

“‘Some Eden Lost in Space’: The wider contexts of Frederick Philip Grove’s
‘The Legend of the Planet Mars’ (1915)”¹

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...for the world, which seems
To lie before us like a land of dreams,
So various, so beautiful, so new,
Hath really neither joy, nor love, nor light,
Nor certitude, nor peace, nor help for pain....
Matthew Arnold, “Dover Beach” (1867)

In Flanders fields the poppies blow
Between the crosses, row on row,
That mark our place; and in the sky
The larks, still bravely singing, fly
Scarce heard amid the guns below.
We are the Dead....
John McRae, “In Flanders Fields” (1915)

Canadians on Mars: an introduction

Mars has long existed at the intersection of science, imagination, religion, and politics. For centuries, fiction about Mars and Martians has been by definition an exercise in speculation about the unknown, although our natural knowledge of the Red Planet has grown steadily, indeed quite rapidly in the twenty-first century. Yet the literature on Mars has almost inevitably expressed the needs, concerns, and beliefs of its very human creators. For instance, late Victorian science fiction about the Red Planet often reflected the contexts and concerns of British imperialism (e.g., Reider 2008). Mars is simultaneously strange and familiar, at once as alien as another world and as domestic as a great-grandmother’s parlour. Culturally, it has been perfectly situated to become both a locus of scientific discovery and a socially constructed artefact, a physical ob-

ject in the night sky and a metaphoric mirror of ourselves. Often, what we might call “real” or “objective” Mars has been barely visible through layers of our hopes, dreams, anxieties, and desires. This other world has served as a useful setting for criticisms of our present, rehearsals of our history, and projections of our future.

While collecting a personal library covering fictional, speculative, and non-fictional accounts of Martians, Mars, and voyages to and from the Red Planet over the last two centuries or so, I noticed a curious paucity of Martian stories by Canadians. My research focus was the late Victorian period. Not unexpectedly, most of the primary sources I found came from Western Europe and the United States. But why was I not coming across many Canadian stories? Did we exist in some cultural backwater, insulated from international fascination with Mars? There were some Martian references in *recent* Canadian science fiction; Robert J. Sawyer’s *The End of an Era*, for instance, offered a fresh version of the invader-from-Mars trope with time travel and dinosaurs (Sawyer 1994; see also Sawyer 1999, “The Blue Planet,” 2003, “Come All Ye Faithful,” 2005, “Identity Theft,” 2006, “Biding Time,” and 2013, *Red Planet Blues* for his other Martian stories). To my knowledge, Sawyer—in whose presence this weekend we all cast shadows—has written more stories involving Mars than any other Canadian, with, one dares to hope, more to come.

But Sawyer’s not alone. In reverse chronological order, there have also appeared Geoff Gander’s “Divided Loyalties” (2012), Derwin Mak’s *The Moon Under Her Feet* (2007), Eric Choi’s “Dedication” (1994), Michael Skeet’s “Breaking Ball” (1990), and William Hamm’s *Gray Shadows of Death* (1964). A.E. Van Vogt’s “Enchanted Village” (1950), about a stranded Earthman alone on Mars, would not have been out of place as part of Ray Bradbury’s *Martian Chronicles* (1950). Van Vogt’s “The First Martian” was copyrighted by the author in 1939. There’s an extremely scarce 1931 apocalyptic novel by Emmanuel Desrosiers, *La fin de la Terre*,

which features a trip to Mars, seen as a refuge for what's left of humankind. Even more obscure is "The Martian Menace" by Clinton Constantinescu, serialized in the *Lethbridge [Alberta] Herald* in 1931-32.² Was there no earlier Canadian writer on Mars? I was not obsessive about searching for Canadian sources; in matters Martian, the scientific and literary action did lie elsewhere, after all. Then, while digging through old files from the late 1990s, I found forgotten notes I had made after a trip to Winnipeg, on an early twentieth-century poem set on Mars, written by Frederick Philip Grove, unpublished during his lifetime, and preserved in the University of Manitoba's Archives (Grove Collection).

According to one twenty-first century historian of the Red Planet, there was a "lull in the debate [concerning an inhabited Mars, usually with a global network of engineered canals] between 1914 and 1925" (Markley 2005, 114), i.e., through World War I and its aftermath. Long mythically associated with warfare and bloodshed, Mars continued serving as Earth's extraterrestrial looking glass during this period. This paper seeks to fill part of the alleged gap in the primary literature by examining the meaning of Frederick Philip Grove's almost forgotten 1915 poem "The Legend of the Planet Mars" while situating it in its wider historical, terrestrial contexts: literary, political, military, religious, and scientific.³

Some background: the Earth-Mars opposition of 1877

The mapping of Mars began with drawings including the first identifiable surface feature (Syrtis Major) by the astronomer Christiaan Huygens of the Netherlands in 1659. The planar projection maps by Johann Mädler and Wilhelm Beer of Germany in 1840 were the first to name surface features and locate them within lines of latitude and longitude. In England, the Rev. William R. Dawes made careful circular (i.e., hemispheric) sketches of Mars during the 1860s (Dawes 1865), which another English astronomer, Richard A. Proctor used in the creation of ste-

reographic, then Mercator projections that, when published, carried the weight of perceived scientific accuracy, authority, and “objectivity” (Lightman 2000; Fayter 2009; Lane 2011, chap. 2). Proctor designated various surface features with such terrestrial-sounding nouns as “continent” and “sea” and naming them after astronomers past and present, mostly English ones (e.g., Proctor 1870; see also Blunck 1982). This solidified a long-developing view of Mars and Earth as analogical twins.⁴ The two planets appeared to have many features in common; that Mars would be inhabited like Earth had become both a scientific and theological expectation (e.g., Proctor 1870; see also Lightman 1996, 2000, 2007, chap.6; Dick 1982 and Crowe 1986, *passim*).

The year 1877, however, was pivotal for Martian cartography, or—from Ares, the Greek name for Mars—“areography,” the specifically Martian example in the emerging science of *planetary* astronomy, and for Victorian interplanetary scientific romances. Given their respective orbital velocities and distances from the Sun, Mars and Earth exhibit regular “oppositions,” when the Sun and Mars “line up” on directly opposite sides of the Earth. The opposition of 1877 was a “perihelic” one in which Mars and Earth drew nearest to both the Sun and each other; the disc of Mars was fully illuminated when viewed from Earth, allowing delighted astronomers to see the Red Planet in unprecedented detail. Two different astronomers—Nathaniel Green of London and Giovanni Schiaparelli of Milan—produced two very different series of Martian maps. Both employed objective-looking Mercator, and other, projections (on Mercator maps, see Monmonier 2004). But only Schiaparelli’s work was the visual representation equivalent of a bombshell.

Green had travelled to the Portuguese island of Madeira for the summer, which granted him much better observing conditions, and allowed him to see more of Mars’s southern latitudes (the northern latitudes were not visible during this opposition). A trained artist, Green created his Martian maps (published in 1878) from beautiful, detailed but *softly shaded* and richly coloured sketches. The maps arising from the colour-blind Schiaparelli’s viewings of Mars, published in

his *Astronomical and Physical Observations of the Axis of Rotation and the Topography of the Planet Mars, 1877-78* (1895; English trans. 1996; see also Sheehan 1997 and Canadelli 2009) were not as beautifully or naturalistically rendered as Green's. However they—and later maps by Schiaparelli, Camille Flammarion in France, and most notoriously by Percival Lowell in Arizona—revealed a hitherto unsuspected global network of clear, straight, and intersecting lines which transformed Mars, in the words of Robert Markley (2005, 55; see also chap. 2) into “a kind of Rorschach test” for future debates on the existence of intelligent extraterrestrials.

From September 1877 onwards, Schiaparelli began to report seeing what he called *canali* on Mars; the word could have been translated as “channels” or “grooves,” implying they were natural features of the landscape. But the more popular and sensational translation, “canals,” of course implied they were artificial, i.e., Martian-made. Schiaparelli, whose first training was as a civil and hydraulic engineer who knew how to build irrigation canals (Basalla 2006, 56-57), thought they were indeed waterways, but was in the beginning cautious about concluding they were intelligently engineered. He recognized that there was no description of Mars without interpretation, and accepted the “clear analogy” of Mars with Earth. But in the interests of “brevity and clarity” he felt “compelled” to use such terms as “*island, isthmus, strait, [canali]*; Sheehan translates this as “channels”], *cape*, etc.” He also imagined what the Earth might look like if observed from the distance of Mars, suggesting “it would present much the same appearance as Mars does to us” (1996: 9, 47, 48).

Needless to say, “canals” with the sexy, thrilling, and disturbing implication of intelligent Martian canal-builders, soon became common usage in both scientific and popular discourses, although not without its critics⁵ (Nall 2017; see also the English astronomer Agnes Clerke's 1896 review of new ideas and observations of Mars). Astronomers such as Flammarion, Proctor (from the 1860s), Schiaparelli and Lowell (from the 1890s) believed that the weight of scientific obser-

vation, speculation, and explanation constituted clear evidence favouring an inhabited Mars. One other very significant event occurred in 1877 that contributed to the scientific understanding of Mars, and encouraged fictional and nonfictional speculation about Martians.

In August of that year, the astronomer Asaph Hall, director of the United States Naval Observatory, which then boasted the world's largest refracting telescope, discovered that revolving around Mars were two small moons which he named—appropriately enough for Mars, the Roman god of war—Deimos and Phobos. (The translations are a bit tricky, but both Greek names convey senses of dread/terror/panic/fear.) Two details in his 1878 paper are relevant for our story: he included a careful account of how the satellites would appear to a Martian astronomer and he supported the idea of a German colleague to create an immense pattern of large fires in Siberia to signal the inhabitants of our Moon. There were various calls in the late nineteenth and early twentieth century to communicate with the Moon, Venus, and Mars using either fires or mirrors. And some astronomers believed Martians were already using lights to send messages to Earth. Once Percival Lowell in the United States and (separately) H.G. Wells in the United Kingdom connected their versions of nebular and evolutionary theories in their 1890s visions of Mars as an older, colder, drying, dying planet, *a scientifically legitimized narrative framework* for fantasy, speculation, and scientific romance was complete (see also du Prel 1880, Winchell 1883, Flammarion 1894, Dross 1901, Brush 1987, and Markley 2005).

Grove's "Legend": the poet and the poem

Frederick Philip Grove (1879-1948), born Felix Paul Berthold Friedrich Greve in the town of Radomno (then in the German province of West Prussia, near the Polish border), has become famous for his deliberately ambiguous and misleading autobiography, *In Search of Myself* (1946; ironically, it won the 1947 Governor-General's Medal for *non-fiction*), as well as for pio-

neering the post-colonial, multicultural Canadian novel. Scholarly research on Grove (see especially the work of Martens 2001a and 2001b) has uncovered a life with more lies, twists, and turns than a television soap opera; some highlights include bigamy, thefts, infidelities, false identities, imprisonment for fraud, foreign travel, and a faked suicide (to avoid debts and a second prison term). Before he entered Canada in 1912, from North Dakota, and began teaching in rural Manitoba, Grove had lived and worked in Germany, Italy, Switzerland, and France. When he wasn't swindling money he was earning it as an editor, writer, and prolific literary translator. Among the English writers he introduced to the German reading public was H. G. Wells with whom, from 1905, he developed a close and significant friendship (see Spettigue 1969; Stobie 1973; Hjartarson 1986; Keith 1991; Martens 2001b).

“The Legend of the Planet Mars” occupies pages 80 through 90 of a 92-page typescript simply titled “Poems,” under which is written “In Memoriam Phyllis May Grove” (Grove’s first and beloved child, who would die tragically in 1927 shortly before her twelfth birthday, of appendicitis). Befitting the dedication, the forty-nine poems share the theme of death, and a dominant mood of grief, and even despair and fatalism. The world seems a lonely and senseless place in these poems, which have—like his utopian science fiction novel—received little scholarly attention or respect (but see Proietti 1992, Warken 2000, Martens 2001a, and Kuester 2005 on *Consider Her Ways*).

The typescript, of which there exist two copies, one with marginal notes, is divided into four sections. The first, “Thoughts,” is late Victorian, indeed Hardy-esque, in style and mood. The largest section, “The Dirge,” consists of thirty-three poems, focused on May’s death; the third, “Landscapes,” consists of seven poems dated from 1909-1924; the last section is called “The Legend of the Planet Mars and Other Narratives.” “Legend” is dated “1915,” i.e., several years before he wrote the novel for which he is best known by readers of Canadian fantastic lit-

erature, *Consider Her Ways*, conceived when Grove was in his early teens, written in 1919-1920, and published finally in 1947 (and grounded scientifically in W. M. Wheeler's authoritative 1910 textbook, *Ants: Their Structure, Development and Behavior*⁶). Twenty-one of these poems, including fourteen from the "Dirge" section, were published in the *Canadian Forum* for April 1932. The poems in three of the four sections (the "Dirge" section being omitted) were published and edited without annotation by Terrence Craig in the journal *Canadian Poetry* (1982), including "Legend of the Planet Mars".⁷

Immediate context: the year 1915

The early twentieth century saw the continuation of trends apparent in the preceding century. It was an age, therefore, of global industrialization, mass migration, new mass media, environmental assaults, and, in North America, the long, slow-burning cultural and physical genocide of indigenous peoples. Hitherto lost civilizations were being unearthed, and new discoveries and conceptions regarding time and space were being made (on the latter, see Kern 1983).

From the 1890s, Germany and Great Britain, with two of the world's most developed industrial economies, began a competition initially for naval supremacy. Their arms race soon spread to the rest of Europe, setting the scene for a future war. Military expenditures among European nations increased by 50% in the years between 1908 and 1913 (Prior 1999; Willmott 2003, 21; Fromkin 2004, 21).

In 1915, Grove was an impoverished schoolteacher in the south-west Manitoban town of Virden, where his second wife Catherine gave birth to Phyllis May, their first child. That same year, Grove enrolled as an extramural undergraduate student at the University of Manitoba, from which he graduated seven years later, with honours.

Throughout 1915, a world's fair in San Francisco, the Panama-Pacific International Expo-

sition, drew seventeen million visitors. Einstein's General Theory of Relativity, a new understanding of gravitation, including the idea that mass warps the fabric of spacetime, was completed near the end of that year. One of the great remnants of the extinct Minoan civilization, the Cretan palace at Mallia, was being excavated in 1915. The Scottish astronomer, Robert Innes, discovered Proxima Centauri, the closest star to our sun, and companion to the double Alpha Centauri star system. Charlotte Perkins Gilman's feminist utopia *Herland* was published (see Doskow 1997; more shocking—and, at the time, better known speculative novels about the “new woman”—were Susan Glaspell's *Fidelity*, and Robert Grant's *The High Priestess*⁸.) Also in 1915, Jack London published *The Star Rover*, the occult/science fiction tale of a man able to project his spirit in time and space. More apposite, that year London published in book form his 1912 post-apocalyptic story, *The Scarlet Plague*, set in 2073, when all hope for humankind's survival is dying. By 1915, the well-known pulp writer and creator of Tarzan, Edgar Rice Burroughs, had published the first three of his eleven Martian novels. New naturalist, modernist, and imagist movements in poetry were being led by figures including Amy Lowell, Ezra Pound, Sara Teasdale, T. S. Eliot, Robert Frost, Joyce Kilmer, Vachel Lindsay, and James Oppenheim (e.e.cummings graduated from Harvard University that year). In the years immediately before and after 1915 avant garde movements in the visual arts, including Expressionism, Impressionism, Cubism, Realism, and Futurism, further disrupted the status quo.

Across the United States in 1915, D.W. Griffith's grotesquely racist film *Birth of a Nation* was exhibited to great acclaim and some controversy. Widely credited with reviving the Ku Klux Klan, the movie portrayed African-Americans (played by white actors in blackface) as monstrous and alien, with crazed, lustful males preying upon innocent white women. People of colour according to this narrative deserved—by virtue of simply existing, by reason of their “natural” inferiority—their poverty, and persecution by lynch mobs.

Of course, there was something even more compelling and horrific going on in 1915: the Great War, begun the previous summer, was raging fiercely on (see Blom, 2008; MacMillan, 2013; Clark 2013). Canada had been part of the hostilities as soon as the United Kingdom had declared war against Germany on 4 August 1914, the same day that the United States declared its neutrality. Isolationist and pacifist sentiments were strong in America early on. The reception of the song, “I Didn’t Raise My Boy To Be A Soldier,” with lyrics by Alfred Bryan and music by Al Piantadosi, was one illustration of this, among many. Released in January 1915, the song and its bestselling sheet music, soon became a popular and politicized antiwar anthem (van Wiene 1997, 39-72). The second half of the chorus ran:

Let nations arbitrate their future troubles,
It’s time to lay the sword and gun away,
There’d be no war today,
If mothers all would say,
“I didn’t raise my boy to be a soldier.” (Ibid., 56)

News from overseas was staggering, confirming fears of unprecedented slaughter; in April 1915, for instance, the German-Austrian offensive in Galicia left a million and a half Russian soldiers dead or wounded. Tragically relevant, given the subject matter of Grove’s Martian poem, that month also saw the beginning of the genocide of up to 1.5 million Armenian Christians by the collapsing Ottoman Empire; the Ottoman Turks also killed at least 500,000 Greek Christians and more than 300,000 Assyrian Christians in their territories (Akçam 2012 and 2018; Schaller and Zimmerer 2009; Sjöberg 2016; Khosorera 2007; Yacoub 2016; these genocides were documented extensively at the time in books and by articles in the international press). On 22 April, during the second battle of Ypres, Belgium on the Western Front, Canadian soldiers were among the very first to die, lungs and eyes burning, from a new and terrible kind of weapon, as Germans unleashed a lethal 160-tonne yellow-green cloud of chlorine gas. On 7 May, a German U-boat torpedoed the British ship *Lusitania* off the coast of Ireland, killing 1,198 civil-

ians, mostly British and Canadian. On 31 May, a Zeppelin released 119 bombs over London, killing seven and injuring thirty-five (Preston, 2015). The largest manufacturing company in Europe at the time was Krupp, the German weapons maker. Other deadly new military technologies included tanks, machine guns, anti-aircraft artillery, and howitzers. Chemical warfare, submarine warfare, aerial warfare, and the deliberate mass killing of civilian populations: here was modern, even science fiction-like, strategy, technology, and science in the service of atrocity and terror (e.g. Wells 1908b, 1914; compare Train and Wood 1915, another early atomic war novel, co-written by a lawyer and a physicist and set during the First World War; see also I.F. Clarke 1997). Lieutenant-Colonel John McCrae, the Canadian physician, surgeon, and poet, a survivor of the second battle of Ypres, wrote his famous poem “In Flanders Fields” at the battlefield there in May 1915; it was first published in December of that year in *Punch*. Also in December, the American industrialist Henry Ford launched an ineffectual, ridiculed, and rather ridiculous peace mission to Europe. That was about as romantic and glorious as World War I ever got. The nineteenth century’s post-Enlightenment positivist religion of inevitable moral, technological, and scientific progress was dying, along with more traditional moral values and hopes for the future. Societies and economies in the early twentieth century were rapidly transforming. Mass production, mass media, new machines, new knowledge, globalization, anarchism, socialism, ethnocentric nationalism, militarism, terrorism, political appeals to popular prejudices and widespread fears were just some of the factors contributing to the emergence of a disturbing, fragile, and unstable world order. Would the new century witness the dawn of “a modern utopia” ? (to borrow the title of H. G. Wells’s 1905 novel; see also Wells 1934, 42-80). Hardly. The war, instead, brought a bloody hell on earth, an apocalyptic wasteland of almost unimaginable suffering. Civilian and military casualties, including those from infections and diseases, were—and continue to be—notoriously difficult to accurately determine but they numbered in the tens of millions for

the entire conflict. Had not Wells accurately described in 1914 (in his novel *The World Set Free*) a brand new instrument of total war? He called it the “atomic bomb.” Were we engaged in some kind of self-created mass extinction? And what role did ideology and belief play in our propensity for violence? Could science solve the question of theodicy, the ancient “problem of evil” in a universe supposedly created by a loving, beneficent God? Or was science-*as*-ideology part of the problem? It is not difficult to imagine Grove in 1915 wrestling with such questions in response to such events. (The specifically *Martian* scientific, popular, and fictional contexts for Grove’s poem will be outlined in the concluding section.)

Analytic description of the poem

Originally, the word “legend” referred to written stories about Christian saints. Secularized legends could still include supernatural beings and events, mythological or fantastic elements, and folk explanations of natural phenomena. However, typical legends (as is the case here) were *presented as* historical narratives about particular persons or places.

“The Legend of the Planet Mars” is a stylistically undistinguished narrative poem, consisting of 260 lines divided into 65 “a-b-b-a” quatrains written in iambic pentameter. It begins, referring to the Creator God: “He spoke his fiat; and there lived a race/Of searchers after truth on some dim star. It ever seemed to them they had come far/From some world sunk, some Eden lost in space.” In the second stanza, the inhabitants of what we soon learn is the planet Mars seek to return to their former garden Paradise. Grove’s debt to biblical themes, images, and symbols is firmly established—and will reappear throughout. The third stanza mixes doubt and hope and ebbing memory, and evokes the Victorian crisis of faith expressed in Matthew Arnold’s “Dover Beach” (1867), which ends, much as “Legend of Mars” does, “on a darkling plain/Swept with confused alarms of struggle and flight,/Where ignorant armies clash by night.”

The Martians, a young “race” close to God, have not yet tasted death. A curious prophet among them seeks to enter *that undiscover’d country from whose bourn no traveller returns*--the line from Hamlet’s soliloquy in act 3, scene 1 is not quoted, but it is alluded to--in order to find the “blessed shores” of some lost Eden in the afterlife. He promises to return if he fails in this quest for knowledge; if he succeeds, however, he will not return, but remain in paradise.

And so (in a Gnostic or Cartesian, rather than biblical, fashion) the Martian prophet’s soul leaves his body and after a symbolically suggestive period of three days the people light the pyre upon which it rests. Time passes, and the people respond in one of two ways to the sight of the old one’s remains: reverent faith or doubtful boredom.

On the third day, “the doubters stood/And sneered and scoffed,” deriding the believers who wait beside the “martyr’s” corpse hoping that he’s found heaven. Death *is* the end! the scoffers shout, certain in their unbelief. The believers waver for a moment in their faith, but then return to pray and weep and hope before the martyr’s body, now reduced to ashes. In so doing, “their ebbing faith” was renewed: “And they sang hymns, in ecstasy conceived; /They felt consoled and of their fears relieved....”

With “faith and promise drunk,” however, “a few fanatics”—we’d call them fundamentalists today, and indeed, that famous series of conservative religious tracts known as *The Fundamentals* was being published in Chicago in twelve volumes, from 1910-1915—decide to hunt down the blaspheming doubters who refused to offer “homage to the sacred corpse.” The reader notices a pattern emerging: religious faith is whipped up into a fever during torch-lit nights, but with daybreak, the sunny light of reason dawns and rationality returns. So far, this tale is cast in the simpleminded, late-Victorian faith-at-war-with-science mould created by polemicists such as the anticlerical biologist, Darwin’s infamous “Bulldog,” Thomas Henry Huxley: *believers* are dangerous fanatics, ignorant and superstitious; sceptical *agnostics* (a word Huxley coined in

1869; see Lightman 1987), or “scientific Naturalists” (a term Huxley coined in 1892) on the other hand, are paragons of virtuous reason.

The story unfolds. As most people watch, the “fanatic few” led by “high priests” fell huge trees, drag them from the forest to the coastal plain, and build a “giant pyre [looming] into space.” Hidden from view, the priests arrange for twelve smaller pyres to be built. At a prearranged command, the pyres are lit, and the spectacle used to rouse the weakening faith of the people who were wondering what was going on. The doubters had been rounded up and bound. The people’s faith is whipped up by the fanatics, and *they imagine the swirling smoke is the wraith of the departed martyr.*

The scoffers, seeing their fate in front of them, “begged, implored, and prayed”. Many flee into the sea and drown. Many other thousands, though, were “fastened to a stake as to a cross” and ruthlessly burned to death. Soon, fully one-third of the Martian race has been sacrificed to the flames.

A series of stanzas follow that suggests a terrible irony. Perhaps the martyr’s spirit *had* returned. A “dull and ghastly moan” is heard as the fire dies down. That would mean that Paradise did *not* exist on the other side of death; the prophet’s quest had failed. Had the doubters died because of mistaken belief?

Then something horrible happens. The fire leaps up high again, forming a white-hot pillar. This physical sign (which in *Exodus* represents the guiding presence of God in the Sinai wilderness) now causes all the coastal forests to go up in flames, trapping the faithful between its “fierce [. . .] withering heat” and the sea. This fiery pillar brings death, not redemption; vengeance, not vindication. The flames blaze out of control, and by the next morning, *the entire Martian race* has perished. Their search for truth had been perverted; love and hope changed into in-

tolerant “belief,” here the enemy of life and reason. This cruel irony is followed in the concluding stanza by an even deeper irony:

Throughout the universe, from many stars,
That night, were eyes strained, glued to telescopes.
On earth, man flashed the message, full of hopes,
“Soon shall we know! They signal us from Mars!”

Thus the Martian holocaust is misperceived on Earth as a *hopeful* sign. The sudden, tremendous light on the surface of Mars is seen as a deliberate attempt to communicate by intelligent beings, and bears the promise of knowledge, even of revelation. (There had been dozens of proposals in the nineteenth century to signal either Lunarians or Martians using giant fires; see Crowe 1986, chap. 4).

Looking at Mars looking at us

The final, cruel, ironic shift in perspective and perception, the play of mis- and re-interpretation, would figure also in later science fiction, such as Arthur C. Clarke’s famous 1955 short story “The Star” in which a faith-shaking discovery is made: the Bethlehem Star which guided the Magi to the Christ child was a supernova that destroyed a distant, advanced planetary civilization.

Since the early-seventeenth century invention of the telescope, and especially in the nineteenth and twentieth centuries, looking at Mars was akin to gazing in a pool that reflected human hopes, fears, devices and desires. Perceptions, real and imagined, went both ways. Startling shifts in point of view were common in both the scientific and fictional literature. Could we imagine Martians—or ourselves—on the Red Planet? What did our telescopic gaze reveal (see Lane 2011 on the “geographer’s gaze” directed at Mars)? Perhaps even more unsettling was the return gaze, the idea of *Martians* observing *us*. How did we humans look to observers on Mars?⁹ Here’s one

poetic example, from Alfred Lord Tennyson, F.R.S., whom Thomas Henry Huxley praised in 1892 as the only poet since Lucretius who understood science and its trajectory (Huxley 1900). Written as a sequel to his 1842 poem “Locksley Hall” (in which his view of the religion of progress was already troubled and ambivalent), Tennyson’s “Locksley Hall Sixty Years After” (Tennyson 1886) is an expression of his dismay, even despair, over the apparent decay of religious and moral values that stabilized the social order in the Victorian Age of Science. The tragic and ironic shift in point of view is seen in lines 187-200:

Hesper—Venus—were we native to that splendor or in Mars,
We should see the Globe we groan in, fairest of their evening stars.

Could we dream of wars and carnage, craft and madness, lust and spite,
Roaring London, raving Paris, in that point of peaceful light?
Might we not in glancing heavenward on a star so silver-fair,
Yearn, and clasp the hands and murmur, ‘Would to God that we were there?’

...Is there evil but on earth? Or pain in every peopled sphere?
Well be grateful for the sounding watchword, ‘Evolution’ here

Evolution ever climbing after some ideal good,
And Reversion ever dragging Evolution in the mud.

As mirror and as metaphor, Mars was used as a way of revisioning, revaluing, and reflecting on our place in the universe, past, present, and future.

Salvator Proietti is one of the very few scholars even to mention “Legend of the Planet Mars” in passing. He refers to it simply as “a variation on the theme of [H. G. Wells’s] ‘The Star’” (Proietti 1992). I am sure that Grove must have read his friend’s 1897 short story, first published in the same year as the serial version of Wells’s more famous novel of catastrophic Martian invasion, *The War of the Worlds* (on this story see Gibbons 1984; Fayter 1997, 268-273; Markley 2008; McLean 2009, 89-113; Crossley 2011, chap. 6; Kurd Lasswitz’s important novel *Auf zwei Planeten*, in which scientifically advanced Martians land on Earth, was also published in 1897.) Other Wellsian material that I believe may have inspired and informed Grove’s poem

includes such non-fiction/speculative biology articles as “Zoological Retrogression” (1891) “The Extinction of Man” (1894), “Intelligence on Mars” (1896) and “The Things That Live on Mars: A Description, Based Upon Scientific Reasoning, of the Flora and Fauna of Our Neighboring Planet, in Conformity with the Very Latest Astronomical Revelations” (1908).

Wells’s “The Star” introduces themes and devices that appear not only in *War of the Worlds*, but “Legend of Mars” as well, including extraterrestrial context and content, natural disaster, human insignificance, complacency and panic, and scientific knowledge juxtaposed with religious belief. In Wells’s short story a cometary body from the depths of space knocks Neptune out of its orbit, and the two gravitationally locked bodies hurtle sunward, threatening doom for all life on Earth. The physical effects on our world as the so-called “star” approaches our planet are of truly “biblical” proportions: heat waves, electrical storms, earthquakes, tsunamis, floods, volcanoes and so on. “Man has lived in vain,” declares one scientist, convinced of our imminent extinction. Countless deaths do occur, and Earth’s climate zones are drastically altered. But the “star” passes by our planet without destroying everything. Our species survives.

There’s a sudden shift in perspective in the last paragraph of Wells’s story. Earth’s near-death experience has been seen from Mars, but as a *minor* event. One Martian astronomer notes, “it is astonishing what a little damage the earth [. . .] has sustained. All the familiar continental markings and the masses of the seas remain intact, and indeed the only difference seems to be shrinkage of the white discoloration (supposed to be frozen water) round either pole” (16-17).

The metaphor of Martian detachment and the dual themes of human arrogance *and* insignificance, recall the opening page of *The War of the Worlds*: “across the gulf of space, minds that are to our minds as ours are to those of the beasts that perish, intellects vast and cool and unsympathetic” watched us as “men went to and fro over this globe about their little affairs, serene in their assurance of their empire over matter” (51). And they mirror Wells’s own cool, calculating

detachment in the face of approaching apocalypse. (Widespread death and destruction was part of Wells's faith in a dialectic process of cleansing catastrophe, followed by reconstruction. The new order would be born from the ashes of the old.)¹⁰ The bitterly ironic note Grove ends his Martian poem with is a Wellsian one (compare the narrator's vision at the end of *War of the Worlds* of busy Londoners walking around like ghosts haunting a dead city).

"Eden Lost": The wider contexts of Grove's Mars and concluding remarks

Like Wells's "The Star," Grove's "Legend of Mars" is only incidentally Martian (that is, to reiterate, stories about other worlds are stories about Earth; Martians are us.) Both tales are cautionary and apocalyptic. Where Wells--as he does in *War of the Worlds*--attacks late Victorian complacency and pride, reminding the reader of humankind's cosmic insignificance and vulnerability, Grove warns his world at war that the way of blind and arrogant belief leads to extinction by senseless suicide. Both—in common with polemicists such as T. H. Huxley—contrast irrational religious faith with superior scientific reason. And both tales feature Mars in ironic, abrupt, perspective-shifting endings.

Why Mars? For centuries, the Red Planet has functioned as a mythic symbol of war, as a utopian ideal (e.g. [Jones and Merchant] 1893 and Ward 1907) or Darwinian threat (e.g., Wells 1897; cf. Dross 1901), as an imperial frontier (e.g., Ash 1909 and Serviss 1898), an advanced, alien Other (e.g., Lasswitz 1897), a forecast of Earth's future (positive or apocalyptic: see Gibbons 1984), a boy's own adventure version of the Wild West (e.g., Burroughs 1912 ff.), a new heavenly abode for resurrected bodies and reincarnated souls (e.g., Flammarion 1890, Cowan 1896, Gratacap 1903, Wicks 1911) and a projection screen for anxieties about disease, evolution, eugenics, immigration, racial purity, revolution, industrial capitalism, communism, invasion, degeneration, extinction, and our cosmic insignificance as implied by the new astronomy (see, e.g.,

Schroeder 2002). The late nineteenth and early twentieth centuries witnessed “Martian mania,” an eruption of scientific interest and popular enthusiasm for Mars—its axial tilt and almost Earth-identical daily rotational period, geologic history, seasonally changing polar ice caps, thin atmosphere, clouds, tantalizing surface features (thought to include water and vegetation), and presumed inhabitants (e.g., Schmick 1879). This period saw the publication of dozens of novels and hundreds of short stories; countless drawings, hundreds of maps, photographs, scientific books and journal articles; and tens—even hundreds—of thousands of newspaper and magazine articles—all about Mars and Martians.¹¹ There are complex cultural, technological, and intellectual reasons behind this phenomenon, the nature of which various scholars have been examining in recent decades (see Jaki 1978, *passim*; Crowe 1986, esp. chaps. 8-10; Guthke 1990, esp. 341-391; Dick 1996, chaps. 3, 5; Fayter 1994, 1997; Basalla 2006, chaps. 4-6; Lightman 1996, 2000; Sheehan and O’Meara 2001, chaps. 6-13; Schroeder 2002; Strauss 1998; Markley et al. 2001; Markley 2005 and 2008; Crossley 2011; Willis 2011, chaps. 3-4; Lane 2011; and Nall 2017).

Briefly, astronomers began employing professional and imaginative techniques drawn from the newly professionalized discipline of geography (e.g., cartographic projections and nomenclatures, travel narratives, photography) to offer putatively authoritative representations of the Martian landscape, both natural and (possibly) engineered. From the second half of the nineteenth century, Mars was being mapped in unprecedented detail, in part following new improvements in instruments, including but not limited to telescopes, spectroscopes (invented in the 1860s), and micrometers, along with new observatories sited in higher and drier places offering better viewing conditions (see especially Morton 2002; Fayter 2009; Lane 2005, 2006, and 2011; larger lenses and mirrors magnified atmospheric disturbances, making observations more, not less, uncertain). Late nineteenth century Martian cartographers beside Lowell in America includ-

ed Richard Proctor (see Lightman 2000; Crowe 1986, 367-386 compares Proctor and Flammarion) and Nathaniel Green in England, Giovanni Schiaparelli in Italy, and Eugène Antoniadi in France. Among new observatories yielding new discoveries and dreams were Green's in Madeira, Lowell's in Arizona, the Harvard telescope in Peru and Amhurst's in Chile. As Maria Lane has shown (2005, 2006, 2011) detailed Martian maps, from Schiaparelli's scientifically authoritative ones to Lowell's controversial and popular ones, created a new sense of Mars as a cultural icon, as *another world in its own right*, with its own geographical place names, topography, weather, seasons, hydrology, and biology (see also Strauss 1993). Globes of Mars reinforced the view of the planet as an icon and analogue of Earth.¹² As Willis (2011; see also Flint 2000) has argued, vision involves much more than physics and physiology. The telescopic gaze of late nineteenth and early twentieth century astronomers involved not simple observation but technology, culture, context, analysis, expectation, and interpretation (e.g., Sheehan 1988; cf. the terrestrial issues of imperial astronomy, scientific instruments, and professional practices in McAleer 2013). Some of the newly perceived, Earth-analogous detail really existed on Mars; some existed only in the minds and imaginations of scientists some of whom were inspired by science fiction writers, theists, natural theologians, spiritualists, and artists fascinated with the Red Planet (e.g., Guthke 1990; Sheehan 1988 and 1996; Lightman 2000; Markley 2005, esp. chaps. 1 and 3; Crossley 2011). It is important to remember, as historians of science and cartography have shown (e.g., Blunck 1982, Jacob 2006, Lightman 2000, Lane 2005 and 2006, Monmonier 2004, Otter 2008, Wood 1992 and 2008), that maps are never purely objective visual representations of nature. And neither are photographs, which since Darwin's 1871 *The Expression of the Emotions in Man and Animals*—the first science book to use photographs as “objective” evidence—were often retouched or otherwise manipulated; Martian canals only emerged in photographs that had

been altered to make them visible: see Schwartz 1996, Tucker 2005, 195-233, and Markley 2005, 87-92).

Mapmaking involves using a variety of instruments and making many practical and theoretical choices. Cartographic interpretations of nature, from landscapes to entire planets, are affected by myriad personal, disciplinary, and national interests, by values, beliefs, hopes, speculations, purposes, perceptions, and preconceptions—the content of which may derive not only from the relevant sciences but imagination, politics, philosophy, and theology. Likewise, spectrographic analyses of Mars from the 1860s on did not involve objective readings of unambiguous data. There are no uninterpreted scientific data. Observations of specific Martian phenomena, from apparently designed *canali* to atmospheric water vapour, took place at the limits of analogy, and technology, at the border between vision and imagination, with multiple possible explanations.

Developments in biological evolutionary and degeneration theories, in nebular and planetesimal theories of planetary formation (see, for example, Du Prel 1880, Lankester 1880, Brush 1987), the especially favourable oppositions of 1877, 1892, and 1909, the infamous “canal” controversy (which coincided with major feats of terrestrial engineering, i.e., canal-building projects from Suez to Panama), the series of well-reported and very deadly droughts and famines (Davis 2001) in India, Brazil, China, and the U.S. from 1877 to the turn of the century—which no doubt made the vision of a desiccated Mars populated by desperate Martians easier to imagine—and the great popularity of astronomers such as Percival Lowell and scientific romancers like Wells all prompted waves of speculations and inferences including a widespread presumption that Mars was an older, dying analogue of Earth and probably inhabited by beings of advanced intelligence.

Grove could not have been unaware of some of the large pre-1915 Martian literature, fictional and scientific, in addition to work by his friend Wells. Book-length fictional work included—in chronological order of publication—Henri de Parville’s *Un habitant de la planète Mars* (1865), Percy Greg’s *Across the Zodiac* (1880), Henry A. Gaston’s *Mars Revealed* (1880), the anonymously written [Edgar Welch’s?] *Politics and Life in Mars* (1883), Lach-Szyrma’s *Aleriel* (1883), William Roe’s *Bellona’s Bridegroom* (1887), Hugh MacColl’s *Mr. Stranger’s Sealed Packet* (1889), Camille Flammarion’s *Uranie* (1890 [1889], esp. part three), Robert Cromie’s *A Plunge into Space* (1890), “Thomas Blot’s” [pseud. William Simpson] *The Man from Mars: His Morals, Politics, and Religion* (1891), Robert Braine’s *Messages from Mars* (1892), [Alice I. Jones and Ella Merchant’s] utopian *Unveiling a Parallel: A Romance* (1893), Gustavus Pope’s *Journey to Mars* (1894), James Cowan’s *Daybreak* (1896; Jesus on Mars!), Kurd Lasswitz’s very important *Auf Zwei Planeten* (two volumes, 1897), George DuMaurier’s *The Martian* (1897), Garrett P. Serviss’s *Edison’s Conquest of Mars* (1898), Oscar Hoffman’s *Unter Marsmenschen* (1905), Arnould Galopin’s *Le docteur Omega* (1906), Gustave Le Rouge’s “Vampires of Mars” romance, published in two parts, *Le prisonnier de la planète Mars* (1908) and *La guerre des vampires* (1909), Alexander Bogdanov’s utopian response to the Bolshevik Revolution of 1905, *Red Star* (1908), Norman Griswood’s *Zarlah the Martian* (1909), Fenton Ash’s *A Trip to Mars* (1909), Albert Daiber’s *Die Weltensegler: Drei Jahre auf dem Mars* (1910), Henry Dowding’s *The Man from Mars* (1910), Jean de la Hire’s *Le Mystère des XV* (1911), Mark Wicks’s *To Mars via the Moon* (1911) and [Mabel Knowles’s] *A Message from Mars* (1912). The first cinematic trip to Mars was produced by Thomas Edison in 1904, with his four-minute, logically-titled film *A Trip to Mars*. In a matter of decades the planet would become a staple of science fiction cinema. Edgar Rice Burroughs began his series of hugely popular Martian novels by publishing *Under the Moons of Mars* in *All-Story Magazine* in 1912 (book edition

in 1917, titled *A Princess of Mars*); the next two installments, *The Warlord of Mars* and *The Gods of Mars*, appeared in *All-Story* in 1913 and 1914, respectively.

Most people interested in popular science were aware of Percival Lowell's astronomical research on Mars, presented in book form in *Mars* (1895), *Drawings of Mars* (1906a), *Mars and its Canals* (1906b), and *Mars As the Abode of Life* (1908; reprinted 1909, 1910). [See also Lowell 1902, 1906d; Lowell's arguments for an inhabited Mars were *hugely* influential on early twentieth century science fiction writers: see, e.g., Markley 2005]. Other important non-fiction texts by scientists include Carl du Prel's *Der Kampf ums Dasein um Himmel* (1873; 3rd ed. 1882) and *Die Planetenbewohner und die Nebularhypothese* (1880); Camille Flammarion's monumental multidisciplinary study, *La planète Mars et ses conditions d'habitabilité*, 2 vols. (1892, 1909), A. Mercier's, *Communications avec Mars* (1899), Théodore Flournoy's *Des Indes à la planète Mars: étude sur un cas de somnambulisme avec glossolalie* (1899; ET 1900, 1901), Otto Dross's, *Mars: eine Welte im Kampf ums Dasein* (1901), various Spanish-language articles by José Comas Solá (e.g., 1903, 1910, 1914), Edgar Sylvester Morse's, *Mars and its Mystery* (1906; reprinted 1913), the evolutionary biologist Alfred Russel Wallace's contrarian *Is Mars Habitable? A Critical Examination of Professor Percival Lowell's Book 'Mars and Its Canals,' with an Alternative Explanation* (1907), and Charles Edward Housden's, *The Riddle of Mars: the Planet* (1914).

Signals to and from Mars represented a common trope in interplanetary fiction, and a frequent speculation in science by the time Grove wrote his poem. In 1891, Flammarion announced that a faithful reader of his had died, bequeathing 100,000 francs for a prize to be named after her late son, Pierre Guzman, and to be awarded (via the Académie des Sciences) to whomever could establish two-way communications with the inhabitants of another planet or star within the next ten years. The woman asked that special attention be paid to Mars (Flammarion 1891). During

the major opposition of 1892, astronomers from California to France reported seeing bright spots—perhaps high clouds or mountaintops—and even mysterious flashes of light on the surface of Mars. This sparked an international press sensation when the latter phenomenon was interpreted by some as signal fires or light-beams by which Martians sought to communicate with Earth (e.g. Lane 2011, 197-201; other eruptions of interest in signaling occurred again in 1894, 1909, and 1915). Charles Darwin's cousin, the statistical biologist and father of eugenics Francis Galton, published “Intelligible Signals between Neighbouring Stars” in the *Fortnightly Review* (1896), a year after he proposed communicating with Mars using a Morse-like code, and four years after he proposed in a letter to the *Times* of London (6 August 1892) that an array of mirrors could be used to reflect sunlight in a way that would be detectable on Mars (a proposal that was adopted and developed by American scientists including William H. Pickering in a series of articles appearing in the *Scientific American* during 1909 (Crowe 1986, chap. 8). C. Paulon published a serialized novella, “Un message de la planète Mars” in *La Science Illustrée* (4-25 December 1897). The brilliant and controversial Serbian-American electrical engineer Nikola Tesla reported (1899-1901) picking up signals from Mars with his powerful radio receiver in the mountains of Colorado¹³ (Tesla 1901; see also Tesla 1907, Lowell 1902, Ball 1901, Holmes 1901, and Brooks 1909). Raymond Taylor composed a popular march and two-step called “A Signal from Mars” (arranged and published by E[dward] T[aylor] Paul) in 1901 in New York City. (The sheet music cover was a coloured lithograph illustrating Martian astronomers observing and signaling Earth; other published Martian sheet music included Davis 1896, “I Just Got a Message from Mars,” Johnson 1901, “A Temperance Message from Mars,” Rose and Snyder 1903, “I’ve Just Had a Message from Mars,” along with pieces by Norris 1905, Freeman and Freeman 1908, and Tennant 1911.) The British physicist Lord Kelvin caused a sensation in 1902 when, speaking at a banquet in New York, he announced that Mars was signaling the City even

as he spoke (Cheney 162). Before Grove wrote “Legend,” two British silent films with the title *A Message from Mars* had been produced in 1903 and 1913 (an American remake of the 1913 film appeared in 1921). [See also Michel Corday, “Les signaux de Mars” in *L’Auto* (1 July 1905) and Theophile Moreux, *Le Miroir Sombre* (1911; reprinted as “Mars va nous parler” in *Journal des Voyages* in 1924). Garrett Serviss, the American science journalist and science fiction writer, wrote an article on Martian signals (1915) that was reprinted many times in newspapers from America to Australia. When Mars approached Earth more closely than it had in the previous two centuries, during the opposition of 1924, the U.S. Navy kept a radio silence for three days, trying to receive Martian messages; and Swiss astronomers set up a heliograph in the Alps in order to send messages to Mars (Bent 1924).]

For these and no doubt other reasons, Mars—long perceived as the closest physical analogue of Earth (e.g., Herschel 1784; but compare Zahnle 2001)—was the handiest and most obvious planet to provide an imaginary mirror, an alien allegory, an extraterrestrial perspective on contemporary earthly affairs.¹⁴

Friedrich Nietzsche’s infamous dictum, “God is dead,” first mentioned in section 108 of *The Gay Science* (*Die fröhliche Wissenschaft*, 1882), was reiterated in his philosophical novel *Thus Spoke Zarathustra* (*Also sprach Zarathustra*, 1884) and again in *The Antichrist* [or *The Anti-Christian* (*Der Antichrist*, 1888)]. To oversimplify the multiple meanings and implications of his declaration, without the biblical God the foundational worldview of western civilization was jeopardized—a process begun by the eighteenth-century Enlightenment’s privileging of non-theistic rationality, culminating in the post-war establishment of the twentieth century’s secular cosmology. This is in part the thesis of *The Great War and the Death of God* (O’Connor 2014), a study of how atheistic materialism in the wake of the First World War displaced the longstanding belief in western history, philosophy, theology, and the arts that the natural and social worlds

were divinely governed. In O'Connor's reading, the Great War was utterly catastrophic; a trustworthy and beneficent God was replaced by an indifferent and meaningless cosmos. Confidence in both traditional faith and reason were shaken to the core. Although I would argue—as an historian of Victorian science, theology, and science fiction—that the process was well under way before the First World War, it does seem clear that the horrors of 1914-1918 provoked a deep intellectual and spiritual crisis in the West (compare Wilson 1999 and Blom 2008). Without a transcendent and eternal God, with only naturalistic science capable of revealing real truth, with life on Earth or elsewhere in the universe the product of blind and purposeless evolution, how could we continue to believe in the existence of meaning or morality? *Why wouldn't* dread replace hope, evil replace good?

It has been well argued that science fiction provides the mythic underpinning for dreams of techno-scientific empire and expansion through conquest and colonization (Csicsery-Ronay Jr. 2003; see also Brown 1993). Grove used the conceit of an inhabited Mars to begin questioning the grand metanarrative of inexorable progress, along with triumphalist dreams of mastering nature (see Markley 2008), romantic glorifications of war, the dichotomizing of faith and reason, the nature of belief in both science and religion, and (at least implicitly) the possibility of rightly understanding our place in the universe—one populated world among other worlds—through natural or spiritual knowledge alone (contrast the life-affirming Martians who consciously *reconciled* science and religion in Ray Bradbury's 1948 story “—And the Moon Be Still as Bright” which became part of his 1950 novel, *The Martian Chronicles*). Grove avoided both violent Wellsian colonizing invaders on the one hand (see Fayter 1997 and Fitting 2001), and naïve visions of scientific and/or sinless utopias (e.g., Torrens 1901, [5]-24, Bogdanov 1908, and Wicks 1911) on the other. During the first full year of the Great War—the so-called “war to end all wars,”¹⁵ the conflict that buried the secular faith in scientific progress and human perfectibility—

Grove's poem (a relatively minor but revealing personal piece conceived at the intersection of science, literature, politics, religion, grief, and unbelief) was a last gasp of late-Victorian and Edwardian spiritual and theological doubt (see Helmstadter and Lightman 1990, Wilson 1999, and Loconte 2014). Whether Grove foresaw that collapsing monarchies and the unraveling of traditional beliefs and values—how could one maintain a providentialist reading of history in the face of such suffering, destruction and death?—would create not only profound existential anxieties but a moral and spiritual vacuum that would be filled by aggressively atheist scientific materialists, and by fascist—including Hitler's viciously racist version of social Darwinism and eugenics¹⁶—is unlikely. Nor did Grove foresee how fervent new nationalisms and aggressive industrial capitalism would forge politics and economies wedded to the mass production and use of the machineries of war. Still, more than a century later, his poetic narrative of a Martian paradise lost serves as both a complacency-pricking, poignant contemporary reflection and a disturbing prophetic anticipation of the almost apocalyptic horrors and holocausts to come (compare Clarke 1992 and Jenkins 2014), specifically the genocidal and suicidal trajectory of self-deluding, violent, and dogmatic ideologies.

Endnotes

¹ This is a revised and expanded version of a paper originally delivered at the 4 June 2005 meeting of the Academic Conference on Canadian Science Fiction and Fantasy at the Merrill [Science Fiction] Collection, Toronto. A different, shorter version of this paper was delivered on 15 September 2013 at the conference on Canadian Science Fiction honouring Robert J. Sawyer held at McMaster University, Hamilton. I gladly and gratefully acknowledge the practical assistance of Lillian Sazz-Fayter, my long-suffering spouse extraordinaire, in resolving numerous computer glitches I either caused or encountered while producing this paper. Thanks too for her help in copy editing earlier drafts. And although only one of his discoveries proved bibliographically relevant to this particular project (i.e., Gander 2012), thanks are due to my book-dealing friend of many years, Jack Brooks, for uncovering and suggesting various twentieth century Martian novels and short stories for my personal research collection.

² I do not yet have a full bibliographic reference for this story. On page six of the *Herald* for Saturday, 21 November 1931, under the headline "Canada Invaded by the Martians," was a notice about the serial, which was to begin in the Monday 23 November issue; by Thursday, 3 December 1931 (p. 5) the still-incomplete tale had reached "Chapter X". For the bibliographically eagle-eyed, I should mention that the teasing title of Margaret Atwood's "The Man from Mars," first published in her collection *Dancing Girls and Other Stories* (New York: Bantam, 1977), is a metaphoric reference to the Other, in this case a Vietnamese exchange student newly arrived in Toronto as seen by

Christine, a young woman who has never before been the object of someone else's disturbing desire.

³ Grove's 1915 poem set on Mars was unpublished during his lifetime; it is preserved in the University of Manitoba's Archives (Grove Collection) in Winnipeg [see www.umanitoba.ca/libraries/units/archives/collections/fpg/descr.shtml]. Unlike fictional and non-fictional treatments of the planet, poems about Mars were rare in this period; see Best 1892, Montgomery 1896, and Clement, "The Gospel from Mars," 1907 (compare the anonymous sarcastic response "A Martian Gospel" 1907). Martian dramas were even rarer. The one example I know of is Ganthony 1899. In my review of the primary literature I am not including work in which Mars functions only as a symbol or as a brief, metaphoric stand-in for Earth. One example of this is Locke's 1917 novel of the Great War, *The Red Planet*, the title of which refers to what Earth has become. Mars—as a representation of the ancient mythic god of war—casts its baleful red eye upon our bloody, violent world. One chapter (Locke, 171) begins: "Thus over the sequestered vale of Wellingsford, far away from the sound of shells, even off the track of marauding Zeppelins, rode the fiery planet, Mars. There is not a homestead in Great Britain that in one form or another has not caught a reflection of its blood-red ray."

This paper began as a personal and rather unsystematic search for science fiction texts about Mars and Martians by Canadian writers (stories by English, French, German, and American writers in the late nineteenth and early twentieth century are not hard to find). Grove's poem is the earliest text I've encountered. The results of my search were limited to twentieth and early twenty-first century Canadian examples; thanks to Derwin Mak and Eric Choi for sending me copies of their work. Jean-Louis Trudel and Allan Weiss both made me aware of Desrosiers' apocalyptic tale which features a trip to Mars John Robert Colombo reminded me of A.E. Van Vogt's "Enchanted Village" (1950), with its clever-at-the-time twist ending [this was reprinted in Van Vogt's 1952 short story collection *Destination: Universe!* published by Pellegrini & Cudahy; it appeared with the alternate title "The Sands of Mars" in the third Signet paperback printing of *Destination*]. Van Vogt's "The First Martian" (copyrighted by the author in 1939; the first publication I'm aware of is as "This Joe," pp. 70-81 in the August 1951 issue of *Marvel Science Fiction*, which also includes an essay on pp. 107-109 by Judith Merril, "Where will our first spaceship go? Mars: New World Waiting").

⁴ Mars is only half the Earth's diameter, with a tenth of Earth's mass, and therefore has less gravity and therefore less atmosphere, so it may seem strange to speak of their being "twins," an idea that was long applied to Venus and Earth. When regarded from space, and without any other information about its rotational period, landscape, and so on (which we now know from robotic landers and orbital surveyors, sent to both our closest planetary neighbours) Venus appears much closer to Earth than Mars in terms of size and presumed mass. But as seen from Earth, Venus—because of its very thick atmosphere with dense cloud cover—presents as a featureless sphere. Compared to Mars, there's nothing much for the eye to see or the mind to imagine. For all of human history, Mars was as noticeable for its reddish-orange hue as Venus was for its brightness. However, once telescopes improved enough (The Dutch astronomer Christiaan Huygens observed Mars with his long focus "aerial telescopes" beginning in 1659), the first surface features of a world other than our Moon began to be observable. By the late eighteenth century with William Herschel's work, enough Martian surface detail (plus its annual and daily motions and axial tilt) could be discerned that seemingly terrestrial features such as polar ice caps, oceans, islands, oases, rivers, and seasonally-changing vegetation became suggestive analogies—and therefore possible explanations—for what was being observed on Mars. The mapping of Mars, both real and imagined versions, began in earnest after 1840.

⁵ Questions soon arose with respect to the implications of the translation or mistranslation of the word *canali*, as well as of the suggestive visual imagery of lines on the Martian surface, as depicted on hand-drawn maps and, later, photographs, although the "evidence" there was blurred and more ambiguous. What may be the first expression of concern regarding unwanted, even unwarranted, meanings associated with the word "canal" applied to Mars can be found in a journal entry made by the English astrophysicist J. Norman Lockyer for 8 September 1890: see Nall 2017, 302; but see Hoyt 1976, *passim*, for evidence he supported Lowell's vision of Mars; for an early critical take on drawings and photographs of Martian surface features, see Pickering 1890a and 1890b. The Canadian-American astronomer, physicist, and mathematician Simon Newcomb tended to be a critic of Lowell's exuberant belief in canal-building Martians. He put forward his view that engineered canals were an illusion in his 1907 discussion of the psychological and optical issues in the observation, perception, and interpretation of Martian surface features across great distances (cf. the arguments of another critic of Lowell, Alfred Russel Wallace, the evolutionary biolo-

gist and independent co-discoverer, beside Charles Darwin, of natural selection: Wallace 1907; see also Lowell's response to Newcomb: Lowell 1907). It is worth noting, however, that in his 1911 article on Mars for the eleventh edition of the *Encyclopaedia Britannica*, Newcomb helped enshrine a Lowellian interpretation of Mars by including two drawings of the Martian canal system.

⁶ Grove owned a copy of the 1913 reprint edition. Intelligent ants from South America were the subject of Wells's 1905 story, "The Empire of the Ants," first published in *The Strand*.

⁷ The typescripts of "Legend" are found in the Grove Collection, Box 18, Folders 14 and 23. The University of Manitoba does not hold the copyright to Grove's Martian poem; quotations from "Legend" in this paper are taken from Grove, "Poems" (Craig, ed., 1982). Also deserving attention are the contents of Folder 11, Book 1, *Thoughts*, which includes "The Gods," "Science," "The Rebel's Confession of Faith," "Man Within the Universe," and "The Sacred Death". "Additional Manuscript Notebooks" in the Grove Collection contain forty-six stories, thirty-four of them unpublished, as well as notes, articles, and poems on a range of subjects including literature, religion, and science.

⁸ In the nineteenth and early twentieth centuries women were seen as physically, mentally, morally, and temperamentally inferior—less evolved than males—and therefore "naturally" unfit to vote or hold elected office. The women's suffrage movement ("first wave feminism") was often opposed with violence and contempt by established authorities, i.e., men with power. Nevertheless, resistance to women's voting and other civil rights was increasingly futile in various provincial, state, colonial, and national jurisdictions at this time, including in the United Kingdom, the United States, and Canada.

⁹ Recall the disturbing image in Wells's "The Crystal Egg" (1897) of Martians staring at the Earthman through a crystal lens. Wells's belief in an inhabited Mars dates to 1888, when he was a student of Huxley's at London's Normal School of Science (Smith 1986, 64-65).

¹⁰ See also, e.g., Wells's *The War in the Air* (1908), *The World Set Free* (1914), and *The Shape of Things to Come* 1933.

¹¹ A search on the word "Martian" at newspaperarchives.com revealed 317 articles in the 1880s, 1,847 in the 1890s, 1,977 in the 1900s, and 1,759 in the 1910s. Searching for the word "Mars" yielded even more impressive results: 35,615 hits in the 1880s, 60,153 in the 1890s, 80,059 in the 1900s, and 96,488 in the 1910s; accessed 8 September 2013.

¹² Martian globes were produced by Hans Busk in Cambridge (1873); by Camille Flammarion in Paris (1884); by Louis Niesten in Bruxelles (1892); by Flammarion and Antoniadi in Paris (1898); by H. Albrecht in Berlin (1903); and a beautiful series of hand-painted globes by Emmy Ingeborg Brun in Denmark (ca.1903-1915) depicting Lowell's canal networks and bands of vegetation, usually with the inscriptions "Free Land-Free Trade-Free Men" and "Thy will be done on earth, as it is in heaven" (see van Gent, www.staff.science.uu.nl/~gento113/celestia/martianglobes.htm). He neglects to include the wooden hand-painted globes made by Lowell in 1903 and 1911, and the globe made by Lowellian science fiction writer Mark Wicks, likely in 1910-11.

¹³ On Friday, 4 January 1901, *The San Francisco Examiner* published, in careful yet poetic prose, a front page story titled "Tesla, the Electrician, Says He Received A Message From Mars":

Nicola Tesla has had the first call of the century from a neighboring planet. He has communicated with Mars, he declares, while on Pike's Peak [near Colorado Springs], delving into the mysteries of the wireless transmission of electrical energy.

The summons was faint, but, according to Tesla, not to be mistaken.

A new voice from a planet, millions of miles removed, was spoken over one of the myriad unwired Telephones of the universe, and there, near the lonely mountain peak, in the fathomless calm of Night, the voice at last found a listener and world spoke to world in language strange at first, but Sure to be clearer, says Tesla, ere the Twentieth Century has finished its course.

In addition to claims and proposals concerning communication between Earth and Mars via wireless telegraphy,

telephony, and various means of visual signalling, there were non-technological spiritualist methods; see Crossley 2008. For more on Tesla, see Peat 1983; Carlson 2013; and Cawthorne 2014.

¹⁴ Since the nineteenth century, science fiction stories set on Mars have almost always been stories and social commentary about Earth. In Grove's poem, the Martian fall from grace into religious conflict and ultimately mass suicide reflected the loss of faith in eighteenth and nineteenth century beliefs concerning scientific progress and moral perfectibility (not to mention imperial conquest and technological mastery over the natural world).

¹⁵ See Wells [1914]. No previous conflict had been so nightmarishly bloody, so immense and mechanized, so ingloriously futile—provoking such social, intellectual, political, personal, moral, and spiritual crises—that more than a century later the scars left on the western memory and imagination continue to be visible. The suicidal “Great War” shocks and haunts us still.

¹⁶ See Weikart 2004. Social Darwinism is a controversial and multivalent concept that has been used to legitimize certain beliefs and practices by those across a wide political spectrum. As commonly understood, this ideology held that social hierarchies and inequalities based on race, gender, and class were “natural,” as were nationalism, imperialism, and warfare. (What was deemed “natural” was of course therefore true, right, and good.) The social and economic orders, in this view, ought to follow the competitive natural order, with its Malthusian/Darwinism “struggle for existence,” “survival of the fittest” (Herbert Spencer's term for the “natural selection” of “favoured races” as the subtitle of Darwin's *Origin of Species* put it), and the domination, even elimination, of the weaker by the stronger. Praise for capitalism, criticism of unions, support for eugenics—the brainchild of Darwin's cousin Francis Galton, and a species of Social Darwinism adopted by later Nazi ideology—were often thought by earlier generations of scholars, e.g., Richard Hofstadter in his 1944 study *Social Darwinism in American Thought*, to have been the product of Spencerian evolutionism, which was then adopted with a vengeance by American industrialists and social scientists, e.g., William Graham Sumner.

Those who still seek to keep Darwin pure and free of any ideological taint object to the term Social Darwinism as utterly misleading: an inappropriate and unscientific misapplication of good Darwinian biology to politics, economics, sociology, ethics, and so on. And yet its main tenets can indeed be found in Darwin's work, not least in his two-volume study of *The Descent of Man* (1871; 2nd ed., 1874; but see Richardson 2014). For more, see Bannister 1979; Bellamy 1984; Crook 1994; Hawkins 1997; Paul 2009; and Lightman, ed. 2015.

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