reads it, a throng of Britons surrounds him and begin asking about it. "It is a public journal" he states, adding, "I will explain what that is, another time" (261). Morgan conceals the paper's more anti-authoritarian purposes, both in terms of the reallocation of power it presents and its power to influence public opinion. Instead, he notes with glee how the Arthurians call it "a miracle, a wonder! Dark work of enchantment" (262).

Knowing that most of them cannot read, Morgan recounts one of the main stories of the day: an account of "the miracle of the restoration of the well" (262). Always a savvy self-promoter, Morgan reads to them about his endeavors, using the newspaper to further promote the idea that his technological feat was a "miracle." After hearing this story, Morgan states "So they took [the newspaper], handling it as cautiously and devoutly as if it had been some holy thing come from some supernatural region" (262). Their reaction supports Randall Knoper's claim that "the Arthurians see every one of his commodities as something existing completely

autonomously, a fantastic object appearing magically . . ." (160). Morgan seems perfectly content with that reaction.

Arthur C. Clarke famously stated that sufficiently advanced technology is indistinguishable from magic, a viewpoint that would not have been foreign to Hank Morgan. Behind Clarke's statement is the idea that an *unadvanced* civilization could not tell magic from technology, and the implication that this situation could be manipulated by the advanced civilization. The portrayal of technology in *A Connecticut Yankee* involves the simple replacement of one superstition for another. In Hank Morgan's mind, technology is inevitably posed to do battle with the superstitions promulgated by established religious hierarchies, and it does this best by playing up its "supernatural" appearances. Morgan not only passes off a technological feat as magic, he uses another form of technology to reinforce that idea by printing the report in his newspaper. Moreover, that technology serves to undermine the Church, replacing the superstitions of the church with the unexplained wonders of Morgan's science. Gregory Pfitzer asserts that both *A Connecticut Yankee* and Ellis's *The Steam Man of the Prairies* promote a "common moral message" about the corrupting power of technology (53).[26] On a similar note, David Sewell points out Twain's March 1886 comments to a labor group: "Power, when lodged in the hands of man, means oppression--*insures* oppression" (141-142). In this light, Morgan's power struggle with the "Established Church" represents two well-intentioned oppressors competing for the worldview that will dominate their society. Morgan embodies both the ideas in Twain's labor speech and the larger imperial dilemma, essentially becoming the kind of secretive tyrant he hopes to resist. Ultimately, *A Connecticut Yankee* presents a critical view of American technocracy by assuming that it will fall prey to the same temptations of power that the institutions it attempts to overthrow.

For many Twain scholars, the final word on *A Connecticut Yankee*'s approach to imperialism comes from Twain's letter to William Dean Howells detailing his frustration that there were "so many things left out" of the final version of the book. "They burn in me," he told Howells, "but now they can't ever be said. And besides they would require a library--and a pen warmed-up in hell" (SLC to Howells 287). Taking the last phrase as his anthology title, Frederick Anderson has seen this line as an indication of Twain's beginning to sense himself as "a reluctant radical [and] an amateur reformer" who would speak out against imperialism and other social ills (xiii).

Perhaps surprisingly, Twain ultimately voiced these thoughts in a novel specifically written for a young adult periodical (the *St. Nicholas Magazine*) and featuring his most famous protagonists.[27] If indeed Twain's warmed-up pen found its use in his protest writings and essays, it also crept into some of his most apparently bland and market-driven writing. Destitute because of the financial failure brought on by the Paige compositor, Twain had to write for money once again and he turned back to his original plan to write continuing adventures of Huckleberry Finn and Tom Sawyer. If *A Connecticut Yankee in King Arthur's Court* suggests that technology undermines religion by simply supplanting it with a new kind of superstition, then *Tom Sawyer Abroad* extends these ideas by showing another example of a character whose dogmatic political and cultural views actually limit his ability to conceive of technology's transformative power.

<u>*Tom Sawyer Abroad*: Expansion, Religion, and Technology</u>

In *Tom Sawyer Abroad*, all the earlier elements of Twain's understanding of literature, technology, and empire connect: from his suggestion that his brother burlesque Verne to his disillusionment with U.S. imperialist tendencies voiced in *A Connecticut Yankee*. As in the unfinished *Huck Finn and Tom Sawyer among the Indians*, Huckleberry Finn narrates *Tom*

Sawyer Abroad. Tom Sawyer longs for adventure and notoriety as Huck finds him "worrying and fretting . . . to think how time was slipping away, and him getting older and older and no wars breaking out and no way of making a name for himself" (17). Even more than Hank Morgan, Tom Sawyer views violent conflict ("wars") as a primary means to prestige. After much contemplation, Tom eventually reveals to Huck and Jim that he is planning a "crusade." Tom is shocked to learn that Huck and Jim don't know what a crusade is. He explains that "A crusade is a war to recover the Holy Land from the paynim," and is further shocked by Huck's lack of concern about the "Holy Land":

> "What do we want of it?"
>
> "Why can't you understand it's in the hands of the paynim, and it's our duty to take it away from them."
>
> "How did we come to let them git hold of it?"
>
> "We did n't come to let them git hold of it. They always had it."
>
> "Why, Tom, then it must belong to them, don't it?"
>
> "Why of course it does. Who said it did n't?"
>
> I studied over it, but could n't seem to git at the right of it no way. I says:
>
> "It's too many for me Tom Sawyer. If I had a farm and it was mine, and another person wanted it, would it be right for him to--"
>
> "Oh, shucks! you don't know enough to come in when it rains, Huck Finn
>
> . . . ." (21)

Huck Finn's question about the land's rightful ownership meets Tom Sawyer's scorn. Here, Twain equates the religious concept of a "Holy Land" with imperial endeavor and the broader, Western tradition of tying expansion to religious conflict. Axel Knoenagel has summed up this

element to the book, explaining, "Tom is still the romantic egotist of the earlier novels, but his innocence has been replaced with arrogance" (99). As in *Among the Indians*, the base of Tom's knowledge is history books and historical fiction, in this case "Walter Scott's book" (25). The scene sets up a recurring motif in the story in which Tom thinks he knows the answers, only to be foiled by Jim and Huck who ask, simply and directly, for elaboration beyond his book-smart understanding. Twain gives his protagonists a problematic relationship in which "Huck takes pride in Tom's wide information but is obliged to correct it steadily by reference to common sense" (DeVoto 303). Irving Stone reads this element of the text in comparison to other Twain works: "Tom's imagination, fed on fiction and history but often blind to personal feelings, is shown up by Huck's and Jim's humane credulity in a manner even more explicitly than in *Tom Sawyer* or *Huckleberry Finn*," adding that "unlike Hank Morgan, Tom is never permitted in his balloon debates to win a clear-cut victory for common sense" (187).

In this instance, Tom attempts to override Huck's common-sense protestations about taking someone else's land or property. He distinguishes the "crusade" he favors from the kind of outright theft Huck sees as analogous to it. Tom states that, unlike stealing a farm,

> ". . . this is religious, and totally different."

> "Religious to go and take the land away from people that owns it?"

> "Certainly; it 's always been considered so." (22)

Taking the land from its rightful owners is acceptable in Tom's terms because it is part of a religious war. Moreover, Tom's appeal to history and his understanding of tradition leads him to ignore Huck's disagreement. Tom focuses on how things have "always been," making him in many ways an arch-conservative resistant to any ideas that challenge his preexisting notions.

Tom's description also prefigures the portrayal of missionaries in Twain's essay "To the Person Sitting in Darkness," published seven years later in 1901. There, Twain the essayist rails against leaders who use religion as an excuse to do violence against another country, even getting in a bit of the Indian-hating spirit he shared with Colonel Dodge in the process: "What we want of our missionaries out there is . . . that they shall also represent the American spirit. The oldest Americans are the Pawnees." Twain then explains how American missionaries who demand monetary reparations and violent retribution when attacked by locals are analogous to Pawnee warriors who take vengeance by committing violence against "any white person that comes along" and take "thirteen times" the value of his property (*Pen* 62). As his essay shows, Twain understood the dangerous commingling of religious evangelism, violence, and territorial expansion after the Spanish-American and Philippine-American wars. These ideas are equally apparent in 1894's *Tom Sawyer Abroad*, with Twain using his most famous character as the advocate of the same kind of dangerous blend of religion and expansion condemned in "To the Person Sitting in Darkness." Just as Hank Morgan becomes an embodiment of the worst technocratic impulses, Tom Sawyer represents the unreflective, knee-jerk expansionist who seizes opportunity and uses appeals to tradition and religion to justify his acts.

Technocracy, of course, appears in full force in *Tom Sawyer Abroad*. Tom, Huck, and Jim embark on a balloon voyage across the Atlantic that eventually leads them through the Sahara and into the Holy Land itself. Many critics have observed that the structure and concept resemble Jules Verne's *Five Weeks in a Balloon*.[28] Twain seems to have fallen into the same trap he criticized Orion for falling into, simply copying Verne's plot rather than genuinely burlesquing his ideas. What Twain *does* mock in *Tom Sawyer Abroad* is imperialist thinking. What happens when Tom Sawyer, so enthused about the possibility of a "crusade," actually

discovers a device that can send him to the Holy Land in short order? Twain's answer charts every typical device in dime novel SF up to that point.

The book's scorn for technocrats starts early with its portrayal of the balloon's inventor, a hackneyed caricature of a scientist prone to making interjections such as "Idiots! They said it would n't go; and they wanted to examine it, and spy around me to get the secret of it out of me. But I beat them. Nobody knows the secret but me" (32). While the dialogue is certainly more melodramatic than *A Connecticut Yankee*, the sentiments are taken straight from Hank Morgan's playbook. The scientist jealously guards his secret, tormenting Huck, Jim, and Tom when he finds out that they are on board after takeoff and forcing them to work for him. He eventually succumbs to paranoia, convincing himself that he must alter his course from England and attempting to throw Tom Sawyer overboard during a thunderstorm, and somehow falling out of the balloon himself in the process (60-61).[29]

At this point in the book, Tom Sawyer takes control by figuring out basics of piloting the airship, and the plot becomes focused on the three friends' episodic adventures on the balloon's flight. Tom dubs himself "Tom Sawyer the Erronort" (75). Twain's creative misspelling of "aeronaut" underscores Tom's youthful unreliability, reminding the reader that Tom is not as well informed as he assumes and that he is prone to "error" because of this trait. Tom's assumption of control over the ship's technology and the group's itinerary indicates his further embodiment of the ready imperialist. Tom frequently stops the action to explain his knowledge of minutia such as mirages or fleas, declaring his companions "sapheads" or "ignorant superstitious blatherskites" if they don't immediately understand or agree (101,128). Clearly, Tom has already mastered the exasperated rhetoric of the technocrat, sounding remarkably like the balloon's paranoid inventor in his recurring, casual dismissal of others who don't share his education. While Tom is not an

inventor himself, his subsequent mastery of both the flying apparatus and the philosophy behind such exploration bring to the novel a plot and setting congruent to the Edisonade, although Twain's tone and approach to Tom Sawyer's views bring elements of criticism to these tropes.[30]

If there were any lingering suspicion that *Tom Sawyer Abroad* sought to mock American imperialist attitudes, Twain has one last ace up his sleeve. When they reach Egypt, Tom becomes even more animated because, as Huck points out, "the land was so full of history and that was in his line, about Noureddin, and Bedreddin . . . and a raft of other Arabian Nights folk . . ." (186). Huck knows enough of the *Arabian Nights* to mention two actual characters, although the second name may be a pun on the term "bed-ridden" as much as it is a reference to the character Bedreddin Has-San, but he has apparently only learned this by listening to Tom and acquiesces to Tom's authority as the resident, self-proclaimed expert.

Tom's understanding of history comes to the fore when they find the Sphinx. The aeronauts sail around it several times. Then Huck says

> We landed Jim on top of the head, with an American flag to protect him, it being
> a foreign land, then we sailed off to this and that and t' other distance, to get what
> Tom called effects and perspectives and proportions, and Jim he done the best he
> could, striking all the different kinds of attitudes and positions he could study up,
> but standing on his head and working his legs the way a frog does was best. The
> further we got away, the littler Jim got, and the grander the Sphinx got . . . . (189-
> 190)[31]

After sailing away, they return to find "two or three wee puffs of white smoke" below the Sphinx and men "hauling a long ladder up onto the Sphinx's back" (193). They realize Jim is under attack by the locals, that the smoke is gunfire. When they pick him up,

Tom was very indignant, and asked him why he did n't show the flag and

command them to git, in the name of the United States. Jim said he done it but

they never paid no attention. Tom said he would have this thing looked into at

Washington, and says--

"You'll see that they 'll have to apologize for insulting the flag, and pay an

indemnity, too, on top of it, even if they git off *that* easy." (194)[32]

Tom's urgent, jingoistic response fits perfectly with his views up to that point of the novel.[33]

Tom's faith in America's authority is also rooted in military power; the italicized "*that*" in his

declaration carries implications of military action, something far worse than reparations. Much as

he does during the makeshift escape at the end of *Huckleberry Finn*, Tom Sawyer ignores Jim's

understandable fear of bodily harm and instead focuses on the cultural narrative as he

understands it.

In this case, Tom's perceptions of their exploration and the Egyptians' attack tie to U.S.

policies of Twain's time. Louis J. Budd has noted that the likely inspiration for this scene came

from an international incident in 1891 between the U.S. and Chile "over the mobbing of some

American sailors" (231). The "Valparaiso Incident" began when an October 16 wharf-side fight

between U.S. navy seamen and Chilean military personnel escalated into a mob attack against

the American sailors, who were subsequently arrested; the October 17th *Chicago Daily Tribune*

headline read "It Was a Bloody Fray: Americans Stabbed in Back by Cowardly Chileans" (1).

Such reports infuriated U.S. citizens and within ten days, both politicians and the public were

calling for Chile to make reparations ("Chile Must Make" 1).[34] American papers reported naval

buildups and calls for war, but eventually the matter was settled when Chile paid a $75,000

indemnity ("Chile Pays Indemnity"). Earl Briden has assessed this situation, particularly the

U.S. willingness to threaten war, to claim that "Twain's satire [in *Tom Sawyer Abroad*] is directed at the militarist and imperialist stirrings of the early 1890's . . . [and] Tom's indignation duplicates, clearly, the American reaction to the Chilean affair" (50). Tom's understanding of the world has been shaped and limited by his reading of history and recent events. The possibility of military retaliation is so natural for Tom that it remains virtually unstated. Tom's suggestion that Egypt may not "git off *that* easy" represents his understanding that international politics operates best when there is a constant, veiled implication that other countries exist at the U.S.'s pleasure and may only avoid such conflict if they conform to U.S. demands.

Here, Tom Sawyer demonstrates the quintessential American's conceptions of how technologically enhanced expansion should occur and what expectations a traveling technocrat should have when he or she reaches the destination. The scene illustrates Tom Sawyer's awareness of international relations, which bears a strong resemblance to his view of the "crusade" in its appeal to both history and authority. Tom assumes that waving the flag alone will protect Jim. If it does not, it becomes a matter of national pride and a subsequent moneymaking venture. "Well, in an aggravated case like this one," Tom tells Huck and Jim, "it [the indemnity] will be at least three dollars apiece" (194). The "erronorts" fly off literally counting the money before they have it. The ever-practical Jim notes that while he would "take de money," he doesn't care about the apology (194). When Huck asks if all countries make such payments-as-apologies when they have "done wrong," Tom replies curtly, "Yes; the little ones does" and the matter is settled (195). Tom understands their journey in terms of international politics, whereby they have a right to land on a national monument and take measurements and expect not only to be left alone but to be handsomely paid if any of the local populace interferes

with their journey. Their new technology does not reorganize the international pecking order; it simply reinforces it.

The similarities between *Tom Sawyer Abroad* and the Frank Reade dime novels are striking. Twain's characters embark on a transatlantic aerial voyage in a newly created piece of transportation. Our titular protagonist is a well-read, essentially middle-class Anglo-American youth in search of adventures; he is accompanied by two companions, an older, free Black man and a temperamental cohort with an Irish surname. Their journey goes to a remote location frequently portrayed in the Reade novels, Africa, in the Sahara desert, where they find treasure and meet the area's residents, who are consistently portrayed as the remote "Other." In the end, their journey is more about personal rewards--adventure, notoriety, and schemes for monetary gain--than it is about transforming the larger world through the introduction of new technology or spreading a larger national influence. The formula of Twain's story so closely resembles the Frank Reade formula that it is tempting to read *Tom Sawyer Abroad* as one more willful burlesque on Twain's part, to see it as Twain's treatment of dime-novel SF in the manner he had previously reserved for Mallory, Cooper, and other writers. Even if he never read a Frank Reade, Jr. dime novel, Twain understood Americans' perception of themselves and how technocracy and imperialism factored into that self-awareness. Like the Edisonades, *Tom Sawyer Abroad* pinpoints the techno-imperial concerns of its era.

Unlike most Edisonade inventor heroes, however, Tom does not use the technological transportation as a weapon. As a result, the "erronorts" do not engage in the kind of individually empowering violent arbitration that is a hallmark of Edisonade dime novels. Edisonade heroes frequently celebrate their autonomy, taking action that governments cannot or will not take. This element of the genre shores up their celebration of individual violence and, in some ways,

undermines their actual nationalistic tendencies. Unlike a Frank Reade, Jr.-type, however, Tom Sawyer never takes the law into his own hands; instead he makes a traditional appeal to national pride and power.

Only Huckleberry Finn seems to genuinely understand the possibilities of the advanced means of transportation they have discovered. As Briden articulates, Huck is "positioned intellectually between Tom and Jim, sharing a small part of Tom's middle-class education and some of the ex-slave's literalist cast of mind and superstition" (47). However, Huck's willingness to question Tom Sawyer on each issue demonstrates a resistance to his technocracy similar to that found in the Arthurians. While Tom understands the balloon's power only in terms of his own education, Huck counters this. For example, when Tom determines that they cannot use the balloon to carry sand as international commerce because of "duties" and tariffs, Huck Finn quickly points out: ""[W]e can sail right over their old frontiers; how are *they* going to stop us?" (174). Huck makes the most reasonable argument, given their technological advantage, but is ignored by Tom who resists any suggestion that doesn't fit his own analysis. Earlier in the book, Huck's perceptions about the logistics of a "crusade" were written off by Tom Sawyer; similarly, Huck's understanding about the empowerment of balloon travel and its potential disruption of the status quo goes unrecognized by Tom.

Ultimately, *Tom Sawyer Abroad* portrays the American technocrat as driven by a form of rationalism informed by religion and popular narratives. Bernard DeVoto called *Tom Sawyer Abroad* a "deliberate effort . . . to explore the mentality of the common man" (302). The type of common man that Tom Sawyer embodies in this book is both well-educated and naïve; he is a talker, a boaster, and casually callous to anyone who doesn't share his ethnicity or beliefs. In one sense, he is a continuation of Hank Morgan, whose unswerving faith in his own abilities to make

money and control situations turn him into a proto-imperialist. In another sense, however, he is a more conflicted character who is limited in his ability to understand technology's possibility and the limits of his own country's power because of his existing American identity. Instead of Frank Reade, Jr. and Hank Morgan fooling the locals by passing off technology as supernatural power, we find Tom Sawyer deluding himself about the necessity and justification of religious crusades and the right of his nation to demand money.

As *Among the Indians* demonstrates, Twain was capable of creating a protagonist who adapted to religious views that he encountered and found suitable. Tom Sawyer and Hank Morgan are not those characters. Although he does not aspire to the kind of self-aggrandizing reform that Hank desires to create, Tom still respects others only to the extent that they share his worldview. Both protagonists are limited by their desire for power and a zeal for technology that is *limited* by their pre-existing worldview, one that is formed by a view of religion as power. Hank Morgan views religion as power to be resisted in his colonial endeavor, while Tom Sawyer views it as an authority that enables that same kind of expansion. In both cases, technology does not transform their views, even as they expect it to transform other people's understanding. Twain's skepticism about human nature, science, and technology results in a portrayal of the limited technocrat, one whose expectation to lead is matched by his inability to consider alternatives outside his existing realm of information.

Chapter 4: Technocratic Exploration as Reconstruction of Pre-Darwinian History
in Garrett P. Serviss and Pauline Hopkins

Garrett P. Serviss's *Edison's Conquest of Mars* (1898) recounts the aftermath of a Martian attack on Earth in which Thomas Alva Edison aids humanity by inventing spacecraft and weapons that enable a counterstrike against Mars. In many ways, Serviss's text represents the culmination of a larger body of postbellum, American proto-science fiction. It takes the narrative used repeatedly by Edisonade dime novels--whose youthful inventor protagonists used technology to explore exotic locations and exploit their resources--and uses it to create an Americanized sequel to H. G. Wells's *War of the Worlds* that appeared a mere six weeks after Wells's story finished American serialization (Campbell 668).[1] Moreover, Serviss used the real-life inventor as his protagonist rather than a fictional young inventor of the type found in works such as Ellis's *The Steam Man of the Prairies* or Senarens's Frank Reade, Jr. stories. By 1898, as the United States ventured fully into imperial endeavors in Cuba, Puerto Rico, the Philippines, and elsewhere, such dime novels had been providing a recurring narrative of techno-expansionism for over two decades. The prevalence of these stories shows the willingness of late nineteenth-century Americans to embrace texts that portrayed the benefits of technology, particularly when tied to an adventure tale in which an American hero goes forth to use his inventions for conquest in remote parts of the globe. As such, the Edisonades are part of a larger tradition of proto-science fiction and its intimate connection to Western imperialism.[2]

Serviss's *Edison's Conquest of Mars* and Pauline Elizabeth Hopkins's *Of One Blood, or the Hidden Self* (1903) demonstrate how the Edisonade's narrative develops from a techno-imperialist fable into a broader consideration of U.S. identity. To some degree, both works participate in the larger construction of American identity that enables imperialism, an identity

fraught with contradictions in its simultaneous valorization of science's ability to create technological might and its resistance to science's challenge to earlier, religiously based narratives of identity, a challenge perhaps most famously embodied by the work of Charles Darwin and evolutionary theory. In America, Edisonades flourished during the same period in which Darwinian evolution became accepted in scientific circles and began to be attacked outright by theologians, the same period when many American readers were realigning their often Biblically based views of history to accommodate Darwin's explanation of the age of the planet and the development of humankind. By blending the Edisonade template with another prominent early SF sub-genre that often addresses Darwinian themes--the lost-race narrative-- both authors engage this debate by creating texts that reconfigure historical events through exploration.

While the heroes of Serviss's novel do not actually engage in imperial control of the distant territory they conquer, John Rieder has connected the philosophy behind their invasion to the pervasive imperialist themes in scientific romances of the era. In his study *Colonialism and the Emergence of Science Fiction*, Rieder finds that "Serviss's nationalism . . . is that of a new imperial competitor bristling with eagerness to reshape the international order of things" (136). *Edison's Conquest of Mars* demonstrates how the Edisonade provides a narrative template for technocratic American empire building. *Of One Blood*, in contrast, resists overt imperial themes by asserting the primacy of an African technocratic nation over the civilization of the American explorers who "discover" it. Reading *Edison's Conquest of Mars* side-by-side with *Of One Blood* demonstrates how works with apparently dissimilar viewpoints concerning empire and race both arrive at similar resolutions regarding technology and the Bible during a time in U.S. history when an established American identity built on those ideas was threatened.

Rather than rejecting Biblical histories in favor of evolutionary science's alternative narrative, these novels portray technocratic exploration as a means to reestablish Biblical authority in matters of history and race. They represent the conflicted approach to science found in the Edisonade at large and play out the tension between science and religion found in the larger American culture of the time. In earlier Edisonades, religion offers either a superstition to be exploited by the technocrat or an established authority for him to resist. As we have seen, Frank Reade, Jr. and Hank Morgan were not above using religious superstition to get what they wanted. *A Connecticut Yankee* and *Tom Sawyer Abroad* further suggested that even technocrats would cling so tightly to their religiously informed identity that it would limit their ability to see possibilities. Serviss and Hopkins suggest more. As they engage with the established technocratic narrative, they ultimately promote a point of view that values established religious tradition over science by providing plots in which technologically enabled exploration produces discoveries that undermine the scientific theory of evolution. This proto-science fiction participates in the attempt to reconcile science and religion in late nineteenth-century America.

Edisonade texts, with their repeated tropes of scientific exploration and the economic reward of such inventiveness, develop a clear American myth in the Lévi-Straussian sense.[3] In "The Structural Study of Myth," Claude Lévi-Strauss notes "the purpose of myth is to provide a logical model capable of overcoming a contradiction (an impossible achievement if, as it happens the contradiction is real) . . . " (114). He also suggests that the elements of repetition, particularly of story elements within the myth but also in the multiple retellings and variants, work to "render the structure of the myth apparent" (114). By the time of the Spanish-American war, the structure of the Edisonade myth is well defined and begins to be incorporated in other types of literature. Serviss and Hopkins utilize this myth as they undertake the "impossible

achievement" of overcoming contradictions inherent in America's approach to empire, race, and religion, constructing an American identity that manages to be both technologically progressive and religiously conservative.

Both *Edison's Conquest of Mars* and *Of One Blood* shift their narrative focus away from exploration and conquest when the protagonists reach their exotic destinations and instead proceed to highlight how the explorers uncover historical evidence tied to race and identity. Serviss's tale begins as military adventure, presenting an Americanized sequel to H. G. Wells's *The War of the Worlds*. *Edison's Conquest of Mars* began serialization in the *New York Evening Journal* on January 12, 1898 (Campbell 668). Eschewing the Darwinian underpinnings of Wells's tale, it instead focuses on the construction of new technology and the attack on Mars by an international force led by Edison and an array of other fictionalized versions of actual scientists, including Lord Kelvin, Sylvanus P. Thompson, and Wilhelm Roentgen.[4] During their invasion of Mars, however, the scientists discover ties to an earlier civilization from Earth that confirms theories of human development tied more to the Bible than to evolutionary theory. *Of One Blood, or The Hidden Self* stems from a different intent yet, like *Edison's Conquest of Mars*, it presents a narrative linking technological and scientific advances to ideologies of race and empire that were prevalent in turn-of-the-century America. Hopkins serialized her novel in 1902 and 1903, during her editorial tenure at the *Colored American Review* where she focused on what Hazel Carby calls "a sustained attempt to develop an Afro-American popular fiction" (xxix). *Of One Blood* presents an African-American rewriting of earlier lost-race adventures, explicitly addressing issues of race and history that appear quite suddenly in Serviss's adventure tale. Hopkins's protagonist, a light-skinned African-American scientist passing for white in order to study medicine, journeys to a hidden African city where he finds a technologically advanced

civilization whose existence undermines notions of white, Western superiority. As in Serviss's novel, however, the latter portions of the novel engage in a discussion about the human race's origins in which scientists ultimately reject an exclusively Darwinian view of history in favor of one that accommodates Biblical accounts.

In creating stories that vindicate Biblical history, Serviss and Hopkins are not necessarily arguing for a specific, literal reading of the book of Genesis. In fact, they do not undertake serious Biblical exegesis. Rather, the Bible represents a cultural authority on history, one intimately tied to the Protestant American worldview that dominated the U.S. imperial identity. From this perspective, the Bible holds authority that provides certainty in the face of new discoveries. Appeals to the Bible demonstrate a search for certitude on issues of race and history during a period when they were being hotly debated. In *Edison's Conquest of Mars* and *Of One Blood*, Biblical history does not merely need to be reconciled with the new horizons opened by science; it can actually be *recovered* and reestablished as authority through exploration. This scientific verification of the Bible's presentation of history becomes, in Lévi-Strauss's terms, a new "constituent unit" of the "bundles of such relations" that make the Edisonade myth (105).[5] This new element--the assertion of Biblical historical authority--appears prominently in both Serviss and Hopkins and ultimately becomes the final goal of each exploratory adventure. Technocratic expansion, the Edisonade's hallmark element, becomes an act that reestablishes a traditional, Christian view of history.

<u>The Edisonade and Lost-Race Adventures: History Meets Technocracy</u>

The key elements shared by Edisonade and lost-race novels can be found in Serviss and Hopkins, particularly both genres' portrayal of exploration and their approach to empire. Both genres incorporate travel, including the exploration of unknown territories and the contact with

outside communities that are the narrative grounds of imperialism. Both utilize adventure narratives, frequently featuring traps and hair-breadth escapes. The difference between the genres stems primarily from the protagonists' motivations for travel. In the Edisonade, the characters reach these locales via invented transport, such as airships or electric coaches. In the lost-race utopia, the characters typically either strike out with the intent of reaching a far-off destination using ordinary transportation or become accidental explorers who are pushed into the travel adventure by circumstances outside of their control. The most important element of the lost-race utopia--the encounter of a lost civilization by Western explorers who find ways to access its riches--appears frequently in Edisonade tales, but is not an essential component.[6] Instead, the Edisonade's defining element is the inventor's ingenious scientific ability which is typically used, as John Clute notes, to create a technology that is both a "weapon" and a "means of transportation" (368). While they share the common theme of travel to exotic locales, the two genres differ in the motivation for the travel and the means for reaching the remote location. From this perspective, then, *Edison's Conquest of Mars* is an Edisonade that utilizes a lost-world plotline, while *Of One Blood* is a lost-race novel that aligns itself with Edisonade values in its portrayal of scientific exploration and its essentially technocratic outlook.

Incorporating lost-race motifs into an Edisonade tale, however, brings its own set of contradictions. As Brian Stableford has pointed out, lost-race novels differ distinctly from the "scientific romances," written by authors such as H. G. Wells during the same era, because their narratives are rarely informed by science.[7] Many of them also contain pastoral or utopian elements that implicitly critique the present; Thomas Clareson notes that many lost-race tales display "a rejection of the increasingly urban-technological society" at the turn of the twentieth century (121). Similarly, Nadia Khouri has examined how utopian lost-race tales have an

ambivalent relationship not just with science, but with history. She states, "To the lost-race

utopist, history is not a constructive dynamo fueled by a sense of progress and achievement.

Oriented towards the remote past, this type of utopia instead seeks to conserve a historical

residue outside the chronology of events" (172). From this perspective, utopian lost-race novels,

on some level, have an ambivalent relationship with the "sense of progress and achievement" that

the Edisonade celebrates. Their portrayal of history as a consistently malleable entity influences

works that borrow from the lost-race tradition, like those of Serviss and Hopkins. They present

scenarios in which the scientific discovery of a lost society undermines or refutes the historical

"facts" of their contemporary world. John Rieder observes similar circumstances in his study of

lost-race novels and imperialism, noting the frequent appearance of dinosaurs in these lost

worlds. For Rieder, lost-race texts portray imaginary places in which "the living anthropological

traces of the past that are thought to remain visible in colonial settings bring to life the geological

ones as well" (52-53).[8] In such cases, dinosaurs--long thought extinct, but now discovered living

in the uncharted territory--embody the past that lost-world travel recovers.

At their heart, lost-race novels tell of a world where history can be encountered firsthand.

It can be explored and verified, rewriting any existing, errant histories. They simultaneously

question their contemporary world's view of history and offer hypothetical revisions to it. This

tendency connects to the intellectual debates during the time these novels emerged, debates that

made for a willing audience for texts performing such cultural work. The environment that

produced novels like *Edison's Conquest of Mars* and *Of One Blood* developed because of three

decades of anxiety regarding Darwinian evolution and its threat to existing concepts of history

that were often informed by the Bible. Carter Hanson, for example, has linked the popularity of

lost-race novels in Britain to the implications of Darwinism, arguing that these works "address

profound anxieties about Darwinian relativism and the racial amalgamation of British society"

(499). These novels engage not only in the "relativist notions" of Darwinism that Hanson notes,

but in the wider, ongoing debate about history and religion that evolutionary theory brought to a

head.

Moreover, this debate was more pronounced in the United States than in Britain, where

scholars such as Hanson and Stableford have focused most of their attention. Even before

Darwin's *On the Origin of Species*, scientists grappled with the fossil record's contradiction of the

Bible's portrayal of historical time. The subsequent discussion over evolution brought such ideas

into further focus for the general American public. These debates occurred with increasing

frequency, particularly during the last decade of the nineteenth century as the Edisonade and

lost-race genres became established cultural myths.[9] To understand how these texts reconcile the

culture's contradictory views of science and religious history, it is essential to see the varied

ways American culture read about and thought about science, the Bible, and history.

<center>Science and Evolution in America during the Edisonade Age</center>

From 1870 to 1900, America saw multiple views on evolution and its compatibility with

Protestant Christianity. While scientists of an earlier generation had accommodated Christian

Biblical traditions in their interpretation of geology and evolution, ministers and educators

became less and less satisfied with such approaches as the century closed. As the seeds for

modern fundamentalist Christianity were sown by some of the era's ministers, pro-Darwinian

educators became more strident as well.

The established tradition for American scientists in the early- to mid-nineteenth century

involved explaining how scientific findings influenced readings of the Bible without

undermining Biblical authority. This approach was particularly prevalent in investigations of the

creation of the earth, where both scientists and theologians frequently acknowledged "long epochs" of development. Geologists, astronomers, and other scientists espoused a view similar to the one articulated by Professor Arronax in Jules Verne's *20,000 Leagues under the Sea*, who explains that "the 'days' of the Bible represent epochs and not an interval between sunrise to sunrise" (147). American science frequently was informed by this proto-Darwinian view of evolution tempered with faith in a divinity and the kind of progressivist, human-centric language Darwin ultimately eschewed.[10] Similarly, concepts such as Laplace's "nebular hypothesis," which read the days of Genesis as a metaphor, found favor from major thinkers such as Yale geologist James Dana (Numbers *Darwinism* 28-29, *Creation* 98-100). Pre-Darwinian American science provided a ready-made template for those who wished to find Biblical history and science compatible.

This partnership continued into the 1880s in Protestant America. Reverend Henry Ward Beecher expressed acceptance for evolution in an 1882 essay in the *North Atlantic Review*, and Presbyterian minister James McCosh, then president of Princeton University, went so far as to send Princeton students to study evolution with "Darwin's Bulldog" Thomas Henry Huxley in Britain (Ruse 137). Even Charles Hodge at Princeton Theological Seminary, who condemned evolutionary thought as "atheism" in his 1874 text *What is Darwinism?*, did so while approvingly mentioning Laplace's Nebular Hypothesis (70) and praising Darwin as a naturalist who "explicitly and repeatedly" referred to a Creator (26-27). Hodge's frustration with evolutionary science came not from its challenge to Genesis, but because it diminished the importance of a creator.[11] Hodge's text illustrates an important point: even some of Darwin's American critics essentially approved of the blending of evolutionary science and religion, their differences lay in the importance they gave a creator.

During the same period in the 1880s, however, evangelical movements by preachers such as Dwight Lyman Moody proved less accepting. Moody, born in Massachusetts, became a "national hero" because of his success as an evangelist in England and Scotland between 1873 and 1885 (Marsden 34). Moody's oft-quoted "Temptations" sermon includes a brief account of Moody's conversation with an "atheist" about how the world was created. The atheist's response: "Force and matter worked together and by chance the world came out" (59). Moody used this example to illustrate the temptation of "False Doctrines," equating the concept with other, more traditionally prohibited behaviors, such as "Disregard of the Sabbath" (56). While he never mentions evolution or Darwin by name, Moody's condemnation of this kind of thinking demonstrates an attempt to voice Protestant America's dissatisfaction with the counternarrative to the Bible provided by evolutionary theory. Moody also promoted the idea of Biblical infallibility, a view that gained popularity during the era. From 1876 to 1895, Moody's views influenced groups such as the Niagara Bible Conference, which made "scriptural inerrancy" one of the five central tenants of its members' Christian faith (Webb 48). The growth of such viewpoints--both hostile to evolution and adamant in their belief that the Bible revealed factual, literal truth in all matters--established a template for the kind of Christian fundamentalism that followed (Webb 48, Marsden 102). Biblical literalism, a view that asserted early history occurred just as it was portrayed in Genesis, began to form. Such views were increasingly hostile to both scientists and Christian theologians who were willing to incorporate the Darwinian narrative into their beliefs. While the views of Christian leaders such as Moody and Hodge did not fully embody what most Americans today would recognize as "fundamentalist Christianity," their concepts demonstrated the growing contentious relationship between Protestant Christianity and pure, theory-based science.[12]

As the doctrine of scriptural inerrancy grew, so did intolerance for evolutionary thought in religious teaching institutions.[13] A key example occurred when Vanderbilt University, a Methodist school, fired geologist Alexander Winchell in 1878 after the publication of his evolution-friendly book *Adamites and Pre-Adamites*. Winchell accommodated the Bible by suggesting that the Biblical "Adam" was a product of evolutionary development. A notable element of his argument includes the claim that Adam was white, but had "descended from a common stock with the Negro" (Winchell 21). Winchell goes to great length to explain that this similar ancestral history does not imply equality between blacks and whites, proclaiming "The inferiority of the Negro is a fact everywhere patent" (22). Winchell, then, embraced a non-literal interpretation of Genesis, at least in part because the "degeneracy" of Adamic whites into blacks could not have occurred in the scale of time allowed by the Bible. Adding a long frame of time before Adam's appearance gave Winchell the ability to present evolutionary concepts without completely discarding Genesis' account of history and provided a case for white superiority because Blacks weren't evolved from this Adamic line. While many white Americans no doubt supported this kind of racialized reading of the Bible, Winchell's method of playing fast-and-loose with the account of Genesis met with professional disapproval. It ended his career at Vanderbilt (Webb 33-34).

By 1891, an English translation of Arnold Dodel's *Moses or Darwin?* appeared in the U.S., signifying secular education's increasing push against literalism. Dodel's first edition, published in Zurich in 1890, forcefully argued for a non-literal reading of the Bible: "it is a myth, a fairy-tale full of oriental beauty, but nothing more than a fiction" (53). Dodel's primary criticism was that only those lucky few who went to universities were exposed to the scientific facts of evolution while European primary schools, which were often religious in nature, ignored

this aspect of science. Translator Frederick Dodel's preface to the American edition pointedly declared that the same problem existed in America despite alleged separation of church and state in public education. This criticism demonstrates the growing frustration among American educators that religion was trumping science in its portrayal of history.[14]

Lost-race novels flourished within this context, as both evolutionary theory's critics and its supporters became more entrenched in their unwillingness to accommodate the other side. The larger history of the debate in America, however, shows that many individuals were willing to accept Darwinian theory as long as it made some appeal to a Creator and acknowledged Genesis as historically authoritative (if not factually accurate in terms of the duration of Earth's creation). Lost-race novels incorporated this kind of blend, found in individuals such as Beecher, Hodge, and Winchell, and turned it on its head during this time of growing contention. Rather than accommodate evolution by re-reading scripture, proto-science fiction presented a narrative where further evidence could be found to bridge the widening gap. As America emerged as an imperial power, early imperialist science fiction provided a powerful narrative reconciling these views by holding out the possibility that technology and exploration could, in fact, return the Bible to a position of cultural authority in scientific matters.

<div align="center">Serviss's Mars: Settling the Question</div>

Serviss began his writing career by creating science essays for mass audiences. As a journalist, he produced a number of texts aimed at general readership, culminating in a two year lecture tour and his most popular non-fiction book, *Astronomy with an Opera-Glass,* in 1888 (Campbell 668). When the *New York Evening Journal* sought to capitalize on the success of Well's *War of the Worlds*, Serviss's name-recognition and writing experience made him a logical choice to write the sequel. In fact, the publication of *Edison's Conquest of Mars* shifted the

trajectory of Serviss's writing from non-fiction to fiction, and he subsequently began selling science-based novels to the slick, popular magazines of the time, including *A Columbus of Space*, serialized in 1909, and *The Second Deluge*, serialized from 1911 to 1912. (Campbell 670-71, Gunn 106-07). Readers taking up the original serialization of *Edison's Conquest* would likely have known that they were reading a story written by an individual with an encyclopedic knowledge of contemporary science and technology who had made a successful career out of his lucid explanations of their concepts.

Edison's Conquest of Mars establishes its technocratic roots from the beginning. The narrator discovers that Thomas Edison has studied the Martians' remaining war machines, as media outlets broadcast the news to a demolished but defiant Earth:

> Suddenly from Mr. Edison's laboratory at Orange flashed the startling intelligence that he had not only discovered the manner in which the invaders had been able to produce the mighty energies which they employed with such terrible effect, but that, by going further, he had found a way to overcome them. (12)

The narrator joins Edison on a test flight around the moon. Once Edison proves that he has mastered space flight and can reproduce his ship to create a fleet, humankind agrees to a strategy: "Let us go to Mars. We have the means. Let us beard the lion in his den. Let us ourselves turn conquerors . . . " (18).[15] Subsequent chapters recount the creation of space suits and "disintegrator" guns, the eventual cooperation of nations to back the endeavor, and the creation of an international strike force led by Edison. Substantial portions of the early narrative address the logistics of space flight, including an encounter with a comet's gravitational pull that almost dooms the expedition (71-75). Space suits are described, including methods for communication between suits via telephone in an airless environment (49-50). One line late in

the novel embodies the book's worldview: "But the genius of one man [Edison] had suddenly put us on the level of our enemies in regard to fighting capacity" (132). The machines and weapons created by Edison and his followers serve the practical purpose of evening the odds against a foe that was originally seen as overwhelming.

If the novel's contents seem driven by contemporary science fiction's naturalistic portrayal of fanciful technology, its tone positions it elsewhere. Unlike Wells's narrator, who explicitly reports bacteria as the cause for the Martians' withdrawal, Serviss portrays President McKinley speaking to the collected nations about the invasion: " . . . it was through the entirely unexpected succor which Providence sent us that we were suddenly and effectually freed from the invaders" (32). Supernatural Providence, rather than an evolutionary process that made humans immune to the same bacteria that killed the Martians, receives the credit for the Martian retreat. References to events or artifacts of Biblical history, such as the Tower of Babel, are offered as factual, historical occurrences (189). The explorers are called "descendents of Adam" on two occasions (69, 165). When the astronauts discover remnants of a civilization on the Moon, Serviss describes the lost culture as having "vanished probably ages before Adam and Eve appeared in Paradise" (64). Serviss likens the protagonists' first encounter with a Martian to standing "face to face with Satan, when he was driven from the battlements of heaven by the swords of his fellow archangels, and . . . transformed from Lucifer, the Son of Morning, into the Prince of Night and Hell . . . " (89). Tellingly, the Martians are not portrayed as the evolved, brain-on-tentacles combination described by Wells's narrator in Book Two, Chapter Two of *War of the Worlds,* but rather as intimidating, giant humanoids. The book describes a captured Martian as "a personage who had presumably inherited from hundreds of generations the results of a civilization, and an intellectual advance, measured by the constant progress of millions of

years" (123). Such a description seems congruent with the earlier, nebular view of the universe described by antebellum American scientists, such as James Dana. Essentially, Serviss uses the language of the pre-Darwinian evolutionist, dealing with epochs of time and Biblical history simultaneously.

The combination becomes more intriguing because of the major narrative shift in the latter third of the story, when the story begins to explicitly focus on concepts of race and history. Once the expedition reaches Mars, the character Edison moves to the plot's background and the novel begins to focus on the narrator's adventures with crew members who are stock fictional characters, rather than fictionalized portrayals of actual scientific personages. These include Colonel Alonzo Jefferson Smith, an army veteran of "many wars against the cunning Indians of the West," (162) and a "handsome young fellow in the flagship" named Sydney Phillips (190). The two men become embroiled in a love triangle after a shocking discovery: a human woman is a captive on Mars. While engaged in reconnaissance in a Martian palace, Smith, Phillips and the narrator hear "music of the earth" coming from a room (168). They find the woman playing music for the Martians. When she sees the humans spying on her, she cries out to them, alerting the Martians to the humans' presence:

> The girl sprang to my side and grasped my arm with a cry of fear. This seemed to throw the Martian into a sudden frenzy, and he raised his arms to strike.
>
> But the disintegrator was in my hand. My rage was equal to his. I felt the concentrated vengeance of the earth quivering through me as I pressed the button of the disintegrator and . . . saw the gigantic form that confronted me melt into nothingness. (172-173)

The appearance of the woman could be seen as an attempt to inject romance into the adventure tale. Clearly, Serviss presents her as a damsel-in-distress to be saved by the technological prowess of the earthmen. Her appearance, however, signals a transition in the story. Once the adventurers are able to communicate with her, the explorers learn that she is the last surviving member of a race of humans who were captured during a Martian invasion centuries earlier and taken back to Mars as slaves, many of whom were recently murdered when Edison's spaceships appeared. The girl, Aina, described as "a beautiful daughter of our common mother, Eve," becomes a living link to Earth's past (188).

In the process of striking against the Martians, the heroes come into contact with a member of a lost race who rewrites, or confirms, one existing theory about the Earthlings' own past. Aina's story provides the solution to a seemingly unrelated Earth mystery, one that becomes foregrounded by the narrative as the final battle with the Martians looms. Among the scientists is a linguist from the University of Heidelberg who determines that Aina's language has "the roots of the great Indo-European, or Aryan stock . . . . Her language every tongue that now upon the earth is spoken antedates" (180-181). The professor teaches her English and slowly reveals her story. Her people came from the Vale of Cashmere and were taken to a "Land of Sand" where they were forced to build mountains of stone and statues of the Martian leader; the professor immediately identifies this with Egypt's pyramids and Sphinx. "It was not," the narrator concludes "the work of puny man, as many an engineer had declared that it could not be, but the work of these giants of Mars" (197). Based on Aina's people's estimation of the number of Martian days since they were taken from Earth, the scientists calculate that the Martians visited Earth and captured Aina's people "more than 9,000 years" in the past (200). Serviss's

narrator ties this to actual theories of eighteenth-century German philologist Johann Adelung, which referred to Biblical history. The narrator states,

> Now on Mars, we had put to rest no less mysterious questions relating to the past history of our own planet. Adelung, as the Heidelberg professor asserted, had named the Vale of Cashmere, as the probable site of the Garden of Eden, and the place of origin of the human race, but later investigators had taken issue with this opinion and the question where the Aryans originated on the earth had long been one of the most puzzling that science presented.

> This question seemed now to have been settled. (200)

So, Aina's story provides scientific certitude of the past, confirming at once philological theory, Western concepts of racial identity tied to an "Aryan" cultural origin, and Biblical history.[16] This passage's language demonstrates how the book emphasizes technocratic exploration's ability to provide definitive proof in historical matters. Just as the earlier language of the text points to Biblical references, such as Adam and Eve, Babel, and Lucifer, the discoveries made are put in the language of scientific theory backed by conclusive evidence. The discovery of Aina has "put to rest" the issue of the origin of the human race; the issue is "settled." The novel ultimately values the expedition less for its military success or its scientific endeavor than for its ability to uncover mysteries of the Earth's past related to Biblically based history and the certainty that it offers in matters of racial identity and cultural authority.

<u>Hopkins's Africa: "The Biblical Tradition is Paramount to All"</u>

Pauline Elizabeth Hopkins's *Of One Blood* presents similar concepts of cultural construction, demonstrating the same kind of exuberance for technology and appeal to Biblical authority on matters of race and history. In Hopkins, we find the references to Egypt as a cradle

of civilization and to the Bible as a legitimate source of scientific knowledge that can be confirmed under the right set of circumstances, often using the same language of certitude demonstrated in the Adelung section of Serviss's work. Hopkins calculatedly adapts popular literary form, using the lost-race story's features to reinterpret and reinvigorate discussion of African-American history.[17]

Hopkins's approach to science and the Bible can be seen in the novel's full title: *Of One Blood, or the Hidden Self*. The main title, *Of One Blood*, comes from the book of Acts, Chapter 17, Verse 26, which states that God "hath made of one blood all nations of men for to dwell on all the face of the earth . . . ." The phrase had a long history in racial debates before Hopkins adopted it, and Hopkins uses its appeal to Biblical authority to counter-assert a common human ancestry against prevailing racist ideologies that used the Bible to justify racial subordination and white supremacy. In contrast, her subtitle, *The Hidden Self*, comes from an 1890 article by philosopher William James in *Scribner's Magazine* in which he calls for scientific examination of mental perception.[18] The book's title, then, signals the novel's attempt to find authority in both the Bible and the then-cutting-edge science of psychology. Moreover, the cues it takes from James are emblematic of the treatment of science in such later Edisonade works, in that they simultaneously valorize exploration while questioning the authority of established scientific fact. James wryly notes, "The ideal of every science is that of a closed and completed system of truth. The charm of most sciences to their more passive disciples consists in their appearing, in fact, to wear just this ideal form" (361). James asserts that science's practitioners and its public both overemphasize science's ability to settle disputed matters conclusively through investigation and proof. Instead, James emphasizes science's unfinished nature, holding out the possibility that further research in one area could validate ideas that have been dismissed or relegated to the

periphery. James advocates closer examination of the "unexamined residuum" that does not so closely fit the parameters of science, including "phenomena generally called mystical" (361). Such a viewpoint pervades *Of One Blood*, providing it with an explicit theoretical basis that many lost-race novels lack but also with a willingness to place the boundaries of science in the same location where they began, in an age before Darwin.[19] Both James and lost-race novels imply that further scientific research could confirm the very supernatural or superstitious concepts that existing science has undermined.

 Of One Blood features multiple, overlapping plot lines, many of which offer sustained critique of Americans' opinions about race.[20] The novel begins with Reuel Briggs, a light-skinned African-American passing for white in order to study medicine. Briggs is also, however, the character in the novel who most closely resembles the kind of theatrical scientific genius found in the Edisonade. As a doctor, Briggs immerses himself in the kind of scientific "residuum" that James advocated, blending established chemistry with studies in "volatile magnetism" (468). He produces a powder containing an artificial version of this magnetism that can restore life to individuals on the brink of death. He explains it to his peers:

> This subtle magnetic agent is constantly drawn into the body through the lungs . . . When respiration ceases this magnetism cannot be drawn into the lungs. It must be artificially supplied. . . .
>
> This compound, gentlemen, is the exact reproduction of the conditions existing in the human body . . . . The product becomes a powder, and *that* brings back the seeming dead to life. (468-469)

Briggs establishes his scientific prowess by restoring life to Dianthe Lusk, an African-American member of Fisk University's singers, who was thought dead by her doctors. While

Briggs's scientific work gains renown, pervasive racial intolerance in the U.S. exerts pressure on him. He falls in love with Lusk and marries her secretly despite the fact that this means she will have to pass for white as well. When medical and academic jobs do not pan out, Briggs fears that his ethnicity has been revealed and joins an expedition to Africa in hopes of making a fortune there. In Africa, he encounters the hidden, technologically advanced city, Telessar, where he learns he is descended from their lineage of Ethiopian kings and that it is his destiny to lead their African civilization.

The most telling moments in terms of the novel's approach to history come in its exploration portions. Briggs's expedition is led by Professor Stone, an Englishman who insists that his excavation of the Ethopian city of Meroe will reveal "invaluable records and immense treasure" (520). Perhaps surprisingly, Stone articulates much of the African-centric view of the book. Briggs, whose own passing stems from fear of lost opportunities in the face of American racism, expresses concern over Stone's radical ideas:

> Your theories may be true, Professor, but if so, your discoveries will establish the primal existence of the Negro as the most ancient source of all that you value in modern life, even antedating Egypt. How can the Anglo-Saxon world bear the establishment of such a theory? (520)

Stone's reply:

> You and I Briggs, know that the theories of prejudice are swept away by the great tide of facts. It is a fact that Egypt drew from Ethiopia all the arts, sciences and knowledge of which she was mistress . . . I have even thought . . . that black was the original color of man in prehistoric times. You remember that Adam was made from the earth; what more natural than that he should have retained the

color of the earth? What puzzles me is not the origin of the Blacks, but of the

Whites. (520-521)

In the single comment, Hopkins's character articulates a progressivist view of science, in which

researched "facts" establish paradigmatic truths and inverts racial hierarchies by tying his claims

to a pro-African version of the Biblical creation narrative. As Stone later states, "The Biblical

tradition is paramount to all. In it lies the greatest authority that we have for the affiliation of

nations . . . " (533).

Ultimately, Stone's blend of Biblical history with an evolutionary time frame appears

similar to the views in *Adamites and Pre-Adamites* that resulted in Alexander Winchell's firing

from Vanderbilt in 1878, albeit without Winchell's assertions of black inferiority. Instead of

asserting a long span of time to explain the degeneracy of Adamic whites to blacks, as Winchell

does, Hopkins holds out Africans as the original Edenic civilization that degenerates into

whiteness. Events in the novel bear Stone's comment out; Hopkins distinctly ensures that her

scientific expedition's findings will vindicate both African superiority and the "Biblical

tradition."

Most of Stone's historical hypotheses are confirmed when Briggs is taken to Telessar,

where he finds a lost city that would have been familiar to any readers of lost-world utopias who

stumbled upon Hopkins's novel. The citizens wear garments of "golden clasps and belts," and

Briggs is gifted by the citizens with a "jeweled dagger literally encrusted with gems" (549).

Such wealth displays the kind of conspicuous consumption Khouri finds as pervasive in lost-race

novels (170). Hopkins's story, however, is adamantly pro-technology; her narrative never lapses

into the ambivalence about technological advance that Khouri finds to be a hallmark of lost-race

utopias. Telessar has technological wonders, among them a disc that allows remote viewing.

This extraordinary device enables Briggs to learn of his wife's abduction and forced marriage to his scientific partner, Aubrey Livingstone, back in America (575-578). Telessar also seems to bring out Briggs's previously established abilities as a telepath and mesmerist. Briggs notes: "In the heart of Africa was a knowledge of science that all the wealth and learning of modern times could not emulate" (576). Even as it deals with the kind of pseudoscientific endeavors promoted by William James, the positive portrayal of science and technology defines the narrative.

Hopkins's approach to Telessar's technology has elicited commentary from scholars analyzing the novel's relationship with American imperialism. While the technocracy of Hopkins's vision connects her work to the Edisonade, it arguably problematizes her other, more culturally explicit goals involving her attempt to, as Lois Brown puts it, "enact a corrective and more expansive African history . . . " (388). Martin Japtok asserts that these elements of African technology undermine Hopkins's attempt to vindicate African culture and values by making "material, technological accomplishments the standard by which any people should be measured" (403). Similarly Kevin Gaines has argued that the novel builds African identity on an existing Western "civilizationist ideology" that by its very nature is pro-imperialist (450). Hopkins's Ethiopian lost city intertwines advanced technology and the right to lead in a manner similar to imperialist America at the turn of the twentieth century.[21] In order to resist the prevailing American conception of race, *Of One Blood* draws from the existing American imperial imaginary by blending a technocratic viewpoint and a Protestant Christian appeal.

As in Serviss, the scientific discoveries in Hopkins's novel become secondary to the confirmation about pre-Darwinian history and the clarification of human racial identity that results.[22] *Of One Blood*'s portrayal of race is at once complex and simplified--particularly as it deals with "passing" and the inadvertent incest that occurs in the novel. By the conclusion, it is

revealed that Dianthe Lusk, Reuel Briggs, and Aubrey Livingston are all half-siblings with

African blood, although Briggs and Lusk are married and the villainous Livingston essentially

kidnaps Lusk to marry her after Briggs is declared missing in Africa. Despite these nuances, the

novel's approach to race becomes clear when Briggs, after a failed attempt to save Lusk from

death, returns to Telessar to marry the queen and become its legitimate ruler.[23] As Walter Benn

Michaels demonstrates, the book ultimately claims that Briggs's lineage from the Ethiopian

dynasty of kings "guarantees a racial identity no amount of miscegenation can obscure" (59).

Similarly, Telessar's history confirms the Biblical tradition's truth, resulting in what Jeanne

Kassanoff calls Hopkins's "own elaborately wrought brand of monogenist creationism" (167).

The Biblical tradition allows for the single heritage from Black ancestors described by Professor

Stone earlier in the book. Hopkins asserts that scientific exploration will enable verification not

just of Biblical history, but her interpretation of the Bible's view of race.

In many ways, then, race becomes the vehicle in which earlier history is embodied and

held up to counter the prevailing scientific worldview by both Serviss and Hopkins. Both novels

end with male explorers joining by marriage the pure bloodlines of the discovered other. When

Briggs's first wife dies, he becomes Telessar's ruler, "teaching his people all that he has learned

in years of contact with modern culture" and marries Candace, the city's virgin queen (621).[24]

Similarly, Serviss's tale ends in marriage. Upon returning to Earth, Sydney Phillips weds Aina.

The novel's final lines express concepts of race and history in a confident tone, revealing just

how much emphasis the text places on racial certainties:

> And thus was united, for all future time, the first stem of the Aryan race, which
>
> had been long lost, but not destroyed, with the latest offspring of that great family,

and the link which had served to bring them together was the far-away planet of

Mars. (254)

Marriage to a "pure" bloodline becomes the connection between a character from the

modern world and the prehistory the woman represents. Kassanoff notes this same element in *Of*

One Blood, finding in Candace's dark-skinned appearance a tie to "pointedly visible" African

blood and in her name a tie to a long Ethiopian tradition of queens (172). Such a wedding

validates Briggs's ascension to Telessar's throne and his own African heritage. In both novels,

the exploration results in historical certainty of supernatural matters, and that certainty is

embodied in race. In both works, the Biblical references to history represent the system of

preexisting thought that will be vindicated by these later scientific expeditions. These are the

"facts" that Professor Brown hopes to find in Telessar and that seem "settled' by Edison's

expedition to Mars. During a period when race was a key factor used to justify imperial

endeavors, these works appeal to a concrete interpretation of race tied to both scientific

discovery and the Bible.

While both stories valorize technological achievement and exploration founded on

scientific principles, their approach to actual scientific discoveries is ambivalent because both

texts find authority centered in earlier understandings of the world. Like the scientists debating

human origins and Darwinian evolution in the latter half of the nineteenth century, both texts

struggle to find ways to be both progressively scientific and to accommodate or utilize an

existing, Biblical paradigm. By injecting elements of a contemporary scientific debate into a

lost-race adventure, Hopkins critiques the ethnocentric elements of the genre. Serviss, in

contrast, brings those very elements into a tale that otherwise would be a straightforward,

Edisonade adventure. Both works, however, find in their resolutions an affirmation of

technology in the service of exploration and racial identity construction. The adventures clarify

the past, rewriting it to create solid and certain versions of race and history.

In Serviss and Hopkins, technocratic expansion becomes the stage on which

contradictions between Darwinian evolution and organized religion are reconciled. The very

ideas that post-Darwinian science necessarily complicates--race and identity, religion and

history--become concepts that can be reestablished through the technocratic exploration. These

stories attempt to overcome the contradictory histories offered by post-Darwinian science and

traditional Christianity. In this sense, they use one dominant cultural narrative of their time--the

Edisonade's technocratic imperialism--to respond and critique Darwinism and its complex

reordering of race, religion, and identity, holding out the possibility that scientific revisionism

could be instigated by the revelations discovered in some far off destination.

Afterword

It seems appropriate to conclude this study by considering the degree to which the Edisonade narrative has crept into popular American consciousness. At the beginning of the twenty-first century, Americans live in a world shaped by technocratic expansion. From a literary perspective, this means that one of the dominant literary genres of our era--science fiction--evolved and flourished partly by continuing to imagine technologically enabled journeys to farther destinations.[1] From a geopolitical perspective, this means we inhabit the century after the U.S. took imperial possessions and committed itself to an imperialist program beyond its North American borders. Whenever the U.S. uses technology to exert its power in foreign locales, elements of the mindset portrayed in these novels enter the discussion.

But it would be incorrect to assume that the Edisonades' grand narrative, then or now, was exclusively about conquest. As we have seen, multiple authors approached the recurring Edisonade plot in a way that simultaneously celebrated and criticized expansionist and imperialist assumptions. Even the most apparently pro-expansionist and militaristic Edisonades, such as Senarens's Frank Reade, Jr. tales, featured elements that did not wholeheartedly endorse the imperial endeavor. The later works by Twain, Serviss, and Hopkins celebrated technocracy, but did so in complex ways that valued it less as a means of military expansion than for the possibility that it could expand knowledge and confirm an American identity.

It is within this articulation of a peculiar kind of technocratic U.S. identity that these proto-SF novels have made their biggest mark on the popular consciousness. The identity valued in later Edisonades was not one that challenged existing definitions of what it meant to be an American, but rather one that reinforced then-dominant perceptions about the proper place of Christianity and liberal government as defining components of national life. The genre narrates

the technological recovery of presumably pre-existing and traditional definitions of American identity in the post-Darwinian age. As such, it establishes the basis for subsequent tales that imagine the use of science and technology to recover or reestablish lost or jeopardized aspects of a U.S. identity.

Twenty-first century Americans still live in a world where the concepts articulated in these works are entrenched in common ways of thinking about expansion and identity. The recurring debate about evolutionary science in school textbooks provides one prominent example, but the prevalence of these concepts runs deeper. While debates about what kind of science will be taught explicitly to students in the classroom continue, ostensibly educational television networks continue to present the kinds of narratives found in lost-race Edisonades. For example, television narratives on oft-rerun History Channel series promise that scientific research in Africa and the Middle East will find evidence validating Biblical narratives. *Decoding the Past: Mysteries of the Garden of Eden*, for example, posits the evidence for the garden's location, just as the German professor in Serviss's novel does. Likewise, *Mysteries of the Bible: Cain and Abel* investigates the Book of Genesis, using the same type of language Gernsback did in 1920, conflating history and religious tradition by presenting Biblical figures as historical personages and Biblical narratives as though they constitute attested historical data. In both cases, exploration of targeted areas of the Middle East plays a key part in accumulating evidence for such arguments. Such programs promise that a blend of technology and exploration may provide concrete evidence of the veracity of religious legend. Such documentaries present the beneficiaries of Western technology not as imperial conquerors but as scientific investigators whose research has the potential to redefine history and whose exploration of remote territories could find evidence to support literal readings of Genesis.

If such pseudoscientific documentaries proffer the cultural concepts and narrative tropes akin to those of the nineteenth century's lost-race Edisonades, then contemporary SF films arguably carry on the imperial legacy of the Edisonades, albeit with a markedly different approach. In 2009, the James Cameron-directed film *Avatar* became the highest-grossing box office movie to date. *Avatar* plays out imperial expansionism on an interstellar level, imagining a future where humans travel to a new planet and attempt to subjugate its people and natural resources. *Avatar* presents explicit criticism of the imperial endeavor by asking its audience to sympathize with the native peoples rather than the militaristic humans who invade their planet; it does so, however, with remarkably little change to the master narrative of the Edisonade itself.[2] The humans travel to the planet to reap its benefits, quickly resort to violence when the native population thwarts their plans, and turn to technology--in this case, advanced weapons along with high-tech biological inventions--in order to achieve their colonial goals. The hero of the story, a wheelchair-bound military recruit, even has his physicality normalized by inserting his consciousness into a technologically created alien body. Like Poe's John A. B. C. Smith, technology is used to restore the protagonist's body exclusively to facilitate expansionism. Rather than imagine a future in which science and technology create opportunities to move *beyond* the old narrative and its embedded assumptions and fantasies, *Avatar* simply renews the established narrative but has the hero fight for the colonized rather than the colonizers. It is as if Johnny Brainerd built his steam man and went westward to aggressively use it as a force to help the Sioux eradicate prospectors and pioneers. The protagonist has changed sides, but the narrative's perspective on technology's use in expansion and its facilitation of warfare has not.

Avatar and *Decoding the Past* demonstrate the continuing allure of narratives that address crises of American identify by mobilizing well-worn tropes concerning technology and travel.

Even as they try to distance themselves from an imperial narrative--either by underplaying the interventionist implications of Western archeological digs in other countries or by overtly making their protagonists fight for, rather than against, the colonized "Other"--these contemporary descendants of the Edisonade embrace technocracy and expansion, particularly their capacity to tell us who "us" really is. They participate in an ongoing struggle over national and other identities in the United States.

Here, the Edisonades' legacy should remind us of the degree to which narrative forms are inevitably embedded in national consciousness, even when they complicate or struggle against dominant cultural norms. Readers of the Edisonade and its cultural descendents must ask how assumptions about national identity, race, and religion limit our ability to interpret science's potential. Even as viewers embrace new technocratic fables such as *Avatar*, we should skeptically observe how the dominant discourse about cultural identity always shapes and limits the imaginative possibilities of fictional forms.[3] As we have seen, the most militaristic Edisonades also contained anti-imperialist elements; we should not be surprised if apparently anti-imperialist narratives often reinforce cultural norms that run counter to their apparent worldviews. For example, *Avatar*'s natives are unable to put up a real resistance until a white invader allies with them, becomes their leader, and helps them battle the military-industrial warriors from Earth, who are portrayed as unredeemablely bloodthirsty and single-minded as any of the enemies faced by Frank Reade, Jr. (The Reade novels, at least, occasionally gave some eloquence to their hero's ethnic foes.)

Since the day of the Edisonade, Americans have enjoyed narratives that present science and technology as tools to right wrongs and recover information that makes us comfortable in our own skins. The popularity of dime novel series in the 1880s and 90s, and the readiness of

subsequent writers to utilize their tropes, amply demonstrates the power of this emergent

narrative. Edisonades imagined a world in which technology enabled exploration and created

identity. As new understandings of American identity emerge, we continue to explore. In all

likelihood, technology will transform the contemporary world as much--if not more--radically

than it did in the nineteenth century. By observing the narratives that arose during a previous

era, we can better understand the new narratives that develop and discern their cultural

ramifications in ways that help us define and shape that world.

Figures

Fig. 1 - The First Decade of Frank Reade Stories with Locale and Publication Information

Year	Title	Locations Visited	First Appearance	Serialization Dates	Issues
1876	The Steam Man of the Plains; or, The Terror of the West	U.S. West	Boys of New York	28 February to 24 April 1876	28-36
	Frank Reade and His Steam Horse	U.S. West	BNY	17 July to 25 September 1876	48-58
1877					
1878					
1879	Steam Man (reprint)			13 January to 31 March 1879	178-189
	Steam Horse (reprint)			21 July to 20 October 1879	205-218
1880	Frank Reade and His Steam Team	U.S. West (Missouri, Kansas)	BNY	5 January to 8 March 1880	229-238
1881	Frank Reade and His Steam Tally-Ho	U.S. West (Wyandotte, Devil's Hole)	BNY	10 January to 4 April 1881	282-294
1882	Frank Reade, Jr., and His Steam Wonder	U.S. West	BNY	4 February to 29 April 1882	338-350
	Frank Reade, Jr. and His Electric Boat	Great Lakes	BNY	12 August to 21 October 1882	365-375
1883	Frank Reade, Jr., and His Adventures with His Latest Invention	U.S. West	BNY	7 April to 23 June 1883	399-410
	Frank Reade, Jr. and His Air-Ship	Mexico/U.S. West (Rocky Mts, California, Mexico)	BNY	1 December 1883 to 1 March 1884	433-446
1884	Frank Reade, Jr.'s Marvel; or, Above and Below Water	Red River (New Orleans)	BNY	10 May to 19 July 1884	456-466
	Frank Reade, Jr. in the Clouds	North Pole, ends in Denmark	BNY	6 September to 20 December 1884	473-488
1885	Frank Reade, Jr. with His Air-Ship in Africa	Africa (Egypt and Zululand)	BNY	14 February to 2 May 1885	496-507
	Frank Reade, Jr.'s Great Electric Tricycle, and What He Did for Charity	Central U.S. (Chicago, New Orleans)	Wide Awake Library	Unconfirmed	Unconfirmed
	Across the Continent on Wings, or Frank Reade, Jr.'s Greatest Flight	U.S. West Coast (Utah, California)	BNY	25 July to 3 October 1885	519-529
	Frank Reade, Jr., Exploring Mexico in His New Air-Ship	Mexico	BNY	12 December 1885 to 3 April 1886	539-555

Fig. 2 - Original Frank Reade, Jr. Stories from 1894 with Locale and Publication Date

Title	Locations Visited	Pub. Date	Issue
The Black Range; or, Frank Reade, Jr. Among the Cowboys with his New Electric Caravan	U.S. West (New Mexico)	6 January 1894	68
From Zone to Zone; or, The Wonderful Trip of Frank Reade, Jr., with His Latest Air-Ship	North Pole	13 January 1894	69
Frank Reade, Jr., and His Electric Prairie Schooner; or, Fighting the Mexican Horse Thieves	U.S. West (Texas / Mexico)	20 January 1894	70
Frank Reade, Jr., and His Electric Cruiser of the Lakes; or, A Journey Through Africa by Water	Africa	27 January 1894	71
Adrift in Africa; or Frank Reade, Jr. Among the Ivory Hunters with his New Electric Wagon	Central Africa	3 February 1894	72
Six Weeks in the Clouds; or, Frank Reade, Jr.'s Air-Ship, the Thunderbolt of the Skies	Canada (Hudson Bay)	10 February 1894	73
Frank Reade, Jr.'s Electric Air Racer; or, Around the Globe in Thirty Days	International (San Francisco, Japan, Pekin, Azores)	24 February 1894	74
Frank Reade, Jr., and His Flying Ice Ship; or, Driven Adrift in the Frozen Sky	Arctic (Norway)	10 March 1894	75
Frank Reade, Jr., and his Electric Sea Engine; or, Hunting for a Sunken Diamond Mine	Indian Ocean	24 March 1894	76
Frank Reade, Jr. Exploring a Submarine Mountain; or, Lost at the Bottom of the Sea	Cape Horn (underwater)	7 April 1894	77
Frank Reade, Jr.'s Electric Buckboard; or, Thrilling Adventures in North Australia	Australia	21 April 1894	78
Frank Reade, Jr.'s Search for the Sea Serpent; or, Six Thousand Miles Under the Sea	Arctic Sea, Alentian Isles	May 4 1894	79
Frank Reade, Jr.'s Desert Explorer; or, The Underground City of the Sahara	North Africa (Egypt)	18 May 1894	80
Across the Frozen Sea, or, Frank Reade, Jr.'s Electric Snow Cutter	Arctic / North Pole	22 June 1894	83

Fig. 2 - continued

Lost in the Great Atlantic Valley; or, Frank Reade, Jr., and His Submarine Wonder the "Dart"	Under Atlantic Ocean	6 July 1894	84
Frank Reade, Jr.'s Clipper of the Prairie; or, Fighting the Apaches in the Far Southwest	U.S. West (Arizona)	19 August 1894	87
Under the Amazon for a Thousand Miles; or, Frank Reade, Jr.'s Wonderful Trip	Brazil	24 August 1894	88
Frank Reade, Jr.'s Search for the Silver Whale; or, Under the Ocean in the Electric "Dolphin"	Pacific Ocean	7 September 1894	89
Frank Reade, Jr.'s Search for a Lost Man in His Latest Air Wonder	Canada (Saskatchewan)	5 October 1894	91
Frank Reade, Jr. in Central India; or, The Search for the Lost Savants	India	12 October 1894	92
The Missing Island; or, Frank Reade, Jr.'s Wonderful Trip Under the Deep Sea	Aztec Islands / Baja California	2 November 1894	93
Over the Andes with Frank Reade, Jr. in His New Air-Ship; or, Wild Adventures in Peru	Peru	16 November 1894	94
Frank Reade, Jr.'s Prairie Whirlwind; or, The Mystery of the Hidden Canyon	U.S. West (New Mexico)	30 November 1894	95
Under the Yellow Sea; or, Frank Reade, Jr.'s Search for the Cave of Pearls with His New Submarine Cruiser	Yellow Sea	14 December 1894	96
Around the Horizon for Ten Thousand Miles; or, Frank Reade, Jr.'s Most Wonderful Trip with His Air-Ship	Over the USA	28 December 1894	97

(Note: Issues 81-82, 85-86, and 90 are reprints of earlier material.)

Endnotes

Notes to Introduction

[1] Gernsback's role as the first publisher of an exclusively science-fiction magazine has traditionally led SF historians to single him out as a key figure who defined twentieth-century SF. Sam Moskowitz called Gernsback the "father of modern genre" of science fiction (*Explorers* 11). Even recent studies temper this claim rather than dispute it; Mike Ashley, for example, calls him "foster father to a variety of homeless children," i.e., to the existing science fiction forms and sub-genres that lacked the single, specialized outlet *Amazing Stories* provided (45). *Science and Invention* issues from 1920 to 1926, then, stand as a study in Gernsback's shifting interests prior to founding the magazine that became the cornerstone of science-fiction market during the late nineteen twenties. Perhaps notably, Senarens was not one of the key writers Gernsback later pointed to in his genre-defining editorial, "A New Kind of Magazine," preferring to describe the type of stories he hoped to publish as "the Jules Verne, H.G. Wells, and Edgar Allan Poe type of story--a charming romance intermingled with scientific fact and prophetic vision" (Gernsback 3).

[2] The first such dime novel was Edward Sylvester Ellis's *The Steam Man of the Prairies* (1868) published two years before Thomas Alva Edison founded American Telegraph Works in 1870 and over a decade before Edison found widespread fame for phonograph in 1877 (Stross 14, 30-37). Thus, the Edisonade genre predates even the rise of Edison himself. For a historical overview, see Landon 40-50.

[3] This definition of technocracy, then, does not refer solely to the idea that society-at-large should be run by engineers. It also differs from the idea of the technocracy movement that existed in the U.S. during the early twentieth century. In fact, the majority of Edisonade dime-novels predate this specific socio-political movement. See Akin for an articulation of the development of the Technocrat Movement.

Notes to Chapter 1

[1] See Clute 369 and Brown 133. Brown calls *Steam Man of the Prairies* "The inaugural American science fiction novel" ("Science Fiction" 133).

[2] Perhaps the most famous portrayal of the Civil War's toll on American limbs comes in Jules *Verne's De la Terre á la Lune*, published in 1865 and translated as *From the Earth to the Moon* in 1873. Verne's main characters

are a "Gun Club" of munitions designers who find their life boring when the War ends. Nearly all of the munitions experts are in some way disfigured from their work with explosives; Verne relates that these men "bore the marks of their unquestionable valor. Crutches, wooden legs, artificial arms with iron hooks at the wrist, rubber jaws, silver skill, platinum noses--nothing was lacking in the collection . . . . not quite one arm for every four men, and only one leg for every three" (4). For overviews of Poe's influence on Verne in the context of science fiction genre development, see Aldiss 103 and Gunn 66.

[3] Kenneth Silverman connects the story to Poe's knowledge of well-publicized journalistic accounts of 1839s Indian conflicts in Florida such as the Second Seminole War (148).

[4] Slotkin's chapter "Myth and Historical Memory" from *The Fatal Environm*ent particularly uses Lévi-Strauss in developing a definition of myth as "stories, drawn from history, that have acquired through usage over many generations a symbolizing function that is central to the cultural functioning of the society that produced them" (16). Like Lévi-Strauss, Slotkin views myth as a repeated story that can be structurally analyzed (20) and that frequently performs the feat that includes reconciling contradictions that may not themselves be explicit in the myth itself. For Slotkin, myth "generaliz[es] particular and contingent experiences into the bases of universal rules of understanding and conduct" (19).

[5] H. Bruce Franklin notes a 1905 essay in *The Saturday Review* that criticized scientific romances and called Poe "probably the father" of the genre (87). Poe was also one of three authors--along with Jules Verne and H.G. Wells-- mentioned by Hugo Gernsback in his pioneering definition of the SF genre in the first issue of *Amazing Stories* in 1926 (Gunn 120). For significant historical overviews of Poe's influence on the development of SF, see Aldiss 53-65, Gunn 55-58, Moskowitz 46-61, Suvin 312-315. Suvin briefly mentions "The Man Who (sic) Was Used Up" as one of the stories that defines Poe as "the satirist of mechanical progress allied to power but divorced from imaginative truth (314).

[6] Indeed, earlier scholarship focused on this political angle, noting possible historical figures on whom the main character, General Smith, could be based. Hoffman names General Winfield Scott as the "real identity" of Smith (197). Stuart and Susan Levine prefer William Whipple's contention that Richard M. Johnson, then Vice-President and wounded veteran of the 1813 Battle of the Thames against Tecumseh, was the target of Poe's satire (438). Vanessa Warne's 2005 article in *Atenea* provides an excellent overview of attempts to locate Smith's real-life analogue (95). See also Hutchisson 90.

[7] For a discussion of Verne's similar approach, see Gunn: "Verne was no visionary. He worked close to the present, often putting together contemporary devices into new combinations or analogous developments to come" (67). Grounding the story in the present --perhaps paradoxically--connects Poe's work with subsequent proto-science fiction and technological romances.

[8] For information about Poe's journalistic writing about science, particularly how he understood technology's ability to transform the publishing field, see Whalen's analysis of the essay "Anastatic Printing" ("Poe and the American Publishing Industry," 82-84) and Tresch 122-124.

[9] A number of studies indicate how the "debunked hoax" motif becomes one of Poe's preferred methods for dealing with nineteenth century science. "Hans Pfaall," for example, ends with a litany of counter-evidence to disprove Pfaall's claim of reaching the moon; "The Facts in the Case of M. Valdemar" structures its entire plot on the narrator's attempt to dispel incorrect reports of his mesmeric experiments. Maurice S. Lee notes that such tales are "scientific hoaxes, which take the authority of science to lie not in a rigorously objective method" but in intuition and social argumentation (226). Hoffman calls this variant of Poe's authorial personality "Hoaxiepoe" who uses "explorations of space and time" to spoof his technophilic audiences (155-6).

[10] Whalen notes Poe's emerging sense of the "Capital Reader" who embodied the "deep connection between gross economic forces and the creative activity of literary producers" (*Poe and the Masses* 10). Whalen finds Poe's "barely repressed enmity toward the reading public . . . closely linked to his struggles with capital and the Capital Reader" (76). Poe's long term attempts to appeal to a popular audience--as writer, as editor, as would-be publisher--determined the type of stories he wrote, work that he thought could survive in the marketplace (Whalen 107).

[11] Many scholars note the interruptions (which always occur when the word "man" is stated) to be indicative of Poe's questioning the nature of humanity in the face of machine hybridity. Jan Mieszkowski, for instance, says this approach ultimately "challenges the assumption that the noun 'man' . . . can refer unproblematically to any particular man, or even to mankind in general" (124). Similarly, Mieszkowski notes the title's significance; its reference to a man *that* was used up (rather than a man *who* was used up) serves to further distance the General from normative, non-prosthetic definitions of humanness. For more on interruptions and the use of "man" as unsatisfactory signifier, see Berkley 370 and Elmer 49.

[12] The names of the tribes are used interchangeably, but each of the interviewee's short narratives address the horrifying nature of the Indian other: "a bloody set of wretches, those Kickapoos!" (382); "--great wretches,

those Bugaboos--" (383); "--terrible wretches those Kickapoos!--" (384); "Dreadful business that of the Bugaboos, wasn't it?--terrible creatures, those Indians!--" (385); "Savage affair that with the Kickapo-o-o-os, wasn't it?" (385).

[13] The novel was reprinted under different titles in different dime novel series during the late 1800s. Different scholars engaging with variants of the text refer to it by different titles. Pfitzer calls it *The Huge Hunter* (see subsequent note) while Brown calls it *The Steam-Man of the Prairies*. I have chosen to use the non-hyphenated, lowercase variant "steam man" in reference to the character and the non-hyphenated spelling for the title in 1868. I refer to the text using its original title, rather than *The Huge Hunter*, although I acknowledge that the work's popularity was achieved under the latter title in 1876 and thereafter. The only existing copy of the first edition, listed as *The Steam Man of the Prairies* (unhyphenated), is at the Rosenbach Library in Philadelphia, whose staff have confirmed for me that the title is unhypenated.

[14] Bleiler's "From the Steam Man to Tom Swift" gives a full account of the Newark Steam Man's short-lived notoriety in the local press and connects it to the "boy inventor" genre's development. See also Landon 44.

[15] After its 1868 release as number 45 in *Beadle's American Novel* series under the title *The Steam Man of the Prairies*, the Beadle's publishing company reprinted Ellis's text in 1876, retitled *The Huge Hunter, or the Steam Man of the Prairies*, as *Beadle's Half Dime Library*, No. 271. This oddly deceptive retitling, given that the Huge Hunter character only appears in one chapter before Johnny eludes him, is perhaps more indicative of the dime-novel publishing strategy of making old material seem new rather than an actual comment on the story's content.

[16] Donald Pfitzer notes Ellis's use of the Colt Arms Factory in *The Steam Man of the Prairies* and its possible influence on Mark Twain while composing *A Connecticut Yankee in King Arthur's Court*, whose narrator Hank Morgan is a manager at the Colt factory and who builds numerous nineteenth century inventions. Ethan Hopkins is described as a level-headed, unsuperstitious "Yankee" early in Ellis's novel. See Pfitzer 52-53.

[17] Pfitzer supports this reading partly by noting passages in which Ellis likens previous inventors, such as Robert Fulton, to destructive forces of change (53-54).

Notes to Chapter 2

[1] John Clute coined the term "Edisonade" in the *Encyclopedia of Science Fiction*, particularly to describe novels featuring "a young US male inventor hero," similar in disposition and technological wizardry to Thomas Alva Edison, who frequently uses his invention for both travel and warfare; per Clute "the Edisonade is not only

about saving the country (or planet) through personal spunk and native wit, it is also about lighting out for the Territory" (368). Everett F. Bleiler notes that they frequently portray "aggressive, exploitative capitalism, particularly at the expense of 'primitive' peoples [and] the frontier mentality, with slaughter of 'primitives'" ("Dime-Novel SF" 335).

[2] See Clute 370 and Brown *Reading* 360.

[3] For a list of Senarens's other pseudonyms, see Cox's *Dime Novel Companion* 237. The only official statement from Senarens himself on what he wrote comes from a reprinted letter in *Dime Novel Roundup*. Senarens states "After writing a number of serials on all subjects . . . I was started on the Frank Reade stories, and while writing them, I wrote several hundred detective stores . . ." ("Biography" 10). In same letter he notes "When Frank Reade stories began to wane, I started the Jack Wright series along the same line" (10). It is worth noting that the article's declaration that he wrote "most of Frank Reade's series [and] all of [the] Jack Wright series" is the assertion of the anonymous writer of the article, not a claim directly made by Senarens himself (10).

[4] See Gunn 74, Landon 40-50, Moskowitz 106-127.

[5] The label was used in a profile entitled "An American Jules Verne" in the October 1920 issue of editor Hugo Gernsback's *Science and Invention* magazine. Gernsback published another "American Jules Verne" profile in *Amazing Stories*' June 1928 issue. These profiles of Senarens may have put his work on the radar of early science fiction fans. The 1920 article made the claim that "[Senarens] corresponded regularly with Jules Verne, who encouraged the American writer and read his stories as well" ("An American Jules Verne" 623). Moskowitz's later profile in *Explorers of the Infinite* (1963) mentions only a single letter from 1881, making much of the idea that Senarens did not reply to Verne because "his longhand might reveal the immaturity of his sixteen years" (109). Such varying, contradictory assertions are fairly common in the history-making process of early SF.

The association between Senarens and Verne had already been established for some readers before 1920. For example, one of the Aldine Publishing Company's British reprints (published between 1894 and 1906 per the O'Hegarty Collection at the University of Kansas's Spencer Library) entitled *Frank Reade's Search for the Isle of Diamonds,* features the heading "Jules Verne Outdone!!!" emblazoned on its cover.

[6] Benedict Anderson's concept of "imagined communities" facilitates the concept of an imperial imaginary. Anderson argues that print culture enabled a collective conceptual "simultaneity" that facilitated national consciousness (37). The bourgeoisie were able "to visualize in a general way the existence of thousands and

thousands like themselves through print-language." (77) Dime novels and the Edisonade enable an imperial

imaginary by presenting a repeated narrative where technology enables travel and warfare.

[7] Ashley also notes that Frank Reade became "the first regular sf *reprint* series" when Tousey's son

reprinted a number of the stories in the magazine format between 1902 and 1904 in the *Frank Reade Weekly*

Magazine (21). For more on such publishing developments in early SF, see major genre histories by Gunn 102-147,

Aldiss 155-205, and Landon 46-58.

[8] For anecdotal examples of written feedback from readers of Senarens's stories, see Alden 57 and

Moskowitz *Explorers* 125.

[9] See Brooks Landon's essay in *Science Fiction Studies*'s 2009 special roundtable on early science fiction

suggesting that Michael Denning's work "points the way toward an overdue culturally-oriented exploration of dime

novels we have thought of as early sf but have not so far considered outside the narrow formal context of genre

history" (198).

[10] A list of the pre-Senarens Reade stories (all of which appear in *Boys of New York* and feature Frank

Reade, Jr.'s father) is as follows: first, *The Steam Man of the Plains; or, the Terror of the West* (serialized from 28

Feb to 24 April, 1876, reprinted from 13 Jan to 31 March 1879, and later retitled *Frank Reade and His Steam Man*

of the Plains; or, the Terror of the West); second, *Frank Reade and His Steam Horse* (serialized from 17 July to 25

Sept, 1876, and reprinted from 21 July to 20 Oct, 1879); third, *Frank Reade and His Steam Team* (serialized from 13

Jan to 31 March, 1880); and, finally, *Frank Reade and His Steam Tally-Ho* (serialized from 10 Jan to 4 April, 1882).

The steam man of 1876 leads to a steam horse in the next tale later that year, which leads to team of two

steam horses in 1880 and a "steam tally-ho" of three horses. As Sam Moskowitz wryly notes "Enton was confusing

numbers with originality" by simply adding to the number of steam-driven horses, a trend that ended once Senarens

took over writing Reade stories (114). As is common with pseudonymous series fiction, authorship is disputed with

some texts: Bleiler suggests that neither Enton nor Senarens wrote *Steam Tally-Ho* (*Science-Fiction* 549).

[11] The latter aspect of physicality represents a striking contrast to Ellis's *The Steam Man of the Prairies*, in

which the boy inventor, Johnny Brainerd, is a "hunchbacked dwarf" who uses his technological skill to overcome his

physical disadvantages and explore the American frontier. See Brown's "Science Fiction, the World's Fair, and the

Prosthetics of Empire, 1910-1915" for more on the evolution of American SF from narratives such as Ellis's, in

which technology normalizes the physically different body, to narratives like the Frank Reade stories that celebrate their protagonists' natural physical prowess.

[12] The Reades can be read as fictional counterparts to what science historian Robert Bruce sees a growing "middle-class" of professional technologists (151). Prior to the fragmentation Denning finds in dime novels, Bruce points to a fragmentation among scientists that was not devoid of its own class distinctions.

[13] For the purposes of this study, I use the term "myth" in the Structuralist sense deployed by Lévi-Strauss. From this perspective, myth represents a narrative paradigm made up of multiple retellings of related stories. A myth's significance can only be understood by analyzing components common to each variant of the story, then addressing what larger cultural contradictions those essential elements resolve. This approach to myth differs from notions found in Jungian archetypes or in Joseph Campbell's "monomyth." Instead of focusing on myth emerging from the collective unconscious described by Jung or embodying a single narrative that pervades all cultures described by Campbell, Lévi-Strauss's approach focuses on the particular socio-cultural milieu where the myth developed and catalogues the specific differences between variants. Myth itself is language that can be decoded and is a product of each unique society used to resolve that culture's particular contradictory beliefs. This perspective is valuable in rooting the Edisonade in its time and place, as a recurring narrative of the postbellum United States.

[14] For a study using a similar approach targeted specifically at science fiction publishing, see Eric Rabkin's analysis of *Astounding Stories* science-fiction magazine in the 2004 special Science Fiction issue of *PMLA*.

[15] Bleiler notes the series frequent "clichéd incidents, often most inappropriately used, involving Indians, Western badmen, giant serpents, and bears; ethnic rancor and teasing" (*Science-Fiction* 549-550). Bleiler sees these elements as hallmarks of Senarens's authorship.

[16] See Bleiler's "A Chronological Note to the Reader" from the first volume of the reissued *Frank Reade Library* and Le Blanc's *Bibliographic Listing of The Boys of New York*.

[17] For more, see Blum, particularly 3-19 and 91-95, Love 1-25, and Michaels 23-24.

[18] Because of the lack of documented evidence, there is some dispute over the authorship of the first Frank Reade, Jr. story. Most sources agree that Harold Enton wrote the first four Frank Reade stories, but did not write any of the Frank Reade Jr. tales. Sam Moskowitz's history provides the classically accepted view (at least in terms of symmetry) that Senarens picked up the series after Enton, focusing on Frank Reade's son "to make a clean break" from the earlier stories (115). Dime novel historian Edward T. Le Blanc attributes *Steam Wonder* to Enton and

subsequent tales to Senarens (16). Bleiler, however, claims *Steam Wonder* is "reasonably certain to have been written by Luis Senarens" (*Science-Fiction* 550).

[19] The real threat in the Reade novels consistently comes from white outlaws. When two white strangers intrude on Reade's campfire in *Steam Wonder*, his companion Jack states "I'd rather have a hundred Indians around us than those two men" (9). This is also seen in the frequent appearance of renegade whites masquerading as Indians; in *Latest Invention*, Reade states of one such nemesis "The worst Indians on the plains are white men who have fled from justice and sought refuge with them" (9). Such scenes play out in Edisonades all the way back to Ellis's *Steam Man of the Prairies* (1868) with its "Huge Hunter" character who expresses his wish to steal Johnny Brainerd's steam man. In the Edisonade, the threat of sly, greedy white individuals is always contrasted to the collective threat of mass attack by Indians, a dark component of the kind of individualism and guile that form the bedrock of the Edisonade hero. Crafty individuals always fare better and have more agency than a group.

[20] In *Steam Wonder*, the character Dick Morgan represents the most blatant Indian-hater. Because he has been masquerading as an Indian to find the kidnapped girls, Morgan plainly states his opinion that "The only good Indian I ever saw was a *dead one*!" (12) Reade, Jr.'s reply--"Maybe you are right, Mr. Morgan . . . In fact I believe you"--seems equally damning; however, the inventor's behavior toward Morgan throughout the text implies that he merely goes along with Morgan out of polite deference rather than genuine agreement, as their later discussion of Pomp demonstrates.

[21] Mark Twain famously uses the same effect six years later in the final battle of *A Connecticut Yankee in King Arthur's Court* (1889). The Yankee builds an electric fence around his final outpost that electrocutes any knights attempting to cross it (437-438).

[22] The scene is particularly interesting when viewed in light of Laura L. Mielke's notion of the "moving encounter," a literary scene that portrays contact between Native Americans and Whites in a way that "proposed the possibility of mutual sympathy... of community instead of division" (2). This scene is a complicated variant on this idea; its presentation of white superiority, voiced by the Native American woman, presents an Anglo-American-centric vision of the inevitable decline of Indian population that the moving encounter resists, while Reade, Jr.'s attempt to find a middle ground and acknowledge his own race's flaws in comparison to the Nipigons has elements of the moving encounter's sentimental appeal.

[23] For a contrasting study of portrayals of African-Americans in other dime novels, see Dobkin 50-56.

[24] It is also difficult to read Pomp's use of racial epithet in this scene as anything but a proud comic inversion. In referring to himself as "De niggar," Pomp mockingly repeats the casual racism voiced earlier by the white men he has bested.

[25] Denning notes that both newspapers and dime novels are forms of "anonymous, 'unauthored' discourse" (24) He also notes dime novels' use of newspapers as "raw material" in dime. Denning's emphasis on the similarities between journalism and dime novels is currently being reassessed by dime-novel scholars, as seen in Pamela Bedore's recent paper presented at the 2010 Joint Conference of the National Popular Culture and American Culture Associations on 1 April, 2010.

[26] Much was made of this action in the American press, although John Lawrence Tone in his recent study *War and Genocide in Cuba, 1895-1898* has pointed out that the February 16 decree was "little enforced" and has been "sometimes ignored" by present historians, partly because it was only the beginning of the brutal reconcentration policies that were to come (195).

[27] Weyler's reputation led to the moniker "Butcher Weyler," commonly used in the U.S. press. By March 4, 1896, the title was so well known it was used as part of a *New York Times* ad for Riker's Expectorant, with the slogan "The Spanish Butcher Weyler is not more dangerous than a cough or a cold. . ." (2).

[28] Dygert's name was spelled at least three different ways by three different papers. Even Trumbull White's *Our War with Spain* (1898) confuses matters by alternating spellings, calling him "Dygert" in a chapter heading (245) and "Dygart" in the chapter itself (251). The *New York Times* referred to him as "Dygart" prior to April 1, 1896 and "Dygert" after that date. I refer to him as Dygert because it was the most-used spelling in the newspaper most likely familiar to New York newspaper readers such as Senarens.

[29] Tone's work (2006) exemplifies this historical approach that puts the focus back on Cuba and Spain rather than the United States, by focusing on the harsh realities of Weyler's reconcentration policies on Cubans and of disease and infection among Spanish combatants. See Ferrer's *Insurgent Cuba* (1998) for a Cuban-centric view of the revolution before U.S. intervention. See also Pérez's *The War of 1898* (1999) for overviews of American propaganda that, while excluding Dygert, contextualizes the way American anger at Spain was channeled in the years and months leading to the U.S. declaration of war.

[30] Similarly, Susan Gillman's analysis of Martí's readings of Harriet Beecher Stowe and Helen Hunt Jackson has shown that Martí clearly associated racism toward blacks and racism toward Indians. See "*Ramona* in 'Our America'", 91-94.

[31] For a more detailed contrast of Frederick Jackson Tuner and Martí, see Brooks Thomas.

[32] This portrayal of Gómez as a brave guerilla leader who makes a stand and then vanishes mysteriously reflects other portrayals of the general in America. White's *Our War with Spain* contains a narrative by Thomas Alvord stating that, when attacked, Gómez would bravely and "leisurely" wait "until he hears the volley-shooting of the oncoming Spaniards" before he would "disappear, followed by his entire force, into the tropical underbrush" (207). Alvord notes that Gómez took "keen delight in leading [the Spanish] in a circle" before advancing on the Spanish column from behind and "punishing it severely" (208).

[33] The portrayal of Maceo also highlights the dilemma of a writer like Senarens attempting to combine serialized dime novels with contemporary events. When *Frank Reade, Jr. in Cuba* was reprinted in the *Frank Reade Library* on May 14, 1897 (less than a year after it finished serialization in *Happy Days*), Maceo had already died in action. General Maceo was killed on December 7, 1896, and the subsequent reprinting would have no doubt taken on an elegiac quality to informed readers.

[34] In *Science-Fiction: The Early Years* (1990), Everett Bleiler suggests that Senarens did not write *Frank Reade, Jr. in Cuba*, despite claiming in 1979 that he did. Bleiler's argues that "certain common elements occur in most of the stories, particularly those that there is reason to think may be the work of Senarens" including "ethnic rancor," "vague travelogue," and the general racist, jingoistic tone of the overall series (549).

[35] I am indebted to Lynne Thomas and her staff at the Rare Book and Special Collections department at Northern Illinois University for providing me with a digital copy of the only existing archived copy of this work.

Notes to Chapter 3

[1] See Clute 368-9 for a full definition that references Twain's *A Connecticut Yankee in King Arthur's Court*.

[2] For overviews, see Landon 40-48 and Gunn 77-80.

[3] In his analysis of the Connecticut Yankee's language use and performance, Seth Lerer has described Hank Morgan's behavior as "Edisonian performativity" in which "stagecraft" is as valuable as actual knowledge (474). Lerer's philological analysis fits well with Clute's definition of the Edisonade, particularly Clute's assessment that

Edison himself was "something of a fraud" who enticed Americans with promises of inventions that sometimes "did not, in fact, exist outside his imagination . . ." (369). A key motif in both *A Connecticut Yankee* and the Edisonade as a whole involves the manipulation of public opinion by a technocrat of questionable ethics, as seen in the Frank Reade, Jr. example.

[4] Lost-race novels frequently dealt with colonial or imperial themes, particularly in their portrayal of an Anglo explorer's encounter with some prehistoric "Other." Thomas D. Clareson describes the genre's formula*:* "an explorer, scientist, or naval lieutenant, either by chance or intentional quest, [finds] a lost colony or a lost homeland of some vanished or little-known civilization" (119-120). John Rieder notes the lost-race novels frequently portray "the living anthropological traces of the past that are thought to remain visible in colonial settings" (52-53). See also Hanson 497-527 and Khouri 170-190.

Twain seems to understand its connections to this genre, particularly in Dan Beard's caption to the beginning of the Yankee's tale, which labels it "The Tale of the Lost Land" (9). It is also worth noting that one lost-race adventure published prior to *A Connecticut Yankee*--Max Adeler's *The Fortunate Island* (1881)--even featured a professor lost at sea who finds an island of descendents from "the time of King Arthur" whose part of Briton "separated from the rest, and drifted far out upon the ocean" leaving it unchanged, so that its inhabitants are awed by the professor's artifacts of nineteenth-century life such as matches and phonographs (Adeler). Twain was accused of plagiarism after *Yankee*'s publication in 1889. See Baetzhold 44.

[5] Sam Clemens included an additional, and perhaps even more acerbic, suggestion: if Orion was going to send his fictional expedition into a hollow-earth: "Why don't you find Verne himself down there?" Part of Orion's plot involved a talking gorilla meeting the expedition; Clemens suggested "Why don't you handle your gorilla for all he is worth & when you have got the good of him, let the reader discover it is Verne in disguise" (SLC to Orion Clemens, 21 Feb 1878).

. [6] Another of Sam Clemens's letters from this period is even less charitable to both Verne and Orion Clemens. Twain writes to Jane Clemens, his and Orion's mother, on February 23, 1878 after her inquiry about the Sir John Franklin manuscript: ". . . I begin to fear it is going to be only a wandering, objectless, motiveless imitation of the rampaging French lunatic, Jules Verne. I *saw*, in the first place, that he was walking gaily along, *exactly* in the Frenchman's footsteps, & with the air of a man who wasn't aware that there was anything to be ashamed of about it . . . ." Clemens concludes on two points: he criticizes his brother's lack of unique subject matter ("Well, Orion is

absolutely destitute of originality, wherefore he must imitate; there is no help for it; so let him go ahead and imitate Verne") but adds a caveat ("he has an opportunity to do a very delicious & bran-new thing . . . i.e. *burlesque Verne & his writings*") (SLC to Jane Lampton Clemens, 23 Feb 1878). Even after Clemens agreed to help Orion market the book in a March 23, 1878 letter, he declared the story "too crude to offer to any prominent periodical" and recommended that Orion send the novel to *New York Weekly* by declaring to the editors that it is written by "a friend" and that it is "a pretty clever travesty on Verne" (SLC to Orion Clemens, 23 March 1878).

7 One of the first things Clemens ever printed--an 1852 satirical newspaper piece mocking the rival newspaper publisher in Hannibal--was unfavorably compared to Ned Buntline's work in a printed rebuttal by the target of Clemens's satire (Powers 54). It is interesting that the response of his rival was to compare him to Buntline, perhaps indicative of the low regard held by "serious" journalists for dime novelists.

8 For other studies of this same theme, see Levy's "The Boy Murderers: What Mark Twain and *Huckleberry Finn* Really Teach" (43-58) and Mailloux's *Rhetorical Power* (100-129), which situates *Huckleberry Finn* in light of the "bad boy" book tradition.

9 Cooper's influence on Western dime novels has been well documented. Albert Johannsen, in his 1950 study of Beadle and Adams dime novel publishing firm, describes how Cooper's stories provided a template for dime-novel marketing. Johannsen quotes a 1900 interview with author Edward S. Ellis, who described how his best-selling dime novel, *Seth Jones*, was marketed by portraying "a stalwart, heroic-looking hunter of the Fenimore Cooper type, coon-skin cap, rifle and all" (32). Bill Brown's *Reading the West* notes that Cooper's Leatherstocking series "provides the first dime Westerns with both their plot structure and their iconography" (3). See also the introduction to Pearson's *Dime Novels; or, Following an Old Trail in Popular Literature* (1929), in which Pearson frames his introduction by comparing the opening lines of one early dime novel to Cooper and declaring "The writers of the early dime novel were reverently following the lead of Cooper and Scott, and had not the slightest intention of composing 'sensational' fiction" (4).

10 Several scholars note that Twain abandoned the text at least partially because the impetus to dispel Cooperesque idealized portrayals of Native Americans by using a captivity rescue would result in frankly addressing rape and its repercussions in a novel aimed at middle-class readers. Gribben notes "Dodge claimed that gang-rape generally followed such captures" (197). Indeed, Dodge states "I believe I am perfectly safe in the assertion that there is not a single wild tribe of Indians . . . which does not regard the person of the female captive as the inherent

right of the captor . . ." and the woman will "soon become a victim to the brutality of every member of the party of her captors" (33). See also Stone 178-179, Armon and Blair 272, and Pfitzer 43. It is worth noting that the first Frank Reade, Jr. dime novel, *Frank Reade, Jr. and His Steam Wonder* (1882), fits Dodge's criticism precisely, as it features two abducted white heroines who are rescued from the Apache by Reade, Jr. and his device. No harm appears to have come to them despite over a year among their captors (6-7).

[11] Dodge notes "Cruelty is both an amusement and a study. So much pleasure is derived from it, that an Indian is constantly thinking out new devices of torture, and how to prolong to the utmost those already known. His anatomical knowledge of the most sensitive portions of the human frame is most accurate, and the amount of whipping, cutting, flaying, and burning that he will make a human body undergo, without seriously affecting the vital power, is astonishing" (536). While Jim states that he's learned of Indian cruelties from the Widow Douglas, Twain is careful to make his understanding more accurate, at least in terms of Twain's source material, than Tom's Cooperesque idealizations.

[12] Arguably, the most science fiction element of *A Connecticut Yankee in King Arthur's Court* is not its time-travel motif (which is achieved in a decidedly non-scientific method). Rather, *A Connecticut Yankee* presents a thought experiment about what happens if existing technology were implemented in an earlier age. See Ketterer, "Power Fantasy."

[13] The motif of awing superstitious natives by predicting an eclipse is borrowed wholesale from the quintessential lost-race novel, H. Rider Haggard's *King Solomon's Mines* (1882). Bruce Michelson mentions that at least two of *A Connecticut Yankee*'s early reviewers noted this similarity to Haggard's book (172). Michelson states "Mark Twain's raid on Rider Haggard's adventures was more extensive than these friendly reviewers observed" and addresses multiple additional similarities (173).

[14] Unlimited suffrage is one of the unique social reforms undertaken by Morgan that actually exceeds the America of Twain's own time. While Morgan's decision to grant the vote to "mothers who, at middle age, should be found to know nearly as much as their sons at twenty-one" rings with chauvinism, in practice it is decidedly beyond the voting opportunities for American women in 1889.

[15] Howells's January 1890 review in *Harper's* called the book "an object-lesson in democracy. It makes us glad of our republic and our epoch; but it does not flatter us into a fond content with them; there are passages in which we see that the noble of Arthur's day, who battened on the blood and sweat of his bondmen, is one in essence

with the capitalist . . . who grows rich on the labor of his underpaid wagemen" (320). José Martí, whose writing

always kept a keen eye on U.S. imperialist tendencies, highlighted the element of criticism in the book, explicitly

marked it as a potentially anti-imperialist text. After addressing the same portrayals of unfairness Howells noted,

Martí states "And so skillfully does he develop his theme that the salient character of that age of kings and bishops,

peasants and slaves, proving to be a picture of what is beginning to be seen in the United States, is more than a mere

copy" (194-95). Early reviewers, then, understood that part of the story's thrust came not only from an outright

celebration of nineteenth-century culture over the medieval worldview, but a comparison between the two.

[16] See Baetzhold 50-51, Driscoll 8, and Smith 55. Driscoll makes particular use of Everett Carter's

observation that in correspondence about the text, Twain frequently "employs the first person pronoun to describe

the novel's plot" in his notes, as though he were Hank Morgan (8). Carter argues that *A Connecticut Yankee*'s

meaning is "that the American nineteenth century, devoted to political and religious liberalism and to technology,

was better than the traditional past" (440). Carter also notes, however, that Clemens told Dan Beard that his

protagonist was "an ignoramus" (420), acknowledging that Clemens may have been of two minds about the

character.

[17] Joe B. Fulton, in *The Reverend Mark Twain*, describes Catholicism as "the church Twain loved to

hate . . . " (139) and contends that "At the core of Twain's literature Catholicism remained the 'alien Other.'" (23).

While assertions that Twain and his Yankee saw the world in identical ways are in some ways suspect, there is good

reason to think Twain shared Hank Morgan's dislike of Catholicism. For information regarding how Twain, like

many nineteenth-century Americans, viewed the Church as a political tool, see Fick 30-42. For more on anti-

Catholicism in America during Twain's youth, including reports on the faith in Hannibal, MO newspapers, see

Durocher 32-34. See also James D. Wilson's entry in the *Mark Twain Encyclopedia*, 130-132.

[18] Morgan even proudly notes that he resists any temptations of his near-absolute power: "I could have

given my one sect the preference and made everybody a Presbyterian without any trouble, but that would have been

to affront a law of human nature" (81). While this sentiment represents a continuation of the celebration of

individual religious choice found in Brace Johnson in *Huck Finn and Tom Sawyer among the Indians*, it is

significant that Twain's protagonist holds a different Protestant affiliation from the author, who by this point was a

regular attendee and participant in Joseph Twichell's Asylum Hill Congregationalist Church in Hartford (Messant

70-72). This further complicates arguments made by Carter, Driscoll, and others who see Morgan as merely a voice

for Twain's own opinions. For more on Twain's involvement with the Congregationalist Church and his relationship with pastor Joe Twichell, see Bush 107-116, 213-215, and Messent 69-77.

[19] My thanks go to Professor Harris for allowing me to read her forthcoming book, *God's Arbiter's: America and the Philippines, 1898-1902*. Harris analyzes literature and political speeches from the era to show the cultural milieu that a character like Morgan would have inhabited.

[20] In this aspect, Twain gives his Yankee a certain amount of self awareness. He sees his own training, and blames other characters' behavior on their training, sometimes conflating "training" and "human nature" in a deterministic way while other times asserting individual will. See Quirk 184-189 and Cummings 166-171. Cummings particularly calls attention to the inconsistent portrayal of human nature and training in *A Connecticut Yankee*.

[21] There are honorable priests in *A Connecticut Yankee*, and they can be read as the ongoing vindication of the individual over the corrupt organization as well as a further sign of Morgan's own nature. William Phipps has mentioned, for example, the portrayal of a priest who speaks out against the hanging of a woman by unjust British laws (292). Morgan grudgingly admits that his interactions with individual priests "showed that not all priests were frauds and self-seekers, but that many, even the great majority, of those that were down on the ground among the common people were sincere, and right-hearted, and devoted to the alleviation of human troubles and sufferings . . . ." (160-161). He continues that same paragraph, however, by concluding that these good priests may, in fact, be a hindrance to his plans: "for it was just the sort of thing to keep a people reconciled to an Established Church. . . . Concentration of power in a political machine is bad; and an Established Church is a political machine . . . an enemy to human liberty . . . ." (161). For Morgan, the corrupt nature of the Church trumps the goodness of its individual members, providing further justification for his actions.

[22] Despite Clemens own formal training as a journalist, this element of the Connecticut Yankee's character distinctly plays against Clemens's own views. Michelson notes an 1873 meeting of the Hartford Monday Evening Club where Clemens read a piece on the topic of news that declared journalists "a horde of ignorant, self complacent simpletons" and expressed concern that newspapers validated their useless blathering: "The opinions of the majority of [journalists] would not be worth tuppence in private, but when they speak in print it is the *newspaper* that is talking . . . and *then* their utterances shake the community like the thunders of prophecy (qtd. in Michelson 176).

Based on such statements, it seems clear that Hank Morgan's faith in news and journalism are meant to lampoon American perceptions about news rather than vindicate them.

[23] For more on the establishment of government support of a free press in early America, see Folkerts and Teeter, who address the libel trial of Peter Zenger in 1735 as a key moment that enabled free press in the colonies. The accused was found not guilty because he deemed the information he published was true. The case established a precedent, and "post-Zenger seditious libel situations generally admitted truth as a defense" (45). Similarly, newspapers in the early national period flourished because both Federalists and Anti-Federalists supported low postal rates, each in hopes that a free press would promote their parties particular views (92). Such policies, along with technological shifts such as the telegraph, established the groundwork for the kind of culture of newspapers Starr finds in the 1880s.

[24] For a general overview of Twain, technology, and Paige's compositor, see Cummings 14-15, Kasson 202-205 and Michelson 10-14.

[25] The priest's report on the tournament, printed in full in *A Connecticut Yankee*, is actually a section of Malloy's *Morte D'Arthur* reprinted verbatim. This sets up a running gag in the novel, in which news reports or long stories told by Arthurians are actually quoted directly from Mallory. Thus Morgan's assessment that the priest's writing "lacked whoop and crash and lurid description, and therefore wanted the true ring; but its antique wording was quaint and sweet and simple . . . and these little merits made up, in a measure, for its more important lacks" (75) is actually a subtle commentary on Mallory's prose and an ordinary American's response to it. At the novel's end, when Morgan reads the new report that his protégé, Clarence, has written about Arthur's final battle, his general assessment--"This is a good piece of war correspondence, Clarence; you are a first-rate newspaperman" (417)--is a similar sly comment on Mallory's prose and subject matter from a nineteenth-century American perspective.

[26] To prove this, Pfitzer studies the moments in Ellis's text where technology fails or where characters voice skepticism over its use. While it's true these moments occur in *The Steam Man of the Prairies*, the overwhelming majority of that text deals with technology's ability to enable the individual positively. Even the Steam Man's ultimate destruction--when Johnny Brainerd uses the Steam Man as a makeshift bomb to kill the Indians who have barricaded his group in a canyon--doesn't highlight technology's problematic volatility as much as show how it can solve problems. In fact, Johnny's sacrifice of the steam automaton allows him to make up for the offense of falling asleep when he should have been guarding the camp.

27 Albert E. Stone, Jr. chronicles Twain's relationship with the *St. Nicholas* and its publisher Mary Mapes Dodge in *The Innocent Eye*. As Stone notes, *The St. Nicholas Magazine* was in many ways created by Dodge as part of a larger publishing "counter-reformation" designed to halt the spread of dime-novel reading among adolescents in Twain's era by providing them with more genteel reading material. See Stone 104.

28 For a detailed list of similarities and probable influence, see McKeithan. See also Stone 180-181, Knoenagel 98-99, and Gribben 726. Twain had also parodied Verne in "A Murder, A Mystery, and a Marriage" (1876); for more on this, see Ketterer, "Power Fantasy," 134- 136 and Gribben 725-726.

29 Because it is night, Huck never sees how the professor falls. Sharon McCoy provides a persuasive close reading of the scene, arguing that in fact Jim throws the professor overboard to save Tom and Huck, but that Huck is "unable to bear that Jim might commit murder to save them" partly because he "believes in the mask . . . that a former slave must love and respect whites" (78).

30 Earl F. Briden argues that this portrayal of contrasting philosophies is the cornerstone of *Tom Sawyer Abroad*. He states "The unity of the tale depends largely on repetitions of scenes in which Tom, Huck, and Jim, each intent on defending his 'Truth,' argue about the mind-nature relation and . . . reify the abstractions in which they have been conditioned" (44).

31 DeVoto argues that this scenario where a "Negro . . . cavorts like a frog for the edification of the two white boys" is intended ironically (185). McCoy views this as a key example of how Jim "has withdrawn completely behind the minstrel mask" effectively ending "the hope for a real friendship, for a real understanding between Huck and Jim" (86).

32 Tom's discussion of indemnities and international relations culminates a recurring theme of wealth and travel in *Tom Sawyer Abroad*. By this point in the novel, they have discovered the jewels and crafted weapons of a caravan that was buried in a sandstorm (117-188) and, after encountering a sandstorm themselves, debated the merits of taking sand back to the U.S. to sell (170-172). The contrast between indemnity and these other money-making ventures--all variants on the capitalist dream of manipulating circumstances for financial gain, of making something out of nothing--seems obvious. In many ways, the discovery of jewels and commodification of sand embodies a larger tendency throughout the Edisonade in which technologically enhanced exploration is an opportunity to simply stumble upon wealth, much as Frank Reade, Jr. does when he finds the hidden silver mine in *Frank Reade, Jr. and His Air-Ship*. See Khouri for more on conspicuous consumption in lost-race novels.

[33] Briden follows Budd in thinking that either this debate about selling sand or the subsequent Sphinx scene was the original impetus behind *Tom Sawyer Abroad*, in that it was the scene Twain had in mind when he told Fred J. Hall at Webster's publishing house that he would "work in the said episode and then nobody will suspect that a whole book has been written . . . merely to get that episode" (qtd. in Briden 43).

[34] By October 25th, many news articles led with the idea that Chile must apologize and make a reparation payment. The *Chicago Daily Tribune* stated that "the administration does not regard it as a simple street row for which the government cannot be held accountable, but as an insult to the honor and flag of the United States" ("Chile Must Apologize" 1). Both the *New York Times* and *Chicago Daily Tribune* articles from that day reported the administration's orders for Chile to "take prompt and vigorous measures to secure proper reparation" along with prominent mention of U.S. naval vessels being sent in Chile's direction.

Notes to Chapter 4

[1] In his definition of the term "Edisonade," Clute singles out Serviss's novel as the work in which "the native edisonade took its mature shape . . ." (369).

[2] Previous scholarship has connected early SF and imperialism. Carter Hanson states that British "lost race" novels "provided young male readers with narratives of imperial permanence" (497) and John Rieder's book-length study, *Colonialism and the Emergence of Science Fiction*, addresses how the use of technology in such novels ties to the Western imperialist ventures that were being undertaken simultaneously. Rieder notes "the advent of spectacular invention inevitably invokes that embracing pattern of uneven economic and cultural distribution, colonialism, and with it arises the specter of those encounters between cultures with wildly different technological capabilities" (32).

[3] I use the term "myth" in the Structuralist sense deployed by Lévi-Strauss to consider the Edisonade as a recurring narrative of the postbellum United States. See note 13 in Chapter Two for additional information.

[4] For a standard description of evolutionary theory in *War of the Worlds*, including T. H. Huxley's influence on Wells, see Gunn's *Alternate Worlds* 91-94. See also Jennifer Malia's recent treatment of Wells's use of Darwin in the context of satire in *War of the Worlds* (82-84).

[5] For an overview of other Edisonade novels that use this technique, see Bleiler's *Science-Fiction: The Early Years*. Of particular note are the lost-race variants found in the long-running series of Frank Reade, Jr. dime

novels, including works such as *Frank Reade, Jr., in the Sea of Sand and His Discovery of a Lost People* from 1891 (556-557), which features a lost race connected to King David, and *Frank Reade, Jr. and His Electric Coach and The Search for the Isle of Diamonds* from 1893 (551-552), which features a lost Hebrew tribe.

[6] Thomas D. Clareson asserts one additional defining element of the genre: "whatever else it might be, the 'lost race' novel was a love story" (123). Clareson calls attention to how these novels promote a narrative in which their Western male protagonists venture to a primitive world and discover happiness with a "pagan" woman.

[7] In his study of British "scientific romances" from 1890-1950, Brian Stableford notes the lost-race novel only fleetingly, stating that it had "little scientific romance in it, although some important scientific romances did borrow the format" (21). Recent work on lost-race novels by Carter Hanson argues in favor of Stableford's approach, noting that the stories are "almost entirely void of scientific pretense or principle" (523).

[8] Rieder links this to Darko Suvin's argument that "cognitive estrangement" remains the key element of science fiction. By taking the known, then adding an element that questions it, these novels do the work of science fiction. Rieder links this directly to colonialism's portrayal of the colonized "other" as somehow pre-historical beings and its colonial venture as a kind of step back in time. "In adventure-oriented lost-race fiction, anachronistic proliferation has to be read as a symptom of colonial discord, the same clash of cultural and economic vales whose structure of abyssal difference and fantastic opportunity underlies" such works (Rieder 52). See Suvin 3-15.

[9] See, for example, major chapters on debates of this period in Croce 87-110 and 111-148, Numbers *Darwinism* 58-75, Ruse 83-102 and 129-145, and Webb 29-52.

[10] For an overview of the early debate among American scientists regarding Christian religious faith, the age of the Earth, and evolution, see Bruce 119-127.

[11] Hodge notes "Darwin rejects all teleology or the doctrine of final causes" (52). Teleology also figures into Henry Ward Beecher's qualified acceptance of Darwin; Beecher sums up the issue, stating "The debate is not about the reality of evolution, but, of the influences which produce or direct it." (109).

[12] Fundamentalism proper did not begin in America until after World War I. For more on Moody, Hodge, and the development of fundamentalism, see Butler, Wacker, and Balmer 292-301.

[13] Such events included the dismissal of a science professor at Columbia Theological Seminary and the Episcopalian church's first trial for heresy in Canton, OH in 1890 over Reverend Thomas Howard MacQuery's book, *Evolution of Man and Christianity*. See Marsden 103-104, Roberts 225-227, and Webb 34-35.

14 Dodel's introduction also complained about a number of larger issues causing the gap in science education in 1890s America, including the use of "surreptitiously" religious textbooks as reading in secular schools (23), the lack of rigorous science courses (24) and the low professional requirements and low pay of teachers (27).

15 Such language may be standard for the Edisonade, but it is striking given the novel's proximity to the Spanish-American war. While the existing genre had imperialist notions inherent to it, Serviss's work demonstrates how the rhetoric becomes more pronounced in the age of American expansion; John Rieder points this out when he likens these phrases to the words of an "imperial competitor." (136).

16 Aina's appearance also adds a new component to their mission. They now become involved in an internal struggle to free the human slave from Martian captors and to topple the Martian despot who is, Aina reveals, "more directly responsible than any other inhabitant of Mars for all the wickedness of which they have been guilty" (251). The implication is that some Martians would have chosen not to attack the Earth. Thus, the Earth scientists become entangled in the same kind of civil war that John Rieder notes is a hallmark of the "romantic," non-utopian lost-race novel (41).

17 Contextualizing her enterprise, John Gruesser notes "Hopkins wrote it expressly for a black middle class audience as a kind of antidote at a time when racism and legal discrimination against African-Americans . . . had reached a frenzied peak" (80). Eric Sundquist has called the result "patently escapist fiction" (570).

18 Hopkins's biographer Lois Brown states that the author examined James and other early psychologists such as Alfred Binet, and considered their approaches approvingly in her own essays in the *Colored American Magazine* (393-394).

19 For a broader recent discussion of such residuum, particularly spiritualism's role in Hopkins's novel, see Kucich 140-142. Kucich states "The focus on research into the occult undercuts the Darwinian amaterialism that underlies most of the era's scientific theorizing about race" (140).

20 Susan Gillman's chapter, "Pauline Hopkins and Blood Talk," (32-72) offers one of the best sustained analyses of the multiple interpretations of race and identity in *Of One Blood*, particularly in the context of America's fascination with Egyptology and psychology.

21 Gaines states that "Hopkins's writing was part of a broader tendency among marginalized racial, religious and gender minorities who used the idea of civilization at the turn of the century to give credence to their own aspirations to status, power and influence" (435). See also Walter Benn Michaels study of "anti-imperialist" racist

literature in America in relation to Hopkins (23-24). In her attempt to counter these insular attitudes, Hopkins follows line of thinking similar to American anti-imperialists.

[22] For more information on how Hopkins uses her narrative to counter racialized pseudoscience of her day, see Gillman 49-57.

[23] For a contrasting view, see Kassanoff, who claims that "although *Of One Blood* explicitly argues for a brotherhood of man, subtexts of incestuous blood . . . dispute this claim" (171). Kassanoff finds that Hopkins complicates, rather than clarifies, race and identity in her attempt to "rationalize both assimilation and amalgamation" (167).

[24] Notably, this shared contact is lopsided in favor of Western religion as much as it is lopsided in favor of African technology. The natives of Telessar are more than willing to adopt Briggs's Protestant faith when he becomes king (563). Despite the lost city's vast social and technological advancements, Protestant Christianity finds a welcome reception.

Notes to Afterword

[1] Bleiler has charted this progression, demonstrating how the Edisonades influenced the Tom Swift stories of the 1910s and 1920s, a series of novels that counted future SF authors such as Isaac Asimov and Robert Heinlein among their young fans ("From the Newark Steam Man" 111-12). Clute notes the genre's influence on subsequent space opera, suggesting that the competent technologists found in Golden Age science fiction contained more than a few characteristics of Edisonade heroes; they were "Thomas Alva Edison in sheep's clothing" (370).

[2] In his review of *Avatar* for the *SFRA Review*, Ed Carmien notes a similarity between the film and Poul Anderson's 1957 short story "Call Me Joe," in which a handicapped man is offered a "enormously strong and capable form--seen at the very beginning of the story in thrilling combat . . ." that enables him to operate as a colonial force on a distant planet (18). Carmien does this to highlight the shift in perceptions between the two works: "The culturally sensible choice of 1957--cripple or pioneering colonialist?--morphs through a half century of cultural evolution to the current sensible choice of imperialist running dog or gaia-saving nature warrior" (18). As such an assessment intimates, the notion of technological body-restoration to aid imperialism found in Poe and Ellis continued into twentieth- and twenty-first-century SF, although the political options have shifted.

[3] In this approach, I advocate for a scrutiny informed by Fredric Jameson's work in utopian SF. Jameson has stated that "at best Utopia can serve the negative propose of making us more aware of our mental and ideological imprisonment" (xiii). Observing how technocratic fiction fails to go outside the cultural norm calls attention to the limits of our imagination. While technocratic science fiction has differences from futuristic utopian fiction, it still holds the possibilities that make it ripe for this kind of analysis.

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