

# By Burro and by *Beagle*: Geographical Journeys through Time in Latin American Science Fiction

Rachel Haywood Ferreira

## Locating the Latin American Future

IN HIS DISCUSSION OF TWAIN'S *A CONNECTICUT YANKEE IN KING ARTHUR'S Court*, Bud Foote makes a provocative connection between travel through geographical space and travel through time in North American culture, stating, "Americans have a peculiar tendency to identify past, present, and future time with location; as one travels to the past in space, one can generate the idea of doing so in time" (65). Foote goes on to trace the multiple geographic-temporal currents present in the US, with the Western frontier representing the future in contrast to the East that represents the past; the past of the agricultural South playing against the future of the industrial North; and somewhat more problematically, the United States symbolizing the future versus Europe as the past. He describes the US position toward Europe as "contradictory and ambiguous," as images of Europe as the motherland of sentiment compete with those figuring it as the past beyond which we have progressed. Foote argues that such time-place associations cannot exist in the same way for Europe, where past, present, and future must coexist in the same geographical space.<sup>1</sup> Foote further differentiates North America from South America in this regard, stating that, "in South America, since the Spanish tended to colonize from the west, the Portuguese from the east, the future never got to lie in any particular direction" (65). It is with this statement that I want to take issue and, with the help of two early writers of Latin American science fiction and their texts, to show that not only is there a Latin American variation to this geographic-temporal theme, but that its science fictional representations demonstrate Latin America's even more problematic relationship with Europe and also exemplify the efforts of Latin American countries to consolidate their own histories and national identities as they struggle to locate—or relocate—the geography of the future.

While specifying the location of the future vis-à-vis Latin America is a somewhat thorny issue, the past is not quite so elusive, though, as in North America, it is associated with more than one geographic location. A glance at any map of colonial Latin America shows the great majority of early Spanish and Portuguese settlements established on the coasts, and current population density maps reveal that in much of Latin America the coastal cities retain their importance. The heavy concentrations of commerce, industry, and political and cultural institutions in the coastal urban centers pinpoint them as the general location of the geographic present, if not the future. In contrast, the past has historically been located in the interior of Latin American nations or beyond other frontiers that separated the "civilized" regions from those that were more sparsely settled and less known.<sup>2</sup> In Argentina, with his seminal *Civilización y barbarie o vida de Juan Facundo Quiroga* (*Civilization and Barbarism or The Life of Juan Facundo Quiroga*) of 1845, Domingo Faustino Sarmiento canonized the popular perception of the Argentine pampa as linked with the barbarous gaucho-caudillo-rural-backward past in contrast with the civilized, populous, urban, modern capital, the port of Buenos Aires. Other representations of Argentine national pasts can be found in the Misiones of the short stories of Horacio Quiroga, in the pampa of José Hernández's *Martín Fierro*, and in the South of Borges's "El Sur" (The South). In Brazil, Euclides da Cunha's *Os Sertões* (*Rebellion in the Backlands*) of 1902 represented the relationship between the then coastally based national government and a group of *sertanejos* from one of Brazil's interiors. The Amazonian interior is internationally known for harboring remnants of the past of the natural world as well as for being the location of some of the last blank spaces in Terrestrial cartography. Alongside these nineteenth-century associations of the Latin American interiors/frontiers with a retrograde past, however, we often find a rebranding of these regions' relationship to the past. They are also portrayed as areas of untrammelled natural beauty and bountiful in natural resources, as wellsprings of national history and identity, and as potentially containing the keys to the most significant scientific puzzles of the day.

A relatively large proportion of the earliest texts of Latin American science fiction depict fantastic voyages through outer space (to Mars, Jupiter, or beyond) and travel through time (to the then-future of 1970, or 2000, or later).<sup>3</sup> Concurrently, however, some of the same writers were also publishing tales of marvelous overland journeys that were set in the Latin America of the day but which represented travel to the nations' natural, historical, and cultural pasts. The Brazilian Augusto Emílio Zaluar (1825–82) and the Argentine Eduardo Ladislao Holmberg (1852–1937) each produced one of these geographical journeys through time in 1875. Both Zaluar's *O Doutor Benignus* (*Doctor Benignus*) and Holmberg's *Dos partidos en lucha: Fantasía científica* (*Two Factions Struggle for Life: A Scientific Fantasy*) were based on the travel narra-

tives of European naturalists as well as on those of Latin American expeditionaries, including the authors themselves. Zaluar had published *Peregrinação pela Província de S. Paulo* (1860–1861) (*Peregrination through the Province of São Paulo* (1860–1861)); and, among other such accounts, Holmberg published *Viajes por la Patagonia* (*Travels through Patagonia*) in 1872.<sup>4</sup> Despite marked dissimilarities between the backgrounds and world views of their writers, the two works in question share a number of common elements: both *Doutor Benignus* and *Dos partidos en lucha* were influenced by the works of Jules Verne, Camille Flammarion, Darwin, and Sarmiento, and among the central themes of both are scientific and pseudoscientific uses of evolutionary theories, national progress through the spread of scientific knowledge, and the representation of South America as the locus for a utopian future.

### **From Burro to Balloon: Dr. Benignus's Utopian Partnership**

Born in Portugal in 1825, Zaluar arrived in Brazil in 1849 and became a naturalized Brazilian citizen in 1856. He spent a portion of his professional career as a professor of pedagogy at the Escola Normal (Teacher Training College); he was also a journalist, co-founding the bi-weekly *Parayba* with Quintino Bocaiúva in Petrópolis; and he was a writer who produced texts in a variety of literary forms and genres: poems, short stories, at least one play and one novel, and the aforementioned travel narrative, for which he is best known. In politics he was a staunch supporter of the status quo, a conservative monarchist who upheld Dom Pedro II's policies and his claim to the throne of the Brazilian Empire. He was a member of the Sociedade Auxiliadora da Indústria Nacional (Auxiliary Society for National Industry), the closest thing to a scientific society in Brazil, and though not a scientist himself, he has been described as “razoavelmente informado sobre as escassas atividades científicas da época” (reasonably informed about the scarce scientific activities of the time) (Carvalho 9). Zaluar's writings reveal a belief in the alliance of scientific and religious principles and in an undifferentiated evolutionism with aspects reminiscent of the arguments of Lamarck, Spencer, Darwin, Haeckel, Huxley, and Wallace.

The editors of the first edition of *O Doutor Benignus* called it Brazil's “primeiro ensaio do romance científico ou instrutivo” (first exercise in writing a scientific or instructive novel) (qtd. in Zaluar 27). There were, in actuality, several Brazilian texts of a science fictional nature already in existence in 1875, but this assertion by Zaluar's publishing company is evidence that early Latin American works of science fiction did not constitute a coherent local tradition, that writers' connections with the genre tended to be either exclusively or primarily with Northern European and North American authors and works. Zaluar himself affirms his scientifically enriched novel to be “o simples

presentimento da nova fase em que necessariamente vai entrar a literatura contemporânea” (the simple presentiment of the new phase which contemporary literature must necessarily enter), part of a trend which he claimed was already in evidence in “as sociedades mais adiantadas” (the most advanced societies [Zaluar mentions England, Germany, and the United States specifically]) (28).

The eponymous protagonist of *O Doutor Benignus* is a Brazilian scientist and a “verdadeiro sábio” (true wise man) (Zaluar 33). So devoted is he to the pursuit of knowledge that he vows in the first chapter to leave the bustling and worldly capital city of Rio de Janeiro for the relative isolation and tranquility of a country estate in the neighboring province of Minas Gerais. Upon the eve of his departure, the good doctor describes himself as a Brazilian version of one of the contemporary science fictional heroes of Jules Verne:

Não sei se já lestes um espirituoso livro de Júlio Verne, que tem por título *Da Terra à Lua*? Pois eu sou o Miguel Ardan dessa arrojadíssima expedição, com a diferença que, em lugar de ir para a Lua, vou para o sertão; em lugar de ser transportado por uma bala, sê-lo-ei por um burro, animal menos perigoso que um projétil, e que tem a seu favor a tradição bíblica, tão recomendada pela igreja ortodoxa. (Zaluar 43)

I do not know if you have read a clever book by Jules Verne, which has for its title *From the Earth to the Moon*? Well I am the Michel Ardan of that daring expedition, with the difference that, instead of going to the Moon, I am going to the interior of Brazil; instead of being transported by a cannon ball, I will be transported by a burro, an animal less dangerous than a projectile, and which has biblical tradition, so recommended by the orthodox church, in its favor.

The value of exploring the Brazilian interior is placed on a par with exploring the great Vernian unknowns. Despite the overt analogy between the two expeditionaries, however, Benignus links the European Vernian hero with the latest of futuristic technologies, while, in contrast, his own method of transportation belongs to the past.

Benignus soon establishes another connection with Europe when he writes a letter to the French scientist, writer, and popularizer of science, Camille Flammarion (1842–1925). The two of them are, Benignus ventures, “duas almas que se compreendem” (two souls that understand one another) (55). He expresses particular interest in Flammarion’s works from his *Pluralidade dos mundos habitados* (*La pluralité des mondes habités* or *The Plurality of Inhabited Worlds*) (1862) to his *Narrativas do infinito* (*Récits de l’infini* or *Stories of Infinity*) (1873) because, he reasons, if Flammarion’s theory that there is life

on other worlds is correct, it would then follow that “*haverá em outros mundos entes mais perfeitos do que nós, e, por consequência, mais próximos da unidade absoluta, do princípio originário*” (there will be beings on other worlds that are more perfect than we, and, in consequence, closer to absolute unity, to the original principle) (49–50). This allows a transitional evolutionist<sup>5</sup> to claim the existence of evidence of the perfectibility of the human species, a religious man to believe that his striving to become more like God may yield tangible results on Earth as well as in Heaven, and a Brazilian Social Darwinist to hope that his own nation might aspire to “evolve” industrially, scientifically, culturally, and racially and to reach the heights already attained by European civilization.

Indeed, in his letter Benignus proposes to “*estender a mão da América à Europa*” (extend the hand of America to Europe), but he does not see the relationship as one in which America merely imports scientific knowledge and other civilizing influences from Europe (56). Brazil, Benignus emphasizes in various ways, does not come to the table empty handed. Throughout the letter he extols the fecundity and the diversity of Brazilian flora and fauna and the optimal conditions of the unspoiled, crystalline Brazilian skies for astronomical observation. He invites Flammarion to come to Brazil in search of “*novas e mais fecundas inspirações a estas regiões prediletas do sol e da liberdade*” (new and more fertile inspiration from these favored regions of sun and of liberty) (53). Roberto González Echevarría has written that in the nineteenth century, “To travel to Latin America meant to find history in the evolution of plants and animals, and to find the beginning of history preserved—a contemporary, living origin” (110). Benignus repeatedly links Brazil’s natural riches not with the backward, uncivilized past, but with the past of antiquity and the roots of humanity: the Brazilian sky is “*como o céu mitológico dos antigos*” (like the mythological sky of the ancients), the forests are composed of “*árvores coevas dos primeiros séculos da criação*” (trees coetaneous to those of the first centuries of creation) (54, 51). He portrays Brazilian nature not as a barbarous opponent but as a “*fecundíssimo laboratório*” (fecund laboratory) of unspoiled beauty and untapped potential (69). In making these connections Benignus seeks to establish Brazil’s *bona fides* as a locus of cultural and historical significance in its own right, as an active participant in the creation of its own national identity. Europe is thus not the only source of humanity’s—and Brazil’s—past, and it is not the only arena in which scientific progress can be made. Zaluar represents the Brazil of the 1870s as less evolved than Europe, but he also emphasizes his adopted nation’s associations with a privileged past which owed nothing to the Old World, and he stresses Brazil’s potential as a contributing partner in the construction of the future.

On a naturalist’s first sally into the Brazilian countryside, Dr. Benignus and his chef, Katini, a Peruvian Indian, “*descendente dos Incas*” (descendant of

the Incas), discover a crude Indian mortuary urn containing a piece of papyrus that bears the legend “À pora” underneath an image of the sun (62). Upon discovering that “À pora” is Tupi for “ECCE INCOLAE: *aqui há gente, aqui está povoado, aqui há habitantes!*” (ECCE INCOLAE: *here there are people, this place is populated, here there are inhabitants!*) (91, capitals and emphasis in the original), the good doctor interprets the inscription to be a sign of the merit of Flammarion’s theory on life on other worlds, and he decides to mount another, larger scientific expedition that will take advantage of the superior celestial viewing conditions of the Brazilian interior in order to prove that there is more advanced life on the sun. Other secondary reasons for the expedition to the Brazilian interior belong to the other two men who join Benignus as its leaders: Fronville, a Frenchman, will study the riches of Brazilian nature, and a young British man, Jaime River, will try to rescue his anthropologist father, William, from the clutches of the savage Carajá Indians of Tocantins. Two other Northerners will be incorporated into this group of leaders during the course of the expedition. Frei Custódio, an Italian priest, embodies Zaluar’s desired link between science and religion: “Bendito sejas, meu Deus,” elucidates the priest, “que fazes com que a ciência seja um dos maiores instrumentos de teu poder!” (Blessed be your name, Lord, [...] for making science one of the greatest instruments of your power!) (334). James Wathon, an engineer and iron foundry millionaire from Philadelphia who had once been cured of a near fatal illness by Dr. Benignus, also joins the expedition in the interior after a record-breaking balloon journey of several thousand kilometers. In *Doutor Benignus* Europe and the United States represent examples of nearer futures for Brazil; Europe is the model for culture, religion, and science, and the US sets an example of industrialization, the Protestant work ethic, and practical Yankee applications of technology in transportation and communication. But other, higher futures for all of humanity are exemplified beyond the Earth, on other planets and stars, and Benignus intends to claim the discovery of and communication with representatives from these more distant futures for Brazil and Brazilian science.

The joint Brazilian-European venture departs from Benignus’s estate in southeastern Minas Gerais. From there, the expedition proceeds in a north-westerly direction across Minas, through Goiás, culminating in a visit to the Ilha do Bananal (Banana Grove Island) in the province of Tocantins. The trajectory of the journey is summarized by the Frenchman, Fronville, in terms that illustrate our extension of Foote’s theory of a link between geographical and temporal travel to the Southern hemisphere:

Vamos seguindo, por assim me exprimir, em sentido inverso à marcha evolutiva da civilização. Partimos primeiramente das fronteiras do mundo habitado e ativo na obra de sua emancipação intelectual e moral, penetramos depois

na vasta província de Minas Gerais, que marca de um certo modo a transição entre a atividade social e a primitiva indolência dos povos menos adiantados, e vamos entrar finalmente nos desertos ainda habitados pelos tipos selvagens, mas pitorescos das primeiras famílias humanas! A nossa digressão não pode ser nem mais curiosa nem mais instrutiva. (Zaluar 271)

We are traveling, to put it one way, in the inverse direction of the evolutionary march of civilization. First we depart from the frontiers of the inhabited world, which are actively engaged in its intellectual and moral emancipation; we then move into the vast province of Minas Gerais, which marks, in a certain way, the transition between social activity and the primitive indolence of less advanced peoples; and finally, we are going to enter the wilderness which is still inhabited by the savage but picturesque types belonging to the families of the first humans! Our excursion could not be more singular or more instructive.

The population-dense Brazilian coast from which Benignus has come, then, forms the last bastion of the inhabited/emancipated/advanced world connected to Europe and the future. Again, the city has historically been associated with civilization and progress in Latin America, and the Brazilian frontier, unlike that of the nineteenth-century United States, did not tempt the average inhabitant to “Go West, young man!” to create the future in the freedom of open spaces.<sup>6</sup>

The semicivilized longitudes of Minas Gerais and also Goiás have been held back, Benignus and Fronville lament, by the very mineral riches that had first brought them to prominence. “O ouro” (Gold), they say, “é a origem do luxo e da devassidão” (is the origin of ostentation and debauchery); its presence discourages the development of renewable sources of wealth such as agriculture and cattle ranching (156). Iron, they tell each other, would historically have been much better for these provinces because its properties make it “a salvaguarda da civilização [...] o severo e santo instrumento do trabalho, o gerador da economia e o conselheiro da moral!” (the safeguard of civilization [...] the grave and holy instrument of work, the generator of the economy and the counselor of morality) (155–56). Fortunately for the future of Brazil, Benignus tells of recent discoveries of iron in these areas, and Fronville discovers a new deposit during the expedition. According to these two men of science, it is precisely such “conquistas da ciência sobre as riquezas naturais do solo” (victories of science over the natural riches of the soil) which, together with industrial development, will bring “felicidade e civilização” (happiness and civilization) to cure the “decadência” (decadence) of the interior of Brazil (276).

Zaluar describes the far interior of Brazil using contradictory terms and

images in a continuing effort to locate a silver lining in the region he himself describes as most distant from the “march of civilization” (271). He therefore simultaneously characterizes the inhabitants of the *sertão* as “savage but picturesque types”; and, at the same time as he describes them as “primitive” and “less advanced,” he claims that they belong to the “first human families,” thus usurping from Africa the distinction for Brazil of being the cradle of humanity (271).<sup>7</sup> At one point during the expedition, the scientists think that a living Brazilian example of the evolutionary missing link has been located, but it proves to be a false alarm—Zaluar is far more interested in the implications of Social Darwinism than in the work of Darwin or his more direct disciples. Zaluar subscribes to the view that living sentient beings fall along a linear evolutionary continuum, and despite his expressions of interest in elevating the status of the indigenous peoples of Brazil, he clearly believes that at present they belong at the lower end of what his narrator describes as the “serie desigual da família humana” (unequal series of the human family) (310).<sup>8</sup> Reconstructed from clear assertions and assumptions throughout *O Doutor Benignus*, Zaluar’s racial hierarchy is, in ascending order: apes, the fabled “missing link,” black slaves,<sup>9</sup> Brazilian Indians, members of the great indigenous civilizations such as the Inca, free men of Brazil, Northern Europeans / North Americans / enlightened Brazilian elites, scientists, and finally, beings on other orbs who have evolved beyond humanity and beyond material form.

Zaluar does believe in the possibility of moving up in this hierarchy through education and the subsequent passing on of acquired traits to one’s descendants. The location by Fronville of the evolutionary past in the interior of Brazil, therefore, complements as well as contrasts with Benignus’s search for the evolutionary future there. After carrying out his observations of sunspots and reviewing the supporting scientific authorities, Doctor Benignus is more convinced than ever that there is life on the sun. When a meteorite lands near the expedition’s camp during their travels in the province of Goiás, Benignus falls asleep atop it, and a luminous being appears to him. This Sun Being tells Benignus that he has deigned to visit such an insignificant world as Earth due to Benignus’s “impaciência de saber, tão rara entre teus semelhantes” (thirst for knowledge, so rare among your fellows) (293), and he lauds and encourages Benignus’s efforts to make this knowledge accessible to others, declaring:

Entre os meios eficazes de elevar o homem teu semelhante ao seu aperfeiçoamento espiritual, que é também moralmente o seu ponto objectivo, consiste o principal na fecunda e nobre missão de que te encarregaste, isto é, vulgarizar os resultados da ciência e fazer subir por esse meio o nível intelectual do povo. (295)

Among the efficacious means of elevating man, your fellow creature, to his spiritual perfection, which is also morally his objective goal, lies the principle of the fruitful and noble mission that you have taken upon yourself, that is, to popularize scientific issues and by that means to raise the intellectual level of the people.

The Sun Being further recognizes Benignus as “o símbolo da aliança e da fraternização das nações civilizadas na parte do continente americano” (the symbol of the alliance and the fraternization of the civilized nations on the American continent) (295). The ultimate objective, then, is the evolution of the entire human race, but Benignus’s immediate mission is to raise the evolutionary level of Brazil by spreading the gospel of science with himself serving as a link between a multitemporal Brazil and the more future-oriented, evolved, “civilized” (Europeanized, westernized, modernized) nations of the world.

Zaluar causes Benignus’s mission to be reaffirmed at the other end of the sentient section of his evolutionary scale as well. When the expedition reaches the Ilha do Bananal to rescue the British anthropologist, William River, Chief Koinaman of the *Carajá* tribe tells Dr. Benignus that they have kept River a prisoner in order to learn from him, declaring: “Sou o primeiro em reconhecer a sua superioridade sobre nós” (I am the first to recognize his superiority over us.) (317). Here, in the heart of the Brazilian darkness, Dr. Benignus decides to establish a utopian settlement to be led by the Brazilian, French, British, and North American expeditionaries and their families. The island’s original inhabitants, the *Carajá* Indians, will be elevated from wild savages to workers on the new estates and in the new factories of this agricultural and industrial colony. The emissaries from the civilized Northern hemisphere and Brazilian coast will bring concrete advances in iron-working, industry, and agriculture, “atraindo à civilização pela santa comunhão do trabalho, as raças ainda mergulhadas na indolência e no barbarismo” (attracting the races still immersed in indolence and barbarism to civilization through the holy communion of labor) (346). Transportation and communication with the North will be improved as well, as the steamships that had formerly run between New York and Rio will now be supplanted by the Wathon-improved balloons (345–46).

Less tangible civilizing benefits will also include a work ethic, Christianity, peace with near neighbors and distant coastal authorities, and education in areas from languages to the sciences. By strong implication, the higher evolutionary status of the newcomers will also benefit the natives by example, by association, and, perhaps, by miscegenation or *branqueamento* (racial whitening). Those Latin Americans who thought of race in terms of Social Darwinism were avid proponents of “improving” the indigenous races by

intermarriage; as Doris Sommer has written, “Miscegenation was the road to racial perdition in Europe, but it was the way of redemption in Latin America, a way of annihilating difference and constructing a deeply horizontal, fraternal dream of national identity. It was a way of imagining the nation through a future history” (39). It is noteworthy in Zaluar’s case that he does not specifically discuss racial mixing. The only marriage that takes place at the end of *O Doutor Benignus* is between two Europeans residing in Brazil: the Frenchman, Fronville, and the British daughter of William River. This is most atypical for a text that purports to be a foundational fiction for Latin America, but it is likely explained by Zaluar’s belief in the possibility of intellectual and moral evolution and/or his Portuguese roots and his support for the Brazilian but Europe-looking monarchy of Pedro II. As a conservative monarchist, Zaluar did not envision an ideal future for Brazil that entailed any changes in the national political or economic power structure.

González Echevarría writes that “scientific exploration brought about the second European discovery of America, and the traveling naturalists were the new chroniclers” (11); he further discusses the ways in which “scientific discourse presumably establishes a distance between naturalists and the world they study” (107). To reframe these concepts in science fictional terms, these scientific expeditions in the New World were no longer “first contact” situations, but situations of second contact and beyond. In our fictional text, Dr. Benignus, a Europeanized member of the Brazilian upper class, brings about a second or final subduing of the indigenous population that is less violent than the first but just as colonial. Benignus uses the distancing, or estranging, lens of science to analyze his own nation; and this scientific viewpoint allows him to envision—and bring about—the solution for pulling the backward Brazilian interior out of the past and into not only the present, but the future.<sup>10</sup> Although Zaluar may locate the future in Brazil, he does not represent it as belonging to Brazil alone. Zaluar’s future must be achieved in partnership with North America and Northern Europe, and it can only be accomplished once the barbaric aspects of the Brazilian past have completed their transformation.

### **From *Beagle* to Hound: The Passing of the Torch**

Eduardo Ladislao Holmberg was a medical doctor by training, a naturalist by vocation, and by profession an educator, an expeditionary to Argentina’s remotest provinces, a translator, the writer or editor of countless scientific and literary works. He was a member of the third generation of one of Argentina’s leading families. His grandfather, Eduardo Kannitz, Baron of Holmberg, had left Europe in 1812 to fight alongside San Martín in Argentina’s wars for independence; his father, don Eduardo Holmberg y Abalbastro, fought with

Lavalle's armies and subsequently accompanied Sarmiento into temporary exile in Chile. Our Eduardo Holmberg followed the family tradition of taking part in national life by working at the "nobles tareas civilizadoras que el país iba a emprender una vez zanjadas las dificultades de su organización" (noble civilizing projects that the country would undertake once the difficulties of its own organization were surmounted) (Pagés Larraya 10).

These "civilizing projects" took several forms. In politics Holmberg supported a democratic system, a "República gobernada por el saber" (Republic governed by knowledge) ruled by an educated but permeable "minoría selecta" (select minority) (Luis Holmberg 104). As a naturalist Holmberg was responsible for collecting and categorizing samples of Argentine flora and fauna as part of the scientific inventory process of the fledgling Republic of Argentina. These activities also formed part of the nineteenth-century transition of Argentina from "source of raw scientific data" (as it was of raw materials), which was sent to Europe for analysis and processing, to "producer of knowledge" (Rodríguez 29). As Rodríguez elaborates:

The first science in Argentina had been colonial in its methods and purposes. Specimens gathered had been sent to Europe for inspection and classification. Diseases were fought with the goal of protecting the European colonists. But now, decades later, the flow of information was in the other direction: scientists focused on the needs of the nascent nation, though they were still dependent largely on European theories and models. (30)

In his own life, then, Holmberg was an active participant in a process that seemed destined to reverse or at least alter the polarity of Europe-science-future and Argentina-raw data-past.

In his capacity as a scientist and a professor of science Holmberg founded scientific journals, participated in Argentina's first scientific societies, produced scientific textbooks, and taught virtually every branch of known science to the nation's future teachers. Holmberg's strong desire to popularize the sciences was founded in a belief, similar to that of Zaluar, in the connection between scientific knowledge and national progress, in the use of education to move from the past into the future.<sup>11</sup> As Holmberg and Enrique Lynch Arribálzaga wrote in 1878 in the first issue of their monthly scientific magazine, *El naturalista argentino* (*The Argentine Naturalist*):

Hemos creído prestar al país un servicio [...] porque las ciencias naturales, las ciencias de observación, deben considerarse como el fundamento del progreso moderno. (qtd. in Luis Holmberg 67)

We have thought to render a service to the nation [...] because the natural sciences, the sciences of observation, should be considered the foundation of modern progress.

One of Holmberg's primary motivations in writing science fictional texts stemmed from these didactic purposes. Among his literary role models he cites Flammarión, Figuier, Mayne Reid (or Reid), and Jules Verne. Holmberg is most voluble in his praise for Verne, in particular for the Frenchman's gift for contributing to the scientific education of his readers by making science more understandable and more palatable: "[Verne,] con una imaginación poderosa ha revestido los arcanos de la ciencia con un manto vaporoso y lleno de atractivos" ([Verne,] with his powerful imagination, has sheathed the mysteries of science with a vaporous mantle that is full of attractions) (Holmberg 70).<sup>12</sup> In recent years Holmberg is finally being acknowledged as the founding father of Argentine science fiction, with a legacy that extends to Leopoldo Lugones (1874–1938) and Horacio Quiroga (1878–1937), and through them to the likes of Jorge Luis Borges (1899–1986) and Adolfo Bioy Casares (1914–99).

Although he was also a pioneering writer of fantastic literature in Argentina and maintained a lively interest in the less canonical sciences, Holmberg's world view and belief system were most heavily informed by and constructed upon the sciences that were empirical in nature. He was not a Social Darwinist (Ortiz 113) but was a strong proponent of the theory of evolution on Darwin's terms. Holmberg was not, however, the first Argentine to show interest in Darwin's ideas. In 1868 Sarmiento had written: "La teoría de Darwin es argentina y me propongo nacionalizarla por Burmeister" (Darwin's theory is Argentine, and I propose to nationalize it via Burmeister) (qtd. in Marín 13).<sup>13</sup> During his presidency (1868–74), Sarmiento brought a number of European scientists to Argentina as part of his campaign to improve the national education system and to raise the level of scientific knowledge and production in the nation. At the head of this group was Carlos Germán Conrado [Karl Hermann Konrad] Burmeister (1807–92), the respected German scientist, but unfortunately for Sarmiento's plans, the specially imported Burmeister was an ardent Creationist.<sup>14</sup> It thus fell to home-grown scientists such as Holmberg to propagate Darwin's revolutionary theories among the general Argentine public. As the History of Science professor, Marcelo Montserrat, tells us:

No es extraño que el darwinismo golpeará entonces las puertas de una República ávida de novedades; lo insólito reside en que la primera profesión pública del credo darwinista fuese a través de una obra de ficción escrita por un estudiante de medicina de veintidós años. (25)

It is not strange for Darwinism to knock on the doors of a Republic avid for the latest novelties at that time; what is unusual is for the first public profession of the Darwinist credo to be expressed through a work of fiction written by a twenty-two-year-old medical student.

This work of fiction was the novel *Dos partidos en lucha*.

In the outer frame of *Dos partidos*, dated December 1874, a fictionalized Eduardo Ladislao Holmberg explains that the “autor verdadero del juguete literario” (true author of the literary diversion), that is, the manuscript of *Dos partidos*, is his friend Ladislao Kaillitz, the Darwinist (Holmberg, page prior to 1 [“Dos Palabras”]). The Holmberg-narrator claims that Kaillitz had entrusted him with the pages of *Dos partidos* before setting out across the Atlantic for parts unknown in September of that same year. Kaillitz’s first-person tale contains two geographical journeys through time, the first within Argentina itself, the second from Europe to Argentina.

The semiautobiographical Kaillitz makes the first of these geographic-temporal journeys. As a young student in 1872 he travels south from Buenos Aires to Río Negro, a region associated in the Argentina of the time with the “barbaric” and backward past. This trip echoes the southern journey made by Holmberg-the-author that same year,<sup>15</sup> and, more significantly, it is a recreation of the young Charles Darwin’s original journey to Latin America aboard the *Beagle* in the 1830s. During the trip, Kaillitz and his party come across the vestiges of one of the camps of the Darwin expedition. The ship’s captain, who had served on the *Beagle* while Darwin was aboard, is inspired to teach Kaillitz the basic tenets of the theory of evolution. So it is that on this voyage Kaillitz retraces the English scientist’s learning process of forty years earlier, and he takes the first steps toward becoming a leading Argentine Darwinist.

The central events of Kaillitz’s narrative are two fictional debates that take place in Buenos Aires in 1874 between Evolutionists and Creationists.<sup>16</sup> The Argentine Darwinista faction is led by Kaillitz’s new mentor, Pascasio Griffritz. Griffritz is yet another semiautobiographical character, but one with ten more years of seniority and of scientific credentials than our young author.<sup>17</sup> The local faction of the Creationists is represented by Francisco P. Paleolitez and Juan Estaca. Although on the one hand Paleolitez’s evocative name consigns him to the prehistoric strata of scientific thought, his name is also likely an allusion to the scientist Francisco Pascasio Moreno, a disciple of Burmeister and an adversary respected by Holmberg (Montserrat 27n18). Burmeister himself is not a principal actor in the story, but his name is invoked as the major authority behind the Creationists. Estaca exemplifies the brand of Creationist that Holmberg does not respect; the superficial nature of Estaca’s scientific understanding is evidenced by his recitation at every opportunity of a memorized list of 323 Latin names of botanical species in lieu of a reasoned argument.

The second geographical journey through time in the novel is set up by the real political subtext behind the fictional debates.<sup>18</sup> Nicolás Avellaneda had won the recent Argentine presidential elections of February 1874, but he was not inaugurated until October of that year. The intervening months, which encompass both of Holmberg's debates, saw the revolt of the forces of the losing candidate, Bartolomé Mitre, and the ensuing national unrest did not subside completely until December. Holmberg's "dos partidos" (two parties, or two factions) are political as well as scientific, and just as Holmberg sought to use his text to bring the Creationists among his reading public over to the Darwinist camp, so he used the text as a vehicle for the condemnation of political violence and the affirmation of the recently won national unity, saying: "Los colores de los partidos políticos se habían fundido en el celeste y blanco de la unidad nacional despues de resolverse las luchas electorales con el casi nombramiento del nuevo presidente de la República" (The colors of the political parties had merged in the blue and white of national unity after the electoral battles had been resolved with the almost-naming of the new president of the Republic) (11).

Argentina's ability to achieve political stability and to debate the latest scientific issues of the day are touted in *Dos partidos* as evidence that the nation was prepared to take a more prominent place on the world stage, to be a locus for the future. As a debate organizer tells the Argentine public gathered in the Plaza Victoria: "Ha llegado por fin el momento, largo tiempo esperado por todos nosotros, de que enseñemos á la Europa y al mundo que sabemos mantener el equilibrio universal con la paz de que gozamos y con la ilustracion que nos legaron nuestros antepasados" (The moment, long awaited by all of us, has finally arrived for us to show Europe and the world that we know how to maintain universal equilibrium with the peace that we enjoy and with the enlightenment that our ancestors bequeathed us) (14). This same quotation is also evidence, however, that Holmberg's Argentina has not completely broken free of its colonial relationship with Europe. Simply declaring the end of Argentine dependency is not enough; Argentina must prove her worth in the eyes of Europe, and the legitimacy of her new status requires recognition by the other nineteenth-century powers-that-be. The continuing primacy of European scientific theories and models in Argentina in the nineteenth century, described above by Rodríguez, is additionally embodied in Holmberg's characters and in the authorities he cites: all of Holmberg's acknowledged scientific—and literary—models are European, and all of his scientists (except the false scientist, Estaca) are given European ancestry and surnames.

The true ambiguity of the location of the future in the text is at its height in the second of the scientific debates. After the Darwinists do fairly well in the first debate in Buenos Aires but fail to convince the Creationists of the superiority of their way of thinking, Holmberg extrapolates a second journey

to Argentina by an aging Darwin. Darwin had landed on Argentine shores once already as part of the voyage on the HMS *Beagle*, during which he had gathered crucial data for the formulation of his theory of evolution; why not then return—this time aboard the HMS *Hound*—to defend that theory? If Holmberg feels he needs Darwin's authority and recognition for Argentina to be admitted to candidacy for status as a progressive scientific nation, he refuses to acknowledge the debt; as his narrator declares: "No solamente no les debemos nada [a los ingleses], sino que no queremos deberles" (Not only do we owe [the English] nothing, we do not want to owe them anything) (90). The narrator's brash assertion is further undermined, however, when Holmberg proceeds to make full use of his purloined Englishman as a voucher of scientific legitimacy to and for the Argentine people.

Still, this second trip by Darwin to Argentina does not prove to be a repetition of his earlier voyage, for the temporal currents have been reversed. Upon his arrival in Buenos Aires, the fictionalized older Darwin proceeds to give his blessing to the Argentine Republic in the person of its president-elect, saying: "Permitidme aprovechar esta gloriosa oportunidad para desearos todas las bendiciones que un anciano puede anhelar para el próximo gobierno del joven Presidente electo de la República Argentina" (Permit me to take advantage of this glorious opportunity to wish you all the blessings to which an old man can aspire for the next government of the young President-elect of the Argentine Republic) (113). With this benediction, Holmberg presents the passing of the torch from Europe to the New World—and specifically to Argentina under this stable and progressive political leadership—as the new locus for cutting-edge scientific research, discovery, and debate.

During the second debate Holmberg's Darwin completes the relocation of the future to Argentina and the relegation of Old World Europe to the past. He defers to the Argentine scientist, Griffritz, to speak for the Evolutionists saying, "El Sr. Griffritz manifestará las opiniones de él que son mas adelantadas y atrevidas que las mias" (Mr. Griffritz will make known his opinions, which are more advanced and daring than my own) (133). This symbolic handoff is later verbalized by Griffritz toward the end of the debate as he declares the transfer to be part of a Hegelian natural progression: "La evolucion de la sociedad humana siguió su curso progresivo de Oriente á Occidente [...]. Y si es verdad que durante muchos siglos la ilustracion ha estado encadenada á la Europa, no lo es menos que en la América se presienten ya los albores del Imperio del mundo" (The evolution of human society followed its progressive course from the Orient to the Occident [...]. And if it is true that for many centuries the Enlightenment has been linked to Europe, the dawn of the world Empire is already being divined in none other than America) (136). In a further extrapolation by Holmberg, *Dos partidos en lucha* culminates with evidence of the new scientific primacy of Argentina, as the Argentine scientists

provide tangible physiological proof to the Creationists and the world that the Akka, or African pygmy, they have discovered is the elusive missing link, a definitive proof of Darwin's theory of evolution.<sup>19</sup>

Once Kaillitz has put "Fin" (The End) to his account, the Holmberg-narrator returns to contribute an appendix to *Dos partidos en lucha*, entitled "Los Akkas: Raza pigmea del Africa central" ("The Akkas: A Pigmy Race of Central Africa"). This appendix is a real translation (by Holmberg-the-author) of a real article (by respected French anthropologist Paul Broca) about the real scientific issue of the day: the place of the pygmy, or Akka, in human evolution.<sup>20</sup> The fictional Holmberg-narrator declares that "Este artículo [...] explica con sobrada elocuencia las presunciones del Sr. Kaillitz" (This article [...] more than eloquently explains the suppositions of Mr. Kaillitz); however, the Holmberg-narrator adds:

No necesita ser leído como parte integrante de los *Dos partidos en lucha*, sino solamente por aquellos que deséen ilustrarse un tanto sobre uno de los hechos antropológicos mas importantes del siglo XIX, si no de la época moderna. [firma] Holmberg. (140)

It does not need to be read as an integral part of *Dos partidos en lucha*, but rather only by those who desire to illuminate themselves somewhat about one of the most important anthropological events of the nineteenth century, if not of the modern age. [Signed] Holmberg.

In addition to the linking of a fictional character like Kaillitz by a fictionalized author to his real-and-now-fictionalized translation, the contents of the article also seem to undo the vision of the utopian Argentine nation that has begun to emerge by the end of Kaillitz's narration, because the article reveals that the Akkas have not yet been proven to be Darwin's "missing link" to the satisfaction of the scientific community. The end result of this interplay of the real, the fictionalized, and the imaginary in the appendix, however, mirrors that in the novel as a whole. The real article partially undoes the extrapolated fictional finale, but by showing that real scientists were positing that the Akkas were the missing link, Holmberg-the-author and the other fictional facets of himself are vindicated in their defense of Darwinism and, by association, in their dreams for Argentina's future. Holmberg's journey toward a geographical relocation of the future is complete.

For these two nineteenth-century Latin America writers, the geography of the past—whether it is represented as lying in a "barbaric" interior or in national scientific backwardness—was not invulnerable to change. While Zaluar manages a science fictional relocation of a utopian future to Brazil, this relocation is only possible—or desirable—in open partnership with Europe

and the US. Holmberg attempts to wrest ownership of the location of the future from Northern hands, yet he too requires—even fictional—European aid to do so. By burro or by *Beagle*, these tales represent some of the early steps by Latin America and Latin American science fiction toward a claim on the geography of the future.

[I presented an earlier version of this paper at the 28th International Conference on the Fantastic in the Arts. I would like to thank my fellow panelists and the audience members, as well as my colleague Kevin Amidon, for fruitful discussions that have contributed to this essay.]

### Notes

<sup>1</sup> I would argue that there are geographic locations in Europe with strong temporal connotations, especially to the past, yet I agree that this is not so in the historically distinctive way of the US.

<sup>2</sup> This is a useful generalization, although the diversity among Latin American nations precludes it from being universally applicable.

<sup>3</sup> See the “Chronology of Latin American Science Fiction, 1775–2005” by Molina-Gavilán et al. for examples of early Latin American works of space and time travel and for the most complete listing of titles of Latin American sf available. See also my “The First Wave: Latin American Science Fiction Discovers Its Roots” for a discussion of three early examples of Latin American time and space travel narratives.

<sup>4</sup> All translations of quotations in this paper are my own. No quotation marks are used in these translations, and they are indicated by the use of parentheses, except in block text. The orthography and accents in Holmberg’s Spanish are taken from the original 1875 edition of *Dos partidos*; Zaluar’s Portuguese has been modernized in part by the editors of the 1994 edition of *Doutor Benignus*.

<sup>5</sup> Zaluar’s evolutionism, as has been discussed above, drank from a range of sources from the eighteenth century through Darwin and his early disciples and extrapolators, and it was heavily tinged by Zaluar’s Christian beliefs (for the most specific references to terrestrial evolution in *Doutor Benignus* see 202 and 278–82).

<sup>6</sup> For a comparison of the image of the western frontiers in Brazil and the US see Ginway 23; see Burns for an overview of the city versus countryside (civilization versus barbarism) debate in Latin America.

<sup>7</sup> *O Doutor Benignus* is not the first or the last literary text to locate examples of earlier stages of evolved animal and human life in the Brazilian interior. One Northern example that was well known in Latin America was Sir Arthur Conan Doyle’s novel *The Lost World* (1912). The expedition of Conan Doyle’s Professor Challenger also finds the trappings of the “civilised world” on the Brazilian coast at Pará in the North (196). In contrast, in the interior—in one of those white spaces on the map in

the heart of the Brazilian Amazon, amid areas with labels such as “unexplored,” “woods,” “morass,” and “many snakes and tarantulas” on the crude, hand-drawn map included in the novel—Challenger locates living evidence of the past: both dinosaurs and Darwin’s missing link in the form of the ape-men (82). This text was translated into Spanish by our other author, Eduardo Ladislao Holmberg.

<sup>8</sup> For more on erroneous conceptions of a linear evolutionary continuum and racial implications thereof, see Eiseley 259–79.

<sup>9</sup> Although Zaluar was in favor of the abolition of slavery, he includes virtually no mention of the influence of Africa on the formation of Brazil in this text. The location of blacks in Zaluar’s racial hierarchy is based on the following passage: “Hoje está provado que há menos diferença entre um chimpanzé e um negro do lago Alberto, que entre este e Newton ou Kepler” (There is proof today that less difference exists between a chimpanzee and a negro from Lake Albert than between the latter and Newton or Kepler) (Zaluar 36). Whereas the Indian was seen as a symbol of Brazilian-ness, of what differentiated Brazil from Europe and made it unique, and was thus to be integrated into Brazilian society, the African slaves were considered foreigners, and they were often left out of nineteenth-century Brazilian attempts at constructing a national history (Bertol Domingues and Romero Sá 84).

<sup>10</sup> There are a number of commonalities between Zaluar’s plan and the relocation of the Brazilian capital from Rio de Janeiro to the planned city of Brasília almost a century later. The joint venture with Northern nations portrayed in *Doutor Benignus* is not one of them.

<sup>11</sup> Unlike Zaluar, Holmberg was not a religious man, though the Catholic religion was part of his upbringing and he respected the beliefs of others. Further direct evidence of divergence between Zaluar and Holmberg on the relationship between religion and science can be found in their opposite reactions to John William Draper’s popular *History of the Conflict between Religion and Science* (1874). Where Zaluar lauded what he interprets—and slightly misquotes—as Draper’s advocacy for “uma literatura grave e austera, a que os interesses da Igreja em perigo comunicarão a paixão e a força” (“a weighty and austere literature, to which the endangered interests of the Church will communicate passion and power”) (29), Holmberg “negó [...] en su casi totalidad, del libro de Draper” (denied [...] Draper’s book, virtually in its totality) (Luis Holmberg 117).

<sup>12</sup> It should be noted that Holmberg’s oft-expressed admiration for Verne was due to Verne’s role as a successful popularizer of science, not necessarily to Verne’s specific interpretations of scientific theories of the day. Where Verne was an opponent of Darwinian evolution, Holmberg was one of its staunchest defenders.

<sup>13</sup> Marún quotes a quotation of Domingo F. Sarmiento’s diary entry of 12 August 1868 (qtd. in Alberto Palcos, “Darwin, Sarmiento y Holmberg,” *La Prensa* 25 Feb. 1945).

<sup>14</sup> Burmeister was to become a supporter of Darwin’s ideas on evolution in 1889, shortly before his death (Montserrat 23).

<sup>15</sup> Holmberg took part in this first scientific expedition at the age of twenty under the aegis of the Sociedad Científica Argentina (Argentine Scientific Society). At that

time Río Negro, Patagonia, was part of a relatively unknown area of the southern lands that were still Indian territory and would only be physically claimed for the Argentine state seven years later as a result of Roca's *Conquista del desierto* (Conquest of the Wilderness). Among Holmberg's other expeditions, sponsored by the Argentine government and by various scientific societies, were those to the northern provinces (1877); the Curá-Malal mountains (1883); Paraná, Santa Fe, and Misiones (1884–86); Chaco (1885); and Uruguay (1890).

<sup>16</sup> The concept of the scientific debate as a forum for proponents of these two viewpoints was not original to Holmberg, as these debates are surely modeled after the 1860 debate between the Darwinist T. H. Huxley and the Creationist Bishop Samuel Wilberforce.

<sup>17</sup> Throughout the work Holmberg plays with his characters' names, using them to typify the characters themselves and/or to allude to his contemporaries whom they represented in whole or in part (for more on this see Montserrat 27n18). Holmberg multiplies his own scientific authority and authorial voice via his creation of multiple semiautobiographical characters in a number of his literary texts. For a discussion of the Kaillitz-Griffritz example of this in *Dos partidos*, see Dellepiane 474. For an expansion of this discussion to include the Holmberg-narrator, see Haywood Ferreira, "The Emergence of Latin American Science Fiction" 40–45, 58–59.

<sup>18</sup> The political content of *Dos partidos* attracted attention from Holmberg's contemporaries. Just after its publication, the author and critic Miguel Cané (1851–1905) criticized Holmberg's choice of temporal setting as too close for comfort to "los recuerdos vivos del sacudimiento violento que ha agitado la república" (the vivid memories of the violent upheaval which has agitated the republic) (141).

<sup>19</sup> The process of locating and confirming the status of the missing link in *Dos partidos* involves a third geographic-temporal journey in the tale, that of Argentine expeditionaries in the employ of Griffritz to Africa, the place of humanity's origins, and their return with the Akka to Buenos Aires.

<sup>20</sup> Holmberg's use of the Akka, a living missing link, as proof of Darwin's theory of evolution should not be misinterpreted as proof that the Argentine author and scientist espoused a theology-driven evolutionism which rejected natural selection. Rather, it is evidence that Holmberg was not immune to repeating the errors of other over-zealous Darwinists who placed existing peoples "on the time scale of the fossil past" (Eiseley 277). Darwin himself used a "living taxonomic ladder" to a certain extent in formulating his hypotheses (Eiseley 288).

### Works Cited

- Arquivo de Efemérides. "2 de dezembro de 1857." 30 Nov. 2002. Instituto Histórico de Petrópolis. 30 May 2003  
<<http://www.ihp.org.br/docs/efem%C3%A9rides1220021130.htm>>.

- Bertol Domingues, Heloisa Maria, and Magali Romero Sá. "La introducción del Darwinismo en Brasil: Las controversias de su introducción." *El Darwinismo en España e Iberoamérica*. Ed. Thomas F. Glick, Rosaura Ruiz, and Miguel Angel Puig-Samper. Mexico: Universidad Nacional Autónoma de México, 1999. 83–102.
- Burns, E. Bradford. "Cultures in Conflict: The Implication of Modernization in Nineteenth-Century Latin America." *Elites, Masses, and Modernization in Latin America, 1850-1930*. Ed. Virginia Bernhard. Austin: U of Texas P, 1979. 11–77.
- Cané, Miguel. "Dos partidos en lucha (Fantasía científica) por Eduardo L. Holmberg." *Ensayos*. 1875. Buenos Aires: Sopena, 1940. 140–44.
- Carvalho, José Murilo de. "Prefácio: Benigna ciência." *O Doutor Benignus*. By Augusto Emílio Zaluar. 1875. 2nd ed. Rio de Janeiro: UFRJ, 1994. 7–11.
- Conan Doyle, Arthur. *The Lost World*. 1912. Chicago: Academy, 1990.
- Dellepiane, Angela B. "Ciencia y literatura en un texto de Eduardo L. Holmberg." *Homenaje a Alfredo A. Roggiano: En este aire de América*. Ed. Keith McDuffie and Rose S. Minc. Pittsburgh: Instituto Internacional de Literatura Iberoamericana, 1990. 457–76.
- Eiseley, Loren. *Darwin's Century: Evolution and the Men Who Discovered It*. Garden City: Doubleday, 1958.
- Foote, Bud. *The Connecticut Yankee in the Twentieth Century: Travel to the Past in Science Fiction*. New York: Greenwood, 1991.
- Ginway, M. Elizabeth. *Brazilian Science Fiction: Cultural Myths and Nationhood in the Land of the Future*. Lewisburg: Bucknell UP, 2004.
- González Echevarría, Roberto. *Myth and Archive: A Theory of Latin American Narrative*. 1990. Durham: Duke UP, 1998.
- Haywood Ferreira, Rachel. "The Emergence of Latin American Science Fiction: A Global Genre in the Periphery." Diss. Yale U, 2003.
- . "The First Wave: Latin American Science Fiction Discovers Its Roots." *Science Fiction Studies* 34.3 (2007): 432–62.
- Holmberg, Eduardo Ladislao. *Dos partidos en lucha: Fantasía científica*. Buenos Aires: Imprenta de El Arjentino, 1875.
- Holmberg, Luis. *Holmberg el último enciclopedista*. Buenos Aires: Colombo, 1952.
- Marún, Gioconda. "Introducción." *Olimpio Pitango de Monalia*. Ed. Gioconda Marún. Ed. príncipe. Buenos Aires: Solar, 1994. 7–69.
- Molina-Gavilán, Yolanda, Andrea Bell, Miguel Ángel Fernández Delgado, M. Elizabeth Ginway, Luis Pestarini, and Juan Carlos Toledano Redondo. "Chronology of Latin American Science Fiction, 1775–2005." *Science Fiction Studies* 34.3 (2007): 369–431.
- Montserrat, Marcelo. "La mentalidad evolucionista en la Argentina: Una ideología del progreso." *El Darwinismo en España e Iberoamérica*. Ed. Thomas F. Glick, Rosaura Ruiz and Miguel Angel Puig-Samper. Mexico City: Universidad Nacional Autónoma de México, 1999. 19–46.

- Ortiz, Eduardo L. "The Transmission of Science from Europe to Argentina and Its Impact on Literature: From Lugones to Borges." *Borges and Europe Revisited*. Ed. Evelyn Fishburn. London: U of London, 1998. 108–23.
- Pagés Larraya, Antonio. "Estudio preliminar." *Cuentos fantásticos*. By Eduardo Ladislao Holmberg. Buenos Aires: Librería Hachette, 1957. 7–98.
- Rodríguez, Julia. *Civilizing Argentina: Science, Medicine, and the Modern State*. Chapel Hill: U of North Carolina P, 2006.
- Sommer, Doris. *Foundational Fictions: The National Romances of Latin America*. Berkeley: U of California P, 1991.
- Zaluar, Augusto Emílio. *O Doutor Benignus*. 1875. 2nd ed. Rio de Janeiro: UFRJ, 1994.

### Abstract

This essay extends Bud Foote's theory of a link between geographical and temporal travel in Northern science fiction to include the science fiction of the Southern hemisphere. It examines two tales of marvelous overland journeys that were set in the Latin America of the day but which represented travel to the nations' natural, historical, and cultural pasts: the Brazilian Augusto Emílio Zaluar's *O Doutor Benignus* (*Doctor Benignus*) and the Argentine Eduardo Ladislao Holmberg's *Dos partidos en lucha: Fantasía científica* (*Two Factions Struggle for Life: A Scientific Fantasy*). Despite marked dissimilarities between the backgrounds and world views of their writers, these two novels share common influences and deal with themes of scientific and pseudoscientific uses of evolutionary theories, national progress through the spread of scientific knowledge, and the representation of South America as the locus for a utopian future.