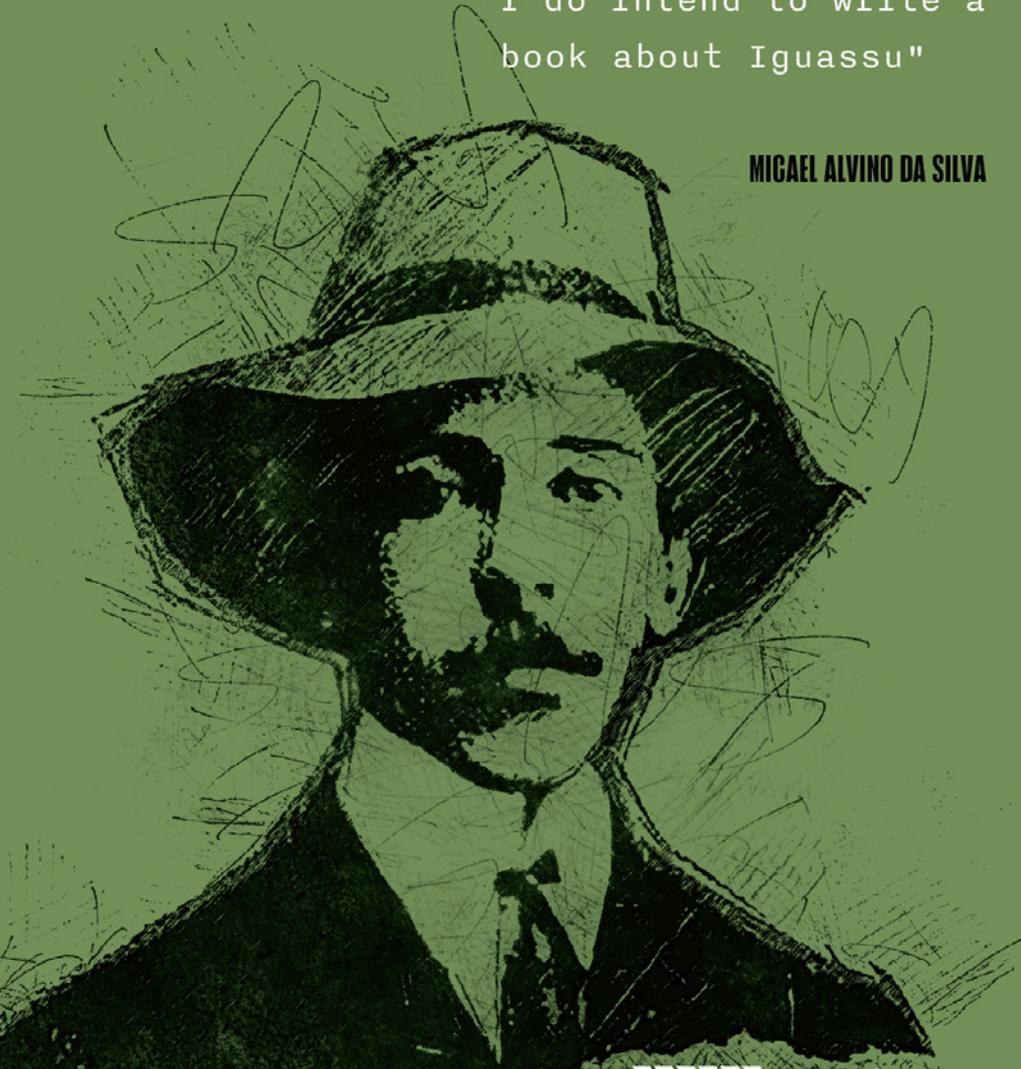


SANTOS DUMONT AT THE FALLS

"I do intend to write a
book about Iguassu"

MICHAEL ALVINO DA SILVA



SANTOS DUMONT AT THE FALLS

"I do intend to write a
book about Iguassu"

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WORDS FROM THE PUBLISHER

In "**Santos Dumont at the Falls**", Micael Alvino da Silva transports readers back to the final decades of the 19th century and the beginning of the 20th century. He provides insights into the global context and the tri-national border region when Alberto Santos Dumont visited Iguassu Falls in 1916. The book, with an engaging writing style, comprises concise essays interweaving chapters that intricately showcase every facet of the renowned aviator's journey, consistently drawing connections with the land of Naipi. The narrative begins in the former district of João Gomes in the Minas Gerais countryside and spans Paris, Niagara Falls, Chile, and Argentina, inviting readers to trace the early days of aviation worldwide.. As Brazil transitioned from an imperial era with slavery to a republican era, establishing national borders with neighboring countries, the Military Colony of Iguassu gave way to the municipality of Vila Iguassu.

Santos Dumont's extraordinary visit to the Falls is now immortalized in this book. This work fulfills the aviator's desire to write about Iguassu—a wish he could not fulfill during his lifetime. Nearly a century after his passing, EDUNILA takes great pleasure in presenting this narrative to the public.

As part of the "**Saberes**" label established by EDUNILA's new editorial policy, the book "**Santos Dumont at the Falls**"

disseminates knowledge and inaugurates the "**Coleção Fronteiriça**", a collection primarily focused on works related to the tri-national border. A region marked by ongoing disputes since M'boi's fury, the convergence of the Paraná and Iguassu rivers possesses extensive geobiophysical, cultural, political, and social wealth, proudly emphasized by the UNILA University Press in its collections.

In conclusion, EDUNILA invites readers to embark on an adventure with Santos Dumont through the intricacies of the tri-national border.

Enjoy your reading!

Foz do Iguaçu, October 2023.

WORDS FROM THE INSTITUTE

Santos Dumont's visit to the Falls should be regarded as a significant endeavor to enrich the history, culture, and local heritage. In 2009, a research project conducted by the 100fronteiras Magazine, led by historian Carlos Grellmann and journalist Jackson Lima, embarked on a journey to gather information linking Santos Dumont to his visit to Paraná.

The journalist visited public libraries in Curitiba and Posadas and engaged in conversations with various immigrants from the region. By establishing a connection with Affonso Camargo Neto, then a federal deputy and the grandson of the former governor of Paraná, Affonso Camargo, Lima obtained undeniable evidence: a photo of Santos Dumont and Camargo Neto's grandfather, taken in 1916.

This photo confirms the aviator's visit to Paraná and serves as a historical document. The original print was in the possession of the Camargo Neto family, and it was sent by mail and donated to the 100fronteiras group as a token of appreciation for our work: "It's great that you remembered to write about my grandfather," said Neto.

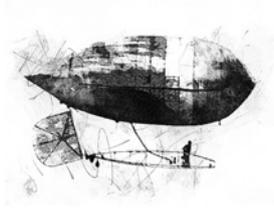
In this regard, the 100fronteiras Institute emphasizes the significance of the book "Santos Dumont at the Falls" as a reinforcement of the connection between culture and tourism in the Triple Frontier, specifically in Foz do Iguassu.

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1

La Baladeuse



On July 20, 1873, a boy named Alberto was born in a village in the interior of Minas Gerais. Belonging to the municipality of Barbacena, the former district of João Gomes – renamed Palmira after gaining political autonomy – would change its name once again on July 31, 1932. At this time, the city was renamed to honor that boy who, in his lifetime, had been its illustrious citizen: the municipality of Santos Dumont.

In his school years, Alberto encountered children's books of his time. Some were special: they suggested that men could fly like birds. The legend of Icarus was one of the narratives he would never forget. According to the legend, the boy Icarus fled with artificial wings made of bird feathers to escape from a labyrinth.

When he was 18 years-old, young Alberto Santos Dumont moved to Paris for good. Without forgetting the legend of his childhood, Dumont began to take an interest in aerial navigation, making his first balloon flight in 1897. After that, flying became his obsession. It was not just a desire satisfied with sporadic rides: the young man decided to commission his balloon from a manufacturer, giving him recommendations that would change the making of these balloons. By the early 1900s, there was no doubt that the Brazilian was one of the leading names among the most respected aviators of the time.

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Santos Dumont was unique; his most significant distinction was his desire to fly. The money that his inventions could yield did not affect him. He aimed to popularize aerial navigation because he believed it would bring people closer together. By flying, Dumont thought they could experience the freedom provided by elevation. For some, this idea was romantic and idealistic. For the aviator, it was the motivation to invent machines and make this dream a reality.

From a young age, machines fascinated Alberto. He would repair machinery and even operate a freight train on his family's farm. Interested in automobiles, the young Alberto from Minas Gerais was the first South American to drive his vehicle when he transported one of his cars from Europe to Brazil. While in France, Santos Dumont became involved into aerial navigation and improving "lighter-than-air" hydrogen balloons. His inventions were so successful that they transformed balloons into dirigibles, allowing the aviator to control the direction of these machines.

The summer of 1903 might have been one of the most enjoyable periods in Santos Dumont's life. It was the occasion of the launch of his invention number 9, a compact dirigible balloon with the concept of an "aerial car." Known as La Baladeuse, it was the realization of his dream to fly from one place to another and to ascend

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and descend at will. His excursions became a spectacle, and his presence became a common sight in the skies of Paris. Some fortunate onlookers could watch him park his balloon at a restaurant and float back home. Aboard La Baladeuse, Santos Dumont conducted the first child on a low-altitude flight. That was also the world's first airship to be operated by a woman.

The freedom Santos Dumont achieved with his dirigibles further elevated his popularity. His movements were followed by the international press, making him a celebrity in both Europe and North America. When he traveled to the United States in 1902, Thomas Edison, the famous inventor of the electric light bulb, received Dumont. The Brazilian also met President Theodore Roosevelt, with whom he had lunch at the government headquarters. Encouragement from Edison led the inventor to surpass lighter-than-air balloons with heavier-than-air machines.

At the time, there was a race to invent the first heavier-than-air machine capable of flight. Santos Dumont, when he was about to turning 30, took on the challenge. His invention, number 14-Bis, earned him international recognition in 1906 for its novelty. To this day, Santos Dumont is internationally remembered as the first aviator to pilot publicly a heavier-than-air machine. For most Brazilians, it matters little if

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other aviators, such as the Wright brothers, are mentioned. Dumont is simply known as the "father of aviation."

Since Alberto's birth in the quiet mining village in the early 1870s, the country and the world have undergone significant transformations. Brazil had just emerged from a war that would redefine South American politics and borders: the War of the Triple Alliance. Known in our country as the Paraguayan War, this was the most significant armed conflict ever set in South America. Involving Argentina, Brazil, Paraguay, and Uruguay, the war had internal consequences for all parties involved, but Paraguay, which faced the other three countries, was undoubtedly the most affected. The estimates are that Paraguay lost 40% of its territory and most of its adult population. Regions that now correspond to parts of Mato Grosso do Sul and the province of Misiones were incorporated by Brazil and Argentina, respectively.

The end of the conflict brought to light a longstanding disagreement between Brazil and Argentina dating back to the mid-19th century. The so-called "Question of Palmas" was a dispute over differing interpretations of the Treaty of

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Santo Ildefonso, signed by the colonial empires in 1777, which dealt with the establishment of geodetic landmarks and the definition of the Spain-Portugal border in South America. After the colonial empires gained independence and, particularly after the end of the War of the Triple Alliance, the dispute involving parts of the territories of Paraná and Santa Catarina was revived, with the United States acting as the arbitrator. Brazil's main argument was based on *uti possidetis*, meaning the principle of actual territorial occupation. The 1890 Census indicated that the population of the disputed territory was primarily composed of Brazilians. Of the nearly six thousand people inhabiting the region, only 300 were foreigners, with no Argentine citizens among them. In 1895, U.S. President Grover Cleveland decided in favor of Brazil.

After the peaceful resolution of this controversy, a joint Brazil-Argentina commission erected hundreds of obelisks on the border, including the pyramidal geodetic landmark called the "Marco das Três Fronteiras," built in 1903 in the then Military Colony of Foz do Iguassu. That was a crucial period for the settlements and villages around the Iguassu Falls. Navigation agreements, the introduction of steamboats, and available labor led to the extraction of yerba mate and increased human movement in the region. In a short time, the extractive activity took the form of *obrage*, a type of yerba

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mate extraction business based on labor exploitation akin to slavery – keeping in mind that slavery had been abolished in the country less than 15 years prior. While *obrages* were typically Argentine companies, their workforce was generally composed of people of Paraguayan origin.

During that time, but far away from there, the young Alberto was taking his first steps on his father's farm. Brazil was a slave-holding empire. The end of the enslavement of Black people would only occur in 1888, with the signing of the Lei Áurea (Golden Law) by Princess Isabel – following a series of uprisings that would inevitably lead to the liberation of enslaved individuals, such as the Carrancas Revolt (1833) in Minas Gerais, the Malê Revolt (1835) in Bahia, and the Cabanagem (1835-1840) in Pará, to name a few. In that same year, 1888, the Empire of Brazil decided to establish a military colony on the border with Argentina and Paraguay to secure the nation's boundaries, which would only take place the following year, now under the auspices of the Republic.

In 1889, a political-military coup dismissed the emperor and established a Presidential Republic. Despite the name given to this historical event, the "Proclamation of the Republic," the beginning of the republican era, was turbulent, especially in military circles. Terms like the "Republic of the Swords"

and the "Armada Revolt" illustrate the conflicts of that time. The "Republic of the Swords" corresponds to the period from 1889 to 1894 and was characterized by the authoritarian rule of the first two military presidents, Deodoro da Fonseca and Floriano Peixoto. The "Armada Revolt" consisted of an uprising by the Brazilian Navy against the developments of the new republican politics, with violent episodes occurring in 1891 and 1893-1894. On one side of the conflict was the government of Brazil, supported by the United States, and on the other side, a group of sailors, including some monarchists.

Despite the monarchist influence in the conflict, there was no more room for the Brazilian royal family. In 1889, Princess Isabel, the heir to the throne, was forcibly exiled to France, where, in the following decade, she would hear much about the young Santos Dumont, also a migrant from the same country in 1891. There are reports that they met at least once. In 1901, the aviator had an accident on a property near Isabel's residence, and she reportedly ordered her staff to assist the injured aviator.

After receiving help, Dumont received the invitation to have tea with the princess. During the occasion, Isabel allegedly presented Alberto with a medal of Saint Benedict, an appropriate symbolism, as any protection was welcome in the world of aviation, which is full of accidents.

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The exiled daughter of D. Pedro II and the wealthy and promising young man were not in France by chance. From the turn of the 19th century to the 20th century, the country represented a synthesis of human progress. The 1900 Universal Exposition in Paris goal was to mark a supposed golden age. Desiring to be a cultural model to the world, France was experiencing years of relative political stability after the consolidation of the Republic, which enjoyed popular and economic support.

Like other wealthy young men of his time, Santos Dumont lived through part of this Parisian cycle known as the *Belle Époque*. It was an environment of cosmopolitan culture and intellectual and artistic effervescence conducive to the inventiveness and experiments of the future Brazilian aviator. Among the cabarets, the cancan, the newly created cinema, the fleeting brushstrokes of Impressionism, and the delicacy of Art Nouveau, Santos Dumont conceived his numerous airships, gliders, and even a helicopter. In front of an audience of about two thousand people on the afternoon of October 23, 1906, his invention 14-Bis covered 60 meters in seven seconds, flying two meters above the ground. His achievement received public acknowledgement the Official Commission of the Aero Club of France, which declared Santos Dumont as the first person in the world to fly in public with a heavier-than-air airplane!

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Without exaggeration, someone can say that the France of the *Belle Époque* surrendered to "Santô's," as Dumont became a household name. At that time, recognition from the Aero Club of France was equivalent to global recognition. That would be disputed later when the Wright brothers presented documents proving that the flight of a heavier-than-air airplane had occurred for the first time on the East Coast of the United States and not in Paris. That was just one of the disputes between France and the United States. Even before it existed, in the 1890s and the early 1900s, Santos Dumont made several trips to the former British colony, not failing to be impressed, and equally disappointed, with the United States.

There were many reasons for Santos Dumont to travel from Europe to North America. The main one was to explore the atmosphere of innovation on the other side of the Atlantic. Some evidence indicates that Dumont's first trip to the United States may have occurred in 1894. At that occasion, the Brazilian might have visited New York, Chicago, and Boston. Six years later, in 1902, Dumont had lunch with Roosevelt at the White House. Although there was no direct correlation, that same year, Baron of Rio Branco assumed the position of Brazil's Minister of Foreign Affairs, and he promoted, as a priority of Brazilian foreign policy, a transition from Europe to the United States.

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Theodore Roosevelt was known for his imperialist foreign policy towards Central and Caribbean America. It was during his administration that the U.S. Department of State began to have doubts about South America. There was a current of thought in U.S. foreign policy that tended to separate Brazil, Argentina, and Chile from the other countries, as they were considered unique, bearing a particular seed that could germinate and make them economically developed nations. These international relations ideas reflected a movement that began in 1889, known as Pan-Americanism, giving rise, six decades later, to the Organization of American States (OAS) in 1948.

It would be far-fetched to imagine that Santos Dumont discussed these matters with Theodore Roosevelt. His concerns were different. However, this environment undoubtedly influenced his thinking about the future of aviation in the Americas. At the turn of the century, Santos Dumont and his Parisian and American friends could perhaps have some idea of international disputes, but the world seemed to be all set for them. Contrary to the romantic expectations of a future of lasting peace and the development of science, arts, and aviation, war erupted in Europe.

The assassination of the heir to the Austro-Hungarian throne,

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Archduke Franz Ferdinand, in June 1914, was the spark in the powder keg of Eastern Europe. In the region, imperial powers were disputing territories in Africa and Asia – tensions that had been growing since 1885 Berlin Conference. The regicide was the trigger that shook the fragile system of alliances and pacts among European powers, leading to a conflict that spread rapidly. It was in August 1914 that France was invaded by the troops of the German Empire, marking the beginning of World War I.

A new element entered the battle strategy: airplanes. Once they were mere entertainment, but now they become war machines. Initially, they served for observing enemy troops and later for aerial bombardments. In several ways, the events of that period deeply affected Santos Dumont. Besides the war, health problems had debilitated him. In 1915, Dumont decided to return to Brazil. With Europe at war, his interests turned to aviation in the Americas.

Around that time, just before the outbreak of war in Europe, what remained of the Military Colony of Foz do Iguassu was transformed into a district and, later, into Vila Iguassu. On June 10, 1914, the institutional history of the municipality around the Iguassu Falls began. The city started its public and administrative life with few resources but many ideas to

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develop tourism. The first mayor did not yet know that the world's first aviator was about to visit the new city.

* * *

On a fresh afternoon in April 1916, Alberto Santos Dumont became acquainted with the Iguassu Falls, even though he had never flown over them. There are numerous accounts of his visit to Argentina and the Brazilian side of the Falls. Little is known about the circumstances that brought Santos Dumont to this region. However, after spending two days exploring the Iguassu River Falls, the aviator set in motion a plan to persuade the governor of Paraná to encourage still incipient tourism at the Falls. This book aims to contextualize these events.

Santos Dumont's first connection to the Iguassu Falls was likely made by the traveler Domingos Nascimento long before the aviator visited the region. In 1903, when La Baladeuse was crossing the skies of Paris, Nascimento visited the Iguassu Falls and suggested that Dumont fly over them to provide an aerial view. Following the traveler's advice, another option was to construct an elevator, adopting a visitation model like what was supposedly present at Niagara Falls, the waterfall separating the United States and Canada.

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In that year, Domingos Nascimento could not have foreseen three forthcoming events: first, that Santos Dumont would fly the 14-Bis, the invention that would make him famous in the world of aviation; second, that he would indeed visit the Iguassu Falls; and third, that influenced by Niagara Falls, the aviator would take the initial steps to create one of the first national parks in Brazil.

Many stories and research have been conducted about Santos Dumont. However, few unravel the thread to comprehend why Santos Dumont was at the Iguassu Falls in 1916. The most obvious explanation is that the inventor wanted to explore the waterfalls. But how and when he learned of the Iguassu Falls remains an unanswered question. It is possible that his first contact with Iguassu happened at the Universal Exhibition in Paris in 1900. According to Florêncio de Balsadúa (1901), Argentina presented a considerable exhibition of the Misiones territory and the Iguassu Falls at the event. Santos Dumont was in Paris at that time because of an *International Congress of Aeronauts*.

Furthermore, years later, in 1912, the famous Cook agency began promoting tours from Buenos Aires to the Iguassu Falls. Santos Dumont may have seen some of this tourism advertising during his visit to the capital of Argentina in 1916. If we accept this hypothesis, another question arises: what

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led Dumont to Buenos Aires? The answer is that the inventor was in transit – he was traveling to Rio de Janeiro after leaving Chile, where he had represented the Aeroclub of the United States. We must understand the motivations behind Dumont's visit to Santiago, Chile, in the early months of the year. The explanation is quite surprising. Following the conclusion of his career as an aviator (his last flight took place in 1910), grappling with a severe illness, and facing work restrictions in Europe because of World War I, Santos Dumont transitioned into an advocate for aviation in the Americas.

In Chile, he represented a federation of aeroclubs from the United States to establish rules for civil aviation in the Americas. He planned to put thousands of aircraft into circulation from north to south of the continent, transporting people and goods across the skies of the Americas. My central argument in this book is that Santos Dumont temporarily interrupted this mega-plan to engage in a dialogue with the governor of Paraná regarding promoting tourism around the Iguassu Falls. The historical sources I have analyzed suggest that Dumont conceived this plan based on his experience at Niagara Falls.

Bear in mind that in 1872, the world's first national park was created: Yellowstone in the United States. This model for environmental conservation was quickly followed by other

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countries, including Brazil, and inspired other parks and individuals like Santos Dumont. Nevertheless, most of these conservation units reinforced a dichotomy between "peoples" and "parks. Often, traditional populations are expelled from the territory in favor of environmental preservation without human's presence.

Before Santos Dumont's visit to Iguassu, he had previously been to the Niagara Falls State Park, established in 1885. That visit inspired the Brazilian aviator to persuade the highest authority in the state of Paraná, Governor Affonso Camargo, to make a decision that would shape the future of the Iguassu Falls. Consequently, on July 28, 1916, Decree No. 653 was issued, declaring the expropriation of over a thousand hectares of land for the establishment a future national park. This marked the inception of what would evolve into one of the largest reserves of Atlantic Forest in South America, the Iguassu National Park.

In addition to his work favoring environmental preservation, Santos Dumont was one of the first figures to compare the Iguassu Falls and the Niagara Falls in a widely circulated newspaper. More than a century after this comparison in 1916, writing this book is also a way to pay tribute to the 150th anniversary of Santos Dumont's birth. I do this in dialogue with two classic dilemmas involving Brazil and the

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United States. Who invented the airplane: Santos Dumont or the Wright brothers? Which waterfalls are more beautiful: those of the Iguassu River or the Niagara River?

The first dilemma becomes more evident in the following three chapters: "An Inventor at the Falls," "The Pan-American Advocate," and "On the Telegraph Trail," in which Santos Dumont's life and work are analyzed. He was an international celebrity of the early 20th century, so the story that leads Dumont to the Iguassu Falls is connected to a new phase in his life. After his period as an aviator, in 1916, Dumont became a strong promoter of aviation for the economic and social development of the Americas. It was this involvement that took him to Chile and the Iguassu Falls.

After spending two days at the Iguassu Falls, Dumont changed his plan. He decided to seek the highest authority in the state and ask for help in making tourism viable in that remote region of Paraná. His model, as expressed in the national press, was the century-old tourism of Niagara Falls. This is my starting point for the following chapters: "The Fury of M'Boy and Hinum," "The Problem and the Poem," "Honeymoon," and "Borders."

The second dilemma, regarding natural beauty, also permeates these chapters, as I discuss three common

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subjects in the history of the Iguassu and Niagara Falls: the founding myths of the peoples who inhabited the respective regions and the first contact of Europeans with both waterfalls.

In the final chapters, I address tourism and the border condition, with explanations that date back to the beginning of tourism in the Iguassu and Niagara regions, along with current data such as the number of tourists and the local population. I conclude the book with a word about these two dilemmas that I consider to be false. To get there, I will need to use the upcoming chapters to demonstrate the facts.

Thus, 120 years after La Baladeuse fulfilled the dreams of the boy from Barbacena, we present the book he intended to write about the Iguassu.

2

An Inventor at
the Falls



Alberto Santos Dumont was one of the pioneers of world aviation and one of Brazil's greatest inventors. In the early 1900s, he was part of a select group of aviators competing for space, fame, and recognition in Europe and the United States. Aviators like the Brazilian and the Americans Wright brothers, became famous for their flying contraptions. Though taking different paths, they pursued the same objective.

This phase, however, quite literally took flight. In over a decade, almost every major city in the Western world had an aeroclub. Many airplanes were being commercialized and acquired by sports enthusiasts, private individuals, and, increasingly, by governments investing in these machines for military use. By around 1915, the peak of the era of discoveries had already passed.

The following year, Santos Dumont altered his course. World War I made him change his base from Europe to the United States, where he presented a plan for the development of aviation in the Americas. He predicted that, in a short time, thousands of airplanes would traverse North America to South America, carrying passengers and enhancing trade through cargo transport.

For this undertaking, it would be necessary to create an aeronautical association that brought together all the

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countries of the continent, which led to the convocation of the *First Pan-American Aeronautical Conference*, initially planned to take place in the United States but, in the end, took place in Chile.

As the proponent of the project, representing the Aeroclub of the United States, and serving as the honorary president of the conference, Santos Dumont traveled to Santiago. After the conference in the Chilean capital, the aviator made his way to Buenos Aires and from there continued his journey to the border between Argentina and Brazil. He wanted to visit the Iguassu Falls!

The distinguished visitor arrived on the Argentine side of the border on April 22, 1916. Two days later, he crossed the border and stayed in Vila Iguassu, the current municipality of Foz do Iguassu. With limited land access, the city was isolated from other parts of the country and had stronger ties with Argentina. This explained why the predominant language spoken there was Spanish, despite efforts to "Brazilianize" the region since the establishment of the Military Colony of Foz do Iguassu by the end of the 19th century.

Dumont was received by the former mayor, Jorge Schimmelpfeng, and his friend, the hotelier Frederico Engels, who were both interested in developing local tourism. Without

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public funds for this mission, Jorge and Frederico encouraged the inventor, who was, after all, a celebrity, to make efforts to obtain resources from the government of Paraná.

The mayor had only been in the region for a few years, having been invited by the State of Paraná in 1902 to establish a fiscal commission in the then Military Colony of Foz do Iguassu, a settlement that, despite having just a few thousand inhabitants, had significant activity in yerba mate and timber exploitation. In 1905, Schimmelpfeng requested to step down from his fiscal role to focus on trade and private enterprise. He became a political figure in the region. When the territory of the Military Colony returned to the jurisdiction of Paraná in 1914, Jorge Schimmelpfeng was appointed the first mayor of the newly created municipality of Vila Iguassu.

Interested in developing the city's tourism potential, in 1915, Schimmelpfeng invited Frederico Engels and his family to open the first hotel in Vila Iguassu, the Hotel Brasil. The following year, upon learning that Santos Dumont was staying on the Argentine side of the Iguassu Falls and in a hotel with conditions like the Engels family, Jorge and Frederico went to meet the aviator and persuade him to cross the border and visit the Iguassu Falls from the Brazilian perspective.

While staying at Engels' modest hotel, Dumont noted that

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his ultimate destination was Rio de Janeiro. However, after two days at Iguassu and in the company of his new friends, the aviator decided to head to Curitiba. In an interview with the newspaper "*O Estado de S. Paulo*", Dumont revealed that he requested the governor of Paraná to "show interest in the waterfalls" of Santa Maria, as they were known.

At that time, and until 1940, the most comfortable way to travel from Vila Iguassu to Curitiba was by boat, departing from the Aguirre port on the Argentine side of the border. The journey along the Paraná River ended in the Argentine city of Posadas, from where it was necessary to take a train to the border with Rio Grande do Sul and, from there, continue toward the capital of Paraná.

Santos Dumont chose the more challenging route. He traveled on horseback from Vila Iguassu to Curitiba, following the trail of the telegraph line built during the establishment of the Military Colony in 1889. After several days of travel, the aviator finally met with Affonso Camargo.

In the conversation with the governor, Santos Dumont's main reference was his experience with tourism at Niagara Falls in the United States. It was no coincidence that, a few months later, Paraná expropriated 1,008 hectares around the Iguassu Falls for the future establishment of a national park.

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Santos Dumont was the first person in the world to fly in public and publicly compare waterfalls at opposite ends of the continent. In paraphrasing his comment about the waterfalls, the land expropriated in Brazil was "larger, much larger" than the Niagara Falls State Park, established in New York in 1885.

In 1906, Paris woke up to the following headline in *Le Petit Journal*: "Airplane takes flight [...] Santos Dumont achieved an unprecedented feat in Europe." The article detailed his feat aboard the prototype 14-Bis, watched by a crowd of curious onlookers. On that day, Dumont was carried by the audience, who were amazed by the first documented flight in history.

Famous in the world of aviation, Dumont was charismatic and often tested his inventions in front of an audience. He participated in competitions, from which he almost always emerged as the winner. Unlike his American counterparts, the Brazilian had no intention of patenting his inventions, although he kept some secrets that he gradually revealed. The Wright brothers, bicycle manufacturers, also invented an airplane in the United States, with their prototype, the

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Flyer, taking off for the first time in 1903. Unfortunately, there was no audience or press to witness it because the brothers intended to patent the invention and, therefore, kept it a secret for some time.

However, in 1908, Wilbur Wright, one of the brothers, visited the land of aviators, France. There, Wright began making public flights with the *Flyer* and became a celebrity since he could fly for hours, as opposed to the minutes flown by Santos Dumont on the 14-Bis. Although he did not openly acknowledge it at the time, the Brazilian aviator later referred to the separation from the public as a "painful experience."

Santos Dumont always said that there was room for everyone in the world of aviation. However, he was competitive and clearly harbored resentment for not being recognized as the first to fly. In a 1929 manuscript, with his physical and mental health considerably deteriorated, Dumont poured out his feelings:

"It is inexplicable that the Wright brothers could have made countless flights for three and a half years without being observed by a single journalist from the astute American press" (Hoffman, 2010, p. 337).

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This is how the Wright brothers went down in history as the ones responsible for the first airplane flight, while Dumont was credited with being the first to fly in public.

* * *

Santos Dumont knew the United States like a few of his contemporaries in Brazil. Ironically, just as he disputed with Americans the title of being the first to fly, the issue of the waterfalls also brought competition with that country. According to common belief, Eleanor Roosevelt would have been the first famous person to visit and compare the Iguazu Falls and Niagara Falls.

First Lady of the United States from 1933 to 1945, Mrs. Roosevelt became a symbol of human rights activism after World War II. Known in her country and much of the world, she is said to have exclaimed "poor Niagara" when gazing upon the Iguazu Falls, expressing her preference for the Brazilian falls.

However, her visit to Brazil in 1944 left no evidence that she visited the Iguazu Falls. Nevertheless, attributing the phrase to this personality helped popularize the comparison

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between the two greatest waterfalls in the Americas. The phrase "poor Niagara" is a constant in texts that compare the two natural wonders, even though it is just a myth.

Another American to reach the waterfalls was the filmmaker, Burton Holmes. In 1920, when cinema was still silent, and documentaries were a nascent and little-known genre, Holmes traveled to Iguazu and captured impressive footage. On the screens of his country's cinemas, the audience watched images of the Iguazu Falls with captions that indicated: "fifty feet [fifteen meters] higher than Niagara."

In the "waterfall disputes," Santos Dumont triumphs over the American First Lady because there is tangible evidence of his visit to Iguazu. In the interview with Dumont in the newspaper *O Estado de S. Paulo* (1916), the aviator himself asked the interviewer, "Do you know Niagara?". Since the response was negative, the Brazilian aviator extensively described the Northern waterfalls.

Detail-oriented, Dumont referred to Niagara as "an immense waterfall offering the most bizarre and picturesque in this world," with "numerous and very diverse waterfalls, islands scattered around, the vegetation, and an infinity of beautiful aspects." After this description, he turned to Iguazu: "Without any exaggeration, it is a marvel. Bigger, much bigger than

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Niagara." He even claimed that in the face of Iguazu, Niagara Falls was just a "formidable" waterfall, "nothing more," he added (Conversando [...], 1916).

During that first semester of 1916, Dumont had a tight schedule. After visiting Vila Iguassu, he planned to return to Posadas and, from there, take a train to Rio Grande do Sul, and only then continue his journey to Rio de Janeiro. This was the main route that connected the region, isolated by land, to the country's capital. However, after conversing with his friends in Iguassu, the distinguished traveler was influenced to change his itinerary and head to Curitiba.

The mayor of Vila Iguassu had little to offer to one of the world's greatest celebrities of that time. Schimmelpfeng provided him with what he could: accommodation, a guided tour of the Falls, and a modest ball in his honor. From his point of view, the most important thing was to persuade the aviator to intercede with the state government in favor of developing the tourist potential of Iguassu.

Accustomed to making plans, Dumont devised a strategy.

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He would go to Curitiba by the route where a road to Vila Iguassu should pass in the future. Upon reaching his destination, the global celebrity would use his influence and ask the governor "to take an interest in the waterfalls" and to make the "excursion more comfortable." In practice, Dumont would report to the governor about his experience as a tourist at Niagara, to illustrate what tourism could be like in Iguassu.

When Dumont made his visit, all the land around the Falls was privately owned. Jesus Val was a Spanish settler who arrived in the region in 1897 to extract yerba mate and hardwood and was subsequently registered on the first page of the Colonia Militar Settlers' Enrollment Book. In 1903, traveler Domingos Nascimento reported that Jesus Val hosted some people in a bamboo cabin and intended to build a hotel. In 1910, he obtained ownership of the land. Thus, the hotel where Santos Dumont was hosted in Iguassu was located on Jesus Val's property, although Frederico Engels managed it.

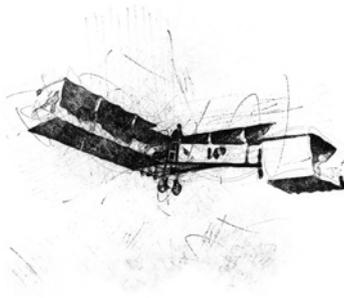
At that time, it was unlikely that the state government could establish a park in the distant Vila Iguassu. It required a lot of resources and, most importantly, the opening of a road. Governor Affonso Camargo and his advisors found an intermediary solution. In a record time of approximately

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three months, the government team made use of State Law 1,260 of 1913, which allowed land expropriations in Paraná for "public interest." Although the law was recent and there were many doubts about its application, the result was Decree 653 of July 1916, through which the state carried out the first expropriation of an area: Jesus Val's land. After much dispute, the Spanish man accepted the compensation offered by the state of Paraná in 1919. Formally, one of the first natural reserves in Brazil was created, and it would become the foundation for the future Iguassu National Park, which was realized in 1939.

3

The Pan-American
Articulator



Alberto Santos Dumont spent a significant portion of his adult life outside of Brazil. He may have visited Niagara Falls during his trips to the United States around 1890. The peak of his experiments and inventions, including the 14-Bis and Demoiselle, took place in France during the first decade of the 1900s. That was the height of his phase as an aviation pioneer, which lasted until the beginning of World War I.

With the outbreak of the conflict in 1914, Dumont entered a new phase in his career, acting as a facilitator – an activist or advocate, as we would say today – for aviation in the Americas. This phase lasted until around 1920 when governments replaced aeroclubs at the center of the debate on the development of air transportation.

Within this timeframe, the year 1916 was special for the Brazilian aviator. Already in January, Dumont developed a plan for the mass use of airplanes in the Americas, intending to bring the United States closer to South America. His proposal was adopted by the Aeroclub of the United States, a national federation representing 28 aeroclubs across the country.

The U.S. federation appointed Santos Dumont to lead the development of the first aeronautical statutes on the continent. For this activity, representatives from aeroclubs throughout the Americas gathered in Chile in March 1916.

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Santos Dumont had a packed schedule from January to July of that year due to his aviation advocacy. In that semester alone, the Brazilian traveled through the United States, Chile, Argentina, and Brazil. At the end of this interval, Dumont returned to the headquarters of the aeroclub in New York.

The Niagara River lies between two lakes in North America, forming the border between the United States and Canada. At a certain point, massive waterfalls create a beautiful spectacle. Niagara Falls is an attraction whose tourism potential has been exploited since the early 19th century, virtually simultaneous with the development of modern tourism itself. The first access to the falls was established in 1825 with the completion of the Erie Canal. By the 1850s, railway connections ensured the early exploration of tourism in the area.

"Niagara Falls" is the name given to both the geographic feature and the cities on the U.S. and Canadian sides of the border. In that region, railways arrived in the first half of the 19th century, making the tourist attraction more accessible for both Americans, who could now travel to the

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falls from the primary urban center around New York City, and Canadians, who had access to the area from Toronto.

In 1885, two of the first environmental conservation parks in the United States and Canada were established at Niagara Falls. Niagara Falls State Park was created on the U.S. side, and on the Canadian side, Queen Victoria Park was established. Therefore, when Santos Dumont visited Niagara Falls, there was a railway connection to major urban centers, a visitor infrastructure, and two environmental conservation parks. This was the model that the aviator had in mind when he approached the governor of Paraná, urging him to take an interest in the Falls.

It is not known how many times or when Dumont visited Niagara Falls. Between 1894 and 1916, he made several trips to the United States, primarily to New York. I believe he may have seen Niagara Falls in 1894, as there is evidence that he was in Boston and Chicago that year, and the waterfalls are situated between these two cities. As an adventurer and nature enthusiast, it is unlikely that Dumont would have passed so close to Niagara Falls and missed the opportunity to see one of the most beautiful attractions in North America.

If he visited Niagara Falls during that occasion, the young

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Dumont, at 21 years old, was exposed to nearly a century-old tourism industry and a state conservation park that had existed for almost a decade. By then, Niagara Falls already had easy land access, tourist exploration, and environmental preservation areas. In 1916, the situation at Iguassu was the opposite: a lack of land access, amateur tourism, and a location on private property.

In the interview with the newspaper *O Estado de S. Paulo* (1916), Santos Dumont mentioned another of his many plans: "I do intend to write a book about Iguassu." Unfortunately, he did not realize this project, which might have happened for various reasons. One of them, undoubtedly, was the deterioration of his physical and mental health, which severely limited him, especially after 1920.

Santos Dumont's life can be divided into three phases: the aviator, the facilitator, and the debilitated. When he was in Iguassu in 1916, his time as an aviator had already passed, and he was at the height of his role as a facilitator. The following decade was particularly challenging due to health issues, which we will not address in this book.

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Being an aviator in the early 20th century was a glamorous and ingenious activity. At the turn of the century, there was a race to invent flying machines. The goal was not precisely to create an airplane as we know it today but to develop prototypes that could fly, often quite different from current aircraft. In that predominantly male environment, there were also women. In 1903, Alberto Santos Dumont supported a young Cuban-American woman, Aida de Acosta, in flying with his airships, making her the world's first female aviator. Raymonde de Laroche was the first woman to obtain a pilot's license in 1909. The Frenchwoman H el ene Dutrieu learned to fly in Dumont's Demoiselle, one of his airplanes. In 1910, she became the first female aviator to carry passengers. It was a fertile time for aviation. Paris was the center of this excitement, and Santos Dumont was there.

The Brazilian was uncommon compared to most of his colleagues. He was not an "engineer aviator," as many of his contemporaries; he was a genius, an inventor averse to dedicating his time to studying theories. Dumont created his inventions and participated in sports competitions, winning the main prizes among European professional aviators. In the October 20, 1901, edition of The New York Times, the Brazilian won the Deutsch Prize for circumnavigating the Eiffel Tower in his Dirigible No. 6.

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In 1906, Santos Dumont was a celebrity. His flight of a few minutes aboard the 14-Bis brought a crowd to exhilaration in France. He was carried and celebrated by the audience that had witnessed his successful flight. All the spotlight in Europe, including headlines in major newspapers, was on that small and charismatic figure.

However, just as fleetingly as it came, the public's exaggerated enthusiasm also faded for several reasons. One of them was the arrival of Wilbur Wright in France with his Flyer prototype. Although there were no witnesses, the Wright brothers documented the Flyer's first flight in 1903, three years before the Brazilian. Indeed, their invention was impressive. In 1908, the French public watched flights lasting hours, in contrast to the minutes flown by Santos Dumont on his 14-Bis.

Still famous but without the public's enthusiasm, Santos Dumont continued his life. In 1909, he invented another airplane, the Demoiselle, considered the world's first commercially available sports plane. His invention was highly successful among elite teenagers of the time. Dumont was seen flying his new machine around Paris, landing on the agricultural properties of his friends because flights required a large field for landing.

Two events marked 1910. First, it was the year of Santos

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Dumont's final flight. After an accident with his Demoiselle, a disease that profoundly affected him was discovered. Without public acclaim and in recovery, the aviator moved to a small coastal town in France, about 200 kilometers from Paris, where he lived until the outbreak of World War I.

In the first months of the conflict, the Brazilian even offered to assist the French army with his projects. However, his eccentricities and his habit of observing the night sky led the neighbors to report him as a spy. The report resulted in a police visit, which ultimately apologized for the misunderstanding. Resentful of the lack of recognition and in a fit of rage due to the accusation of espionage, the aviator burned all the files and projects within his reach.

The incident and insecurity in Europe led Dumont to leave the Old Continent. In 1916, he was actively engaged in another mission: he was no longer the aviator and sportsman of the early 1900s. In this new stage of life, Dumont became the primary facilitator of civil aviation in the American continent. At that time, aviation was developing rapidly, but there were still no government institutions regulating air

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transportation. Aeroclubs, not governments, took the first steps in this direction. There were aeroclubs in practically all the capitals of the Americas, with a greater number in the United States.

Santos Dumont was well known in that country, which he had visited several times. In 1902, the American press enthusiastically reported the contact between the Brazilian inventor and inventor Thomas Edison. In April of that year, the "Wizard of Menlo Park," as Edison was known, attended a press conference where he expressed his interest in having Santos Dumont contribute to creating an Aeroclub in the United States, which would happen three years later.

These types of aeronautical clubs multiplied. In 1916, there were 26 aeroclubs in the country, united in the Aeroclub of the United States, a kind of national federation. The Aeroclub published the magazine "Flying" and celebrated its tenth annual dinner on January 12, 1916. Santos Dumont attended this dinner and was one of the most respected individuals present. He was mentioned as one of the "revolutionary" aviators and as the facilitator of an aviation plan for the American continent.

In his speech at the annual dinner of the Aeroclub of the United States, Alan Hawley, the president of the federation,

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mentioned that the most prestigious pioneers of world aviation were Americans. In his words, these pioneers were "revolutionaries" of the air, just as Christopher Columbus was of the seas. To reinforce his argument, he named the main achievements: the first flight was by the Wright brothers of the United States; the first public flight was by Santos Dumont of Brazil; the first overflight of the Alps was by Jorge Chávez and Juan Bielovucic of Peru; and the first seaplane flight was by Glenn Curtiss, also from the United States. With them, the New World "gave wings" to the Old World.

On that occasion, after a toast to the Wright brothers, the master of ceremonies invited Santos Dumont to deliver his speech. He had been appointed to represent the Aeroclub of the United States at the Aeronautical Conference to be held in Chile in March of that year. The Brazilian's nomination was considered natural because the plan to be discussed at the conference was his brainchild. Dumont devised a strategy for producing thousands of airplanes to take flight and help solve the "difficult transportation problems." If necessary, these machines could also contribute to the defense of the Americas.

It was precisely this plan that kept Santos Dumont quite busy for a while. In 1916, his agenda for the first semester

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was packed: in January, he had the Aeroclub dinner in New York; in March, the conference in Chile; in May, a meeting in Rio de Janeiro; and in July, he was expected back at the headquarters of the Aeroclub of the United States. Between his departure in February and his return in July, the main event of Dumont's facilitation occurred: the Pan-American Aeronautical Conference in Chile.

Before the trip, between December 17, 1915, and January 8, 1916, Santos Dumont had participated in the Second Pan-American Scientific Congress in Washington, where he presented his plan for the development of aviation in the Americas at the end of the event. Industrial development was already much more significant in the United States than in South America. Nevertheless, in general aspects, capitals like Rio de Janeiro, Buenos Aires, and Santiago were not significantly different from major U.S. cities like New York and Chicago.

The Pan-American movement was at its peak. There was a romantic idea of brotherhood and solidarity among the American people in the air, especially under the influence

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of Washington. Indeed, the term had geopolitical weight, indicating the presence and influence of the United States in the region, contrasting with the idea of "Latin America," a term coined by the French in the mid-19th century, which indicated the intentions of the Napoleonic Empire in the subcontinent.

This conflict between Pan-American and Latin American identities was part of the international relations scene in the American States in the post-independence period in the 1810s and 1820s. In 1823, for example, the President of the United States, James Monroe, delivered a message to Congress that became known as the Monroe Doctrine, whose later attributed slogan was "America for the Americans." For Monroe, it was about ensuring U.S. political dominance over the entire continent, contested by international powers of the time. In this perspective, the very definition of "American people" – or simply "Americans" – corresponded to all those born in the New World, also known as the Western Hemisphere.

Among aviators, this integration and competition for transnational identities were evident in the recognition of aviation pioneers, which included those born in the United States, the Wright brothers and Glenn Curtiss; in Brazil, Santos Dumont; and in Peru, Jorge Chávez, and Juan

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Bielovucic, indicating, at the same time, the terminological dispute prevalent at that time.

In this context, Santos Dumont's plan for the skies of the Americas sprouted with airplanes that would allow the circulation of people and goods. For the strategy to work, an international organization that brought together the national representations of aeroclubs was needed, giving rise to a sort of "Aeroclub of the Americas," officially named the Pan-American Aeronautic Federation.

The event to discuss the creation of the entity was to be held in New York. However, at the invitation of the Aeroclub of Chile, the headquarters was moved to Santiago. Santos Dumont was deeply involved with the occasion, first as a proponent and representative of the Aeroclub of the United States and later, after the work began, as its honorary president. On February 5, 1916, the aviator left New York and arrived in the Andean country almost a month later, on March 1. The 25-day trip was striking evidence that, in the future, an airplane could expedite transportation between North and South America.

Received with festivities, Dumont told the press that the purpose of that inauguration was to lay the foundation for hundreds of aircraft to cross the Americas soon, reducing

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a 24-day journey to just 24 hours. For him, the airplane would bring cooperation between the United States and South America, as well as the development of trade, sports aviation, and the defense of the Western Hemisphere "in case of possible war." To put ten thousand commercially used airplanes in the continent's skies, the Pan-American Aeronautic Federation was indispensable (Tenth Annual Banquet [...], 1916).

In Chile, more than 400 police officers were not enough to contain the crowd that greeted the aviator and the delegates from Brazil, Argentina, Peru, Uruguay, Colombia, and Guatemala, among other countries. In the face of the public's enthusiasm, the Brazilian was appointed the honorary president of the event and coordinated the work that established the first rules for establishing aviation routes in the Americas.

An interesting aspect that is noteworthy in reading the May 1916 issue of *Flying* is a complaint from the Aeroclub of the United States regarding the participation of U.S. government representatives at the conference. The president of the Aeroclub, Alan Hawley, pointed out the disregard of the U.S. ambassador to Chile for Santos Dumont, interpreting it as a lack of courtesy. The main reason for the ambassador's attitude would have been the fact that a Brazilian led the

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U.S. mission to the event (The Pan-American [...], 1916).

There was also another issue. Santos Dumont's movement was as innovative as his Dirigible No. 6, 14-Bis, or Demoiselle. If at the beginning of the century, there were no airplanes, just over a decade later, aircraft were already being produced by the thousands, serving as weapons in World War I. The pace of aviation development was overwhelming. By 1919, governments across the continent had a direct interest in the matter, and cooperation in this area exceeded the level of aeroclubs and became a state issue.

However, in 1916, aeroclubs were still the primary authorities on logistical aviation planning. With the establishment of the Pan-American Aeronautic Federation in Chile, the next stop in Dumont's plan was Rio de Janeiro. His goal was to organize another grand event: a Pan-American aviation competition that would take place in the then capital of Brazil the following year, as published in the May issue of *Flying*. Still, on his 1916 trip, he would go to Buenos Aires for the celebrations of Argentina's First Centenary of Independence, with the destination being a return to New York by July.

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From 1919, a few years after Santos Dumont's efforts for aviation, international cooperation on aeronautical matters left the private sphere of aeroclubs and became a responsibility of the American states. Despite its recognized historical importance, the Pan-American Aeronautic Federation – planned by Santos Dumont and executed by the Aeroclub of the United States – became obsolete. The good news was that aviation had evolved, necessitating the creation of new mechanisms and institutions, such as Aeronautics.

The 1920s brought a new stage in Santos Dumont's life. The phases of aviator and coordinator were left behind. This influenced the worsening of his health. In the early 1920s, he checked into various recovery clinics in Switzerland and France. It was a period of deteriorating illnesses that eventually led to his death on July 23, 1932, in Rio de Janeiro, at the age of 59.

When he visited the Triple Frontier of Argentina-Brazil-Paraguay between April 22 and 27, 1916, Santos Dumont was a very busy man. In seven months, he traveled to four different countries, at a time when each journey took at least 20 days. It is not an exaggeration to say that during those months, Santos Dumont spent more time at sea than on land.

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Involved in integrating the Americas through aviation, it is worth asking: why did Santos Dumont spend 24 days visiting the Iguassu Falls and then travel to Curitiba to draw the attention of the Paraná state government to the falls? The answer is not evident. We know that Santos Dumont knew Niagara Falls, and after completing his work in Chile, he was in Buenos Aires. Between leaving Chile and departing from Argentina, 25 days passed. We know little about what the Brazilian did in Buenos Aires. Perhaps some advertising to visit the Iguassu Falls had come his way. At that time, the railway to Posadas had just been inaugurated, and with "only" three days by train and three days by boat, it was possible to visit the "Latin Niagara." That is what he did.

4

On the Telegraph
Trail



Upon arriving in São Paulo in May 1916, Santos Dumont was interviewed by the newspaper O Estado de S. Paulo. The main topic was expected to be aviation and international matters of interest. However, in the conversation with the journalists, he did not even mention the creation of the Pan-American Aeronautical Confederation. He started and ended the interview talking about Iguassu "with enthusiasm and a vivid sparkle in his dark eyes." Dumont explained to his interviewer that "there is a Saxon Niagara in the United States and a Latin Niagara here in the South of America" (Conversando[...], 1916).

Santos Dumont's enthusiasm was contrasted with the difficulty of access and the lack of tourist infrastructure at Iguassu. The journey took six days from Buenos Aires. There was no overland access from Brazil. Nevertheless, Dumont stated: "The Iguassu Falls, what a wonder! It more than compensates for the inconveniences of the trip." About accommodation, he commented: "Imagine that there is not even a hotel in those parts. There is, with the name of a hotel, a little house with two rooms and a living room, that is all...".

At no point in the interview did the distinguished visitor mention the fact that the Iguassu Falls were located on private property, nor that the owner of those lands was a foreigner.

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In any case, it can be inferred that Dumont conceived a plan to contribute to tourism at Iguassu. His ideas included the elements he must have remembered from his visit to Niagara Falls: overland access, tourism development, and the creation of an environmental preservation area. It was with this perspective that Dumont decided to go to Curitiba to convince the governor to see the potential of Iguassu.

The Iguassu River originates from the confluence of the Iraí and Atuba rivers, east of the capital of the state of Paraná. Its course generally flows from east to west for about 910 km, crossing a significant part of the state of Paraná, which was established as a federal unit in 1853. Just before it flows into the Paraná River, a majestic set of waterfalls makes the far western region of the state unique. In that stretch, the river divides the national boundaries of Brazil and Argentina, which share the Iguassu Falls.

Despite its tourism potential being equivalent to that of Niagara Falls, the Iguassu River Falls are in the interior of South America. Unlike what happened in North America, an efficient network of roads for overland transportation

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was developed here only in the second half of the 20th century. On the Brazilian side, the first dirt road was opened by Paraná in 1920, and it was expanded by the federal government twenty years later. Only in 1969, almost three decades later, this road would be fully paved.

Although access difficulties were immense, influential people visited the region in the early 20th century. In 1903, the poet and Paraná deputy Domingos Nascimento reported his experience of seeing the impressive waterfalls. The traveler stated that, on the Brazilian side, there was no tourist infrastructure, and on the Argentine side, the exploration of the activity was just beginning.

In Brazil, Jesus Val was the tour guide for Domingos Nascimento. The Spaniard explained that he had received a plot of one thousand hectares and the Santa Maria da Colônia Militar Falls for agricultural purposes. At that time, agricultural activity consisted of harvesting native yerba mate and hardwood for export to Argentina. Jesus Val told the poet that he intended to develop tourism and already had a cabin to receive people who wanted to see that natural beauty.

For Nascimento, Val would have been the first tour guide for the Falls! Although it was Frederico Engels who was

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responsible for opening "a little house with the name of a hotel," as Dumont later stated, Jesus Val was, in fact, one of the first hotel managers in the region. In 1906, he managed a lodging place on the Argentine side of the border, not much better than the shack on the other side of the river. That is, until 1922, when a higher-quality hotel was built on the Argentine banks, there were only a few shacks for the accommodation of visitors on both sides of the Falls.

In 1914, when the Colônia Militar became the municipality of Vila Iguassu, tourism activity began to be seen as essential. On March 14 of that year, Law 1,383 created the municipality, which was effectively installed on June 10 with the inauguration of its first mayor, Jorge Schimmelpfeng, and the installation of the first City Council. In the first year of his term, in 1915, Jorge Schimmelpfeng traveled to Posadas, where he met with Frederico Engels, who had experience in lodging, and proposed that he and his family move to Vila Iguassu to start a new business in that sector. The mayor intended to make every effort to develop tourism in the municipality.

The Hotel Brasil was opened on November 15, 1915, in the city center. In parallel, Engels leased the "little house" near the waterfalls from Jesus Val, turning it into a branch of his hotel. To enhance the tourist experience, Engels used his

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available resources – more physical strength than money – to improve access and visitation to the site.

Without a public budget, the first initiatives for tourism on the Brazilian side still had to compete with the facilities on the other side. Santos Dumont, for example, arrived in Puerto Aguirre, as Puerto Iguazú was known, the Argentine city, on April 22, 1916. Only two days later, thanks to the pleas of his compatriots, he checked into the Hotel Brasil. Dumont was the most illustrious visitor to the main branch and its "little house" branch by the waterfalls.

When they learned that the competition on the Argentine side had received the renowned inventor Frederico Engels crossed the border and, appealing to the aviator's patriotism, invited him to stay on the Brazilian side. The hosts, with limited resources, were creative: they organized a dance, prepared a good barbecue, and guided Dumont on the tour of the Falls. In addition to the hotel in the city center, the guest stayed for two days at the branch by the waterfalls, where he could enjoy the Iguassu River Falls from various angles. Over those days, the three of them effectively exchanged many ideas and plans for tourism on the border.

In contrast to other travelers, Santos Dumont was not concerned about "losing" the territory of the Falls, a

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predominant thought in a region that had only recently stabilized its borders. Many narratives, like Domingos Nascimento's, went in that direction. Far from conventional, the aviator requested an audience with the governor of Paraná to emphasize the urgency of opening a road to make the excursion easier and more convenient.

Despite his efforts to develop tourism, the actions of the mayor of Vila Iguassu were limited. He had neither a public budget nor an overland access route to the capital, Curitiba. Just as he induced Engels to invest in the hotel business, Schimmelpfeng's argument was undoubtedly crucial in convincing Santos Dumont of the need for the state of Paraná to do something for the Falls.

That is precisely what happened. In Vila Iguassu, Santos Dumont was enthusiastic about the issue. The man who had planned the 14-Bis and was involved in creating the Pan-American Aeronautical Federation would not be without a plan.

On April 27, 1916, Santos Dumont continued his journey eastward on horseback. There was no road. In those

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conditions, the telegraph line served as a reliable guide. After riding for eight days and passing through various small towns in the interior, the Aviator arrived in the capital of Paraná. He was celebrated and honored during the five days he spent in Curitiba.

The audience with Governor Affonso Camargo took place on May 8. The local press reported that the aviator "requested that the government do everything to make use of that waterfall, building a national park there that would certainly attract a large tourism competition" (Santos [...], 1916).

The governor carefully listened to his suggestions to turn the Iguassu into a "Latin Niagara." Santos Dumont likely recommended actions to facilitate access, develop a visitor structure, and delineate an environmental preservation area. Immediately, Affonso Camargo had no means to mobilize resources to open a road, promote tourism, or create a state park. What he did have were some legal tools.

In 1907, Paraná approved one of Brazil's first forest codes, paving the way for conservation policies. In 1913, another law allowed the state government the right to expropriate land for public interest. When listening to Dumont's ideas, the governor thought of the innovative laws of Paraná, which had not yet been applied. That was how, just three months

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after the aviator's visit, Affonso Camargo transformed Jesus Val's property into an area of public utility, probably one of the country's first expropriations.

On July 31, 1916, on the eve of Santos Dumont's return to New York, the governor of Paraná sanctioned State Decree No. 653, which registered the reservation of "an area of land near the Iguassu Falls [...] for the establishment of a settlement and a park."

Despite Santos Dumont's decisive influence on the fate of Iguassu, the idea of a national park in the Falls area had been circulating at least since 1876. André Rebouças, Brazil's first black engineer, published an article advising preserving the waterfalls "intact, free from iron and fire" for future generations (Rebouças, 1898). This did not exclude tourism, if the infrastructure was modeled after Niagara Falls.

Inspired by Rebouças, Captain Edmundo de Barros of the Colônia Militar proposed and executed practical actions at the end of 1890, such as opening a road of approximately 20 kilometers that connected Vila Iguassu to the Falls. On his initiative, he even wrote on wood attached to a tree the words "Parque Nacional." Even though it was an isolated initiative, the sign alarmed *los hermanos*, who believed it was an official plan by Brazil.

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Most likely, this sign was posted while Captain Barros commissioned a map with the heading "Studies conducted in the first half of 1897, to be used in the demarcation of an urban headquarters for the future Brazilian National Park" (Barros, 1914). However, Barros's project did not materialize. In 1910, the land where the Falls were located was formally granted to Jesus Val by the Colônia Militar.

Like the first flight, Dumont was not exactly the precursor of Iguassu National Park. However, the aviator was the first notable figure to do something decisive for its creation. The decisive step was taken when Dumont encouraged the governor to revoke the private property status of the Falls. After the expropriation in 1916, Jesus Val took legal action. Finally, in 1919, the Spaniard accepted the compensation proposed by the government.

When he left Buenos Aires to visit the Iguassu Falls, Santos Dumont had the North American Falls in mind as a model. The Brazilian was impressed by the beauty and the difficulty of access and tourism at Iguassu. Niagara was smaller, but in Iguassu, there was no tourist

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infrastructure. Schimmelpfeng used his most potent tool, argumentation, to convince the inventor that the Paraná government should address this situation.

Affonso Camargo also used one of his primary weapons: the pen. By signing the decree of public utility for the area, he expropriated Jesus Val's land, paving the way for the delineation of the park decades later. Sadly, Santos Dumont passed away seven years before the creation of Iguassu National Park in 1939, which would change the region's history and environmental conservation in the country.

5

The Fury of M'Boy
and Hinum



The history of comparisons between the Iguassu and Niagara Falls began over a century before Santos Dumont's visit to Iguassu. One of the oldest accounts is that of Félix de Azara, a Spanish official who surveyed the geography of South America in 1780. His goal was to delimit the border with the Portuguese Empire, which did not happen due to the absence of Portuguese representatives. Despite this absence, Azara did his work and compared what he saw at the Iguassu River with records of the Niagara River. There is no evidence that he visited the waterfalls in North America.

After the end of the War of the Triple Alliance and the advent of steamboats, the late 1800s and early 1900s were marked by explorers who visited the Iguassu Falls and produced numerous notes about the local nature. In this vast documentation, parallels between Iguassu and Niagara often appeared, as was the case with Alejo Peyret (1877), Florêncio de Balsadúa (1901), and Domingos Nascimento (1903), among others.

Santos Dumont innovated in his comparison, was well-versed in the affairs of his time, and was an eyewitness to both waterfalls. In his 1916 interview with the newspaper *O Estado de S. Paulo*, he used the term "Latin Niagara" to refer to the Iguassu Falls. However, he classified them as much larger than the Anglo-Saxon waterfalls. Another novelty

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that his comparison brought was pragmatic: influenced by the physical visitor structure of Niagara, Dumont imagined something similar for Iguassu. However, tourism as we know it today, a phenomenon of the 20th century, would be effectively established at the Iguassu Falls only five decades later when the activity professionalized and distanced itself from previous amateurism and improvisation.

More than a century after Dumont's airy comparison between the two incredible waterfalls, I came across another intriguing similarity: both majestic and giant waterfalls were explained by the worldviews of the peoples who inhabited their territories. Despite the more than eight thousand kilometers that separate such distinct populations as the Iroquois and the Guarani, similar points permeate the founding myths of Niagara and Iguassu Falls: both stories feature young women - Lelawala and Naipi - as protagonists, and in both myths, serpents are responsible for the cataclysm that formed the waterfalls.

One of the historical maps of Foz do Iguassu from 1941 shows the beginning of urbanization. In that year, about

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a thousand inhabitants were in the small city, in a much more prosperous context than the Vila Iguassu visited by Santos Dumont. The Iguassu National Park has brought unprecedented economic development to the municipality. In that old street layout drawing, two parallel streets stand out, Naipi and Tarobá, whose names refer to the Legend of the Waterfalls.

According to the Guarani tale, Naipi, the chief's daughter, possessed unparalleled beauty and had been consecrated to M'boy. This god, who ruled the world, had the form of a serpent, and lived among the rocks of the Iguassu River. Everything was going well in the preparations for the consecration ceremony until the young woman met and fell in love with Tarobá. To escape her destiny and be together, Naipi and Tarobá decided to flee in a canoe.

Awakened by the noise of the canoe on the water, M'boy discovered the lovers' intent and decided to seek revenge. The serpent rushed into the riverbed of the Iguassu River with such fury that it caused an earthquake. As a result, the Waterfalls were formed. With the strong tremor, Naipi and Tarobá's canoe was engulfed by the river's falls. The serpent then transformed Naipi into a stone and Tarobá into a palm tree.

The legend says that M'boy still lives in the depths of the

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Devil's Throat, the largest of the 275 falls that make up the Iguassu Falls. At all times, the serpent god contemplates Naipi and Tarobá, eternally separated by his vengeful wrath. When you visit the Iguassu Falls and admire its depths, rocks, and palm trees, you will, therefore, be sighting M'boy, Naipi, and Tarobá.

The legendary characters of the Iroquois myth do not have an equivalent presence in the spaces and streets around Niagara Falls, as is the case in the Triple Frontier region. Also, unlike the Iguassu myth, there is no consensus on the legend of Niagara Falls, which has various versions. If the Guarani people never came forward to defend their version of Naipi's story, the Iroquois population, in turn, had to publicly oppose the Europeanized version that circulated and distorted the original cosmology.

In general, the narratives of Niagara converge on the fact that the central character is a young woman named Lelawala who, accidentally or intentionally, depending on the version, encounters a waterfall while descending the river in a canoe. Saved from death in the waterfall by the thunder god Hinum,

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who lived in one of the caves of Niagara, Lelawala was taken to recover and live with the god's family.

When revitalized, the young woman falls in love with Hinum's son. Some versions claim that the two married and started a family. Things were going well until a colossal serpent appeared, poisoning the waters of the Niagara River, which would cause the death of Lelawala's human family. With Hinum's permission, the young woman warned her people to flee, avoiding the water poisoned by the serpent monster. When the snake learned of what had happened, it confronted the thunder god, who killed it with a lightning bolt. The thunderous sound caused an earthquake, giving rise to the Falls. Unfortunately, Hinum's house was also destroyed, and they moved to a new dwelling in the sky.

If you visit Horseshoe Falls, the largest of the three Niagara Falls, observe it, for the spirit of the enormous serpent dwells among its rocks. The constant thunder and mist are Hinum and the Maiden of the Mist, as Lelawala is known.

It's fascinating to note that two Indigenous Peoples, physically

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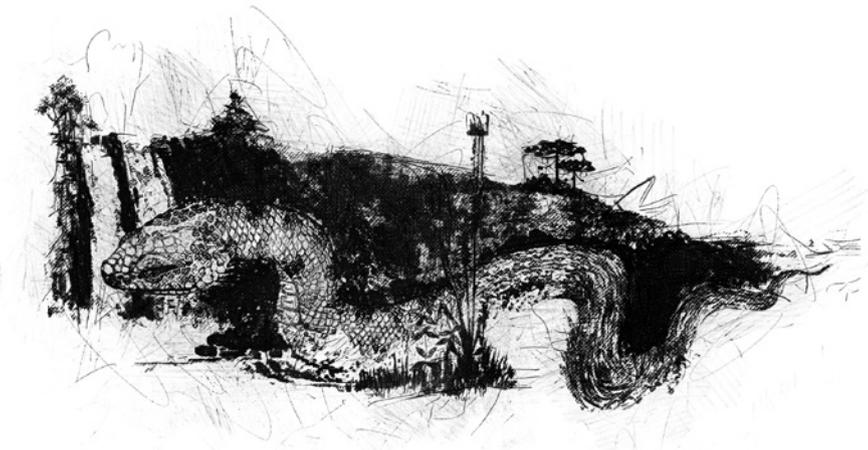
separated and without contact, conceived similar myths about their respective massive waterfalls, featuring the figures of a beautiful young woman and a serpent, and both waterfalls are interpreted as a result of a thunderous roar in the riverbed caused by the action of the serpent-monster god.

The presence of the two main characters is also intriguing. Perhaps women had prominent roles in indigenous societies and explanations about space formation. Naipi and Lelawala are two very different young women, inhabitants of the continent before the arrival of Europeans. Both used a canoe as a means of transportation, and both fell in love with a young man, alongside whom, through different circumstances, they remain for eternity. Naipi, as a stone, gazes upon Tarobá as a palm tree in the Iguassu River, and Lelawala lives with her adoptive family in the sky above the Niagara River.

Perhaps the primary distinction in these legends lies in the deities and the rivers. In South America, the god is a serpent; in North America, the god fought against a serpent. In this sense, the ending of the vengeful god M'boy is more dramatic, and the god Hinum's ending is more honorable. As for the rivers, in Iguassu, there would be no waterfall before the intervention of the serpent god. Niagara's existing waterfall was "enhanced" due to the battle between the thunder god and the serpent monster.

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In conclusion, the abundant Native American mythology consists of stories far more enduring than the life of any human being who has passed through Iguassu or Niagara. There is a mystery in the mists of the waterfalls. In both places, one must look closely to find all the elements of the legends: waterfalls, water, rocks, trees, mist, and perhaps, the serpents...



6

The Problem and
the Poem



Christopher Columbus arrived in the region that is now the Caribbean in 1492. According to the Treaty of Tordesillas, the New World was divided between the two major powers of the time: Portugal and Spain. During the early years of the colonial period, both the Iguassu Falls and the Niagara Falls region belonged to Spain, despite the numerous Indigenous Peoples who already inhabited these territories, such as the Guarani and the Iroquois. Over more than 500 years, many changes have occurred, but one issue has remained: the occupation of indigenous lands, first through colonization and, after the countries gained independence, by the National States.

Before the arrival of Europeans, the regions of the Niagara River and the Iguassu River were inhabited by different peoples. In North America, the Iroquois were grouped into a confederation of tribes and clans. Around 1140, the Iroquois Confederation brought together a large and diverse organized population consisting of five major nations. This group played a role in military confrontations and disputes between European empires and participated in the American War of Independence. Despite the dismantling of this advanced political and social association in 1779, the Iroquois people still resist and currently number around 130,000 people living in the border region between the United States and Canada.

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In South America, the Guarani people inhabited the vast region surrounding the Iguassu Falls. Unlike the Iroquois, the Guarani organized themselves into decentralized and semi-nomadic societies at the time of their first contact with the Spaniards. To this day, the Guarani people, with a population of approximately five million people, are divided into various ethnic subgroups in Argentina, Brazil, Bolivia, Paraguay, and Uruguay.

The first Europeans who encountered and documented the Iguassu Falls came with the expedition of the Governor of the Province of Rio de la Plata, the Spanish explorer Álvar Núñez Cabeza de Vaca, in 1542. The journey was documented in an inventory compiled by the secretary Pedro Hernández and published in 1555. The document describes the entire expedition, detailing how the governor, on his way to the capital of Asunción, ended up deviating from a "rough patch" on the Iguassu River.

In the local narrative, it is said that Cabeza de Vaca exclaimed, "Santa Maria, Mother of God, how much water!" For this reason, the falls were initially known as "Salto de Santa Maria." However, there is no historical evidence to support this claim. The reference to the "Salto de Santa Maria" possibly comes from another group of Spaniards: the Jesuits. In 1623, Jesuit priests founded a mission near

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the Falls called the "Redução de Santa Maria do Iguassu." However, due to the advance of the Paulista Bandeirantes, this mission had a short life and was relocated further into the forest in the region of the current province of Misiones, in neighboring Argentina.

The beginning of the colonial period has no parallel between Iguassu and Niagara. In the North, the first European to visit and record Niagara Falls was the French priest Louis Hennepin in 1678. Before him, other Frenchmen had mentioned probable waterfalls based on reports from Indigenous Peoples. Hennepin was the first to appreciate the beauty of the Niagara Falls on-site. At that time, the French were advancing in North America, and the Spanish Empire no longer had dominion over that colonial space.

Situated among the most notable figures in the history of the Spanish Empire in the Americas, Governor Álvar Núñez Cabeza de Vaca was 52 years old when he arrived on the coast of Santa Catarina. However, before that, he had ventured through North America, specifically the region that is now the Southern United States and Northern Mexico.

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The expedition in North America took place between 1527 and 1537 and was a disaster: only four people survived, including Cabeza de Vaca. Upon his return to Spain, the colonizer was appointed Governor of the Province of Rio de la Plata, with its capital in Asunción. When he decided to embark on a journey through South America, using the indigenous route that connects the Andes to the Atlantic, the Peabiru, Cabeza de Vaca reached the southern coast of Brazil in 1541, passing near the Iguassu Falls on one of his routes.

It is possible that Cabeza de Vaca sought to avoid attacks from the indigenous population by deviating from the most obvious route, which would have been to sail to Buenos Aires by sea and then follow the Paraná and Paraguay rivers to reach Asunción. However, that was the age of conquerors. Men like Cabeza de Vaca aspired to find - like Francisco Pizarro, who had subjugated the Inca Empire in the Andean region seven years earlier - another advanced civilization in the interior of South America.

However, there was no other empire to be found on the Peabiru route, which was traveled by an expedition consisting of about 200 soldiers, priests, laborers, and indigenous guides. On the last day of January 1542, the group reached the mouth of the Iguassu River. They then crossed the Paraná

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River and continued on foot until reaching Asunción on March 11, 1542.

The governor's stay in Asunción was short and full of controversies. In the political intrigues of the time, he ended up being imprisoned and deported to Spain in 1545. Ten years later, as part of his defense efforts, the book "La Relación y Comentarios del Gobernador Álvaro Núñez Cabeza de Vaca" (1555) was published. The first part of the compendium, "Relación," written by the governor, narrates his passage through North America. The second part, "Comentarios," written by his secretary, Pedro Hernández, recounts the expedition in South America, including the first European encounter with the Iguassu Falls. In chapter 11, the manuscript records that the governor and his expedition encountered a "problem" to overcome: "a difficult passage of a river," which required the group to carry the canoes over land "using the strength of their arms."

According to Hernández's description, the "difficult passage" consists of "very high rocks" that, with the falling water, can be heard "from a great distance," and the "foam that forms" plummets "with great force." The book describes how the canoes were returned to the river after overcoming the "problem."

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Following the course of the waters, the Spaniards advanced just over twenty kilometers until they reached the mouth of the Iguassu River on the Paraná River. The main concern of the Spaniards was the local people who, according to rumors, had annihilated a Portuguese expedition in the vicinity of another river in the region. Chapter 11 ends by reporting the feared encounter: at the mouth of the Iguassu, many Guarani people "adorned with parrot feathers," painted, and armed with their bows and arrows.

In contrast to the brief description of the Falls, the notes about the indigenous population are lengthy and full of adjectives. The feathered Guarani of 1542 were praised for their indescribable beauty, so "it was a great pleasure to see them." There was no feared confrontation. The Spanish expedition continued its crossing of the Paraná River. "With great whirlpools," the force of the waters claimed, "a Christian," who died trying to reach the other shore. After this loss, the governor proceeded to Asunción.

The story of Louis Hennepin's passage through Niagara Falls has two interesting coincidences compared to Iguazu

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Falls, which the French priest never knew. The first is that Hennepin was born in 1626, the same year when the Jesuits abandoned the Santa Maria do Iguassu reduction to protect themselves from the Bandeirantes, who were pressing the borders between Portugal and Spain in the region. The other coincidence is that when Hennepin encountered Niagara Falls, he was the same age as Cabeza de Vaca when the latter saw Iguazu Falls: both were 52 years old.

Despite these coincidences, as Cabeza de Vaca and Hennepin lived in significantly different times, the priest traveled the continent when Spain no longer shared the dominion of American lands exclusively with the Portuguese. Louis Hennepin was a clergyman in the service of "New France," which would later become part of the United States and Canada. Like England, the Sun King advanced into territories in North America that had previously belonged to Spain.

The priest arrived in North America in 1675. Three years later, his expedition to explore the western part of New France led to the first European contact with Niagara Falls. Hennepin himself recorded the event with an illustration in his diary. Later, in 1698, he wrote a book titled "A New Discovery."

The French arrival at Niagara occurred 136 years after the

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Spanish passage through the "difficult passage" of the Iguassu River. Despite being separated by time and space, the first European contact with the waterfalls is described similarly: the height of the rocks, the force of the water, the noise, and the foam also appear in Louis Hennepin's account. However, while the Spanish book was a defense of the governor's actions, giving little importance to the beauty of Iguazu Falls, Father Hennepin's writing adopts a poetic literary style. The French priest also parallels his continent, stating that the waterfalls in Italy and Switzerland would be "false standards" compared to "the one we are speaking of now."

In addition to drawing the waterfalls, Hennepin was more meticulous about their natural aspects: he mentioned the sound of the waters over the rocks, and he emphasized that the sound could be heard "fifteen leagues away." It is a justifiable exaggeration, as the author wrote to captivate the public with his "new discovery." He highlighted that the roar of the falls was very loud, "more terrible than thunder," as the waters "that fall from this vast height foam and boil in the most fearful manner imaginable."

Despite the strong impact caused by the stunning waterfalls on both colonizers, the historical contexts of Cabeza de Vaca's and Hennepin's expeditions were very different, as already mentioned. The governor's account was published

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for his defense against political opponents' accusations. The priest wrote a book to communicate a novelty. The Spaniard mentions only his heroic way of bypassing Iguazu Falls. The Frenchman provides an artistic description of Niagara Falls. On the one hand, a problem. On the other hand, a poem.

The original accounts of the colonizers have been preserved in North America, helping us to learn about the unprecedented encounter of Europeans with the two most extensive waterfalls in the Americas. Since then, the historical context has changed. Neither Cabeza de Vaca was Portuguese, nor Hennepin was English. The former colonies of Portugal and England became independent states, expanding their boundaries to territories that once belonged to the Spanish Empire and New France. Thus, both Iguassu Falls, between Brazil and Argentina, and Niagara Falls, between the United States and Canada, mark the borders of Independent Americas.

7

Honeymoon



Visitation and territorial boundaries have been central to the history of both Iguazu and Niagara Falls. Before the arrival of Columbus, the Guarani people in the South and the Iroquois in the North created their explanations for forming these majestic waterfalls, likely solidifying territorial boundaries through their cosmological perspectives in disputes with other Indigenous Peoples. In the case of European explorers like Cabeza de Vaca and Hennepin, their expeditions into these territories were not driven by tourism or the appreciation of natural beauty but by the expansion of European empires. During the colonial period, these boundaries were subject to various conflicts and would shift as explorers advanced.

Both national borders and the tourism of visitation have taken unique forms in the past 200 years. Tourism as a deliberate journey to explore a specific location is even more recent. It is an economic activity that varies by country, culture, and the purchasing power of societies. Among the largest waterfalls in the Americas, tourism at Niagara predates that at Iguazu by almost a century.

The origins of modern tourism precede mass tourism, which involves hosting many people in a particular city to visit an attraction. The first tourists at Niagara Falls, such as Jerome Bonaparte, date back to the late 18th and early 19th centuries. In the South's counterpart, tourism only

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began a century later, during the turn of the 19th to the 20th centuries, with a notable visit from Santos Dumont.

* * *

Naming and quantifying the tourists who have visited the Iguassu and Niagara Falls since ancient times is impossible. The most lasting memories are of people who were celebrities in their times, such as Charles Dickens and Napoleon Bonaparte III at Niagara, and Claude Lévi-Strauss and Oswald de Andrade at Iguassu, in addition to, of course, Dumont himself.

In the early 1800s, railroads crossed the United States and reached the Canadian border. In 1801, the wedding of Theodósia, the sister of the U.S. vice president, was celebrated at Niagara Falls. It was Jerome Bonaparte's turn to celebrate his wedding at the grand waterfalls four years later. Jerome was the brother of the French statesman Napoleon Bonaparte, who became emperor and shook Europe with his power and dominance.

These noble weddings set a precedent for Niagara Falls to become a global destination for weddings and honeymoons.

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For over 200 years, the Niagara Falls scenery has been attributed as the "honeymoon capital of the world." In this aspect, there is no comparison with the Iguassu Falls, despite the advertising appeal in recent years.

Unlike the brides and grooms at Niagara Falls, Santos Dumont's inaugural visit faced no easy access — something the aviator even reported to the governor of the state! North America already had a railway system, the Brazil-Argentina border region relied on river navigation. Tourism structures were limited, predominantly undertaken by the Platine country until the early decades of the 20th century.

It was after the arrival of boats and steamers and the end of the War of the Triple Alliance in 1870 that navigation agreements allowed Argentine companies to explore the Paraná River. The railroad connecting Buenos Aires to Posadas, about 200 kilometers from the Brazilian border, was completed in the early 1910s. On the Brazilian side, a dirt road was opened only in 1920 and finished almost 50 years later!

In 1916, visiting the Falls was an activity for people living nearby or with an adventurous spirit like Santos Dumont. Four years after the famous aviator's stay, another renowned character passed by Iguassu: Burton Holmes, a documentary

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pioneer, recorded the oldest video images of the Iguassu Falls we know. His scenes revealed a place that had not yet become touristy, like Niagara. It would take about twenty more years to execute a plan in that direction.

In the early 1930s, Brazil and Argentina were governed by nationalist presidents who believed it was necessary to "Brazilianize" and "Argentinize" their respective countries. This included taking care of national borders. For this reason, Argentina conceived Iguazú National Park in 1934. As a response, Brazil created Iguassu National Park five years later. In this case, protecting the Brazilian borders was also part of creating national territories, aiming to prevent territorial disputes that were plaguing the world in World War II from eventually reaching this side of the Atlantic.

Both parks were distinctive, transcending mere bureaucratic formations. The Argentine and Brazilian national parks were designed to foster the economic development of their respective regions, a goal that was successfully realized. Strategically planned and executed investments from Buenos Aires and Rio de Janeiro brought about a radical transformation in the area. Regrettably, Santos Dumont did not live to witness the metamorphosis of Iguassu into a hub of mass tourism.

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A federal plan to create a park around the waterfalls did not occur at Niagara Falls, where land access conditions facilitated tourism development. In Iguassu, the national park was created in an isolated area covered by a dense Atlantic Forest, with no land access to the state capital. The transportation situation was so dire that one of the first buildings to be completed in the construction complex around the park was the Iguassu National Park Airport in 1941.

Ângelo Murgel was the architect who planned the works of Iguassu National Park. In his 1945 book, he describes more than twenty works in the area, such as the airport. Murgel also mentions that a stretch of highway was under construction for land access to Foz do Iguassu, and the city's river port on the Paraná River was undergoing renovations to increase boat traffic.

As per Murgel, Getúlio Vargas, with the vision of modernizing the country, aspired to transform the region into a "terrestrial Eden" and an "international tourism center" by promoting this extensive activity. To illustrate, the projected investment for this endeavor was 32 million cruzeiros, surpassing the entire budget of Paraná in 1941, which amounted to approximately 28 million cruzeiros.

This was a very different scenario from the previous decades

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when the governor of Paraná had little more than legal resources to meet Santos Dumont's request. Now, the situation was different. In 1940, the first luxury hotel in Foz do Iguassu was inaugurated. Located in the city center, about twenty kilometers from the Falls, the Iguassu Casino Hotel was owned by the government of Paraná.

Like Niagara Falls, the casino business was also introduced as a tourist possibility. However, the activity lasted only a short time, as gambling was prohibited in Brazil in 1946. The hotel, however, continued its trajectory, becoming a reference in the early years of tourism in Iguassu. Currently, the restaurant school of the National Commercial Learning Service operates on the premises of this old building.

Despite their different trajectories, Iguazu Falls and Niagara Falls were mass tourist attractions in the early 21st century. Hundreds of thousands of visitors stroll through the parks, admire the falls, and make use of the hotel and dining networks. Investments in attractions like museums, aquariums, and Ferris wheels are carried out with the aim of increasing tourists' length of stay in the cities.

HONEYMOON

Approximately two million people visit Iguazu Falls annually, of which around 80% are from Brazil and Argentina. A small percentage, about 1%, comes from the United States, indicating considerable room for comparing Iguazu and Niagara. In the Northern Falls, the Canadian side records about 13 million visitors annually. That is more than ten times the total number of tourists who visit Iguazu, with over 90% being Canadians or Americans. There are no data on how many Brazilians visit Niagara.

On the internet, you can find a reasonable number of comments from those who have seen one of the Falls and, as a result, have decided to visit the other. These accounts lead us to some observations. American and Canadian visitors have access to a century-old infrastructure and first-rate attractions. This makes them highly demanding and critical of public transportation and food quality, among other services, at Iguazu. There is a consensus that tourism at Southern Falls has much room for improvement.

Another point where tourists' narratives converge is the idea of a "wilder" experience on the Brazil-Argentina border, starting with the fact that Iguazu Falls is far from the city center, which is not the case with Niagara Falls. Additionally, the boat ride at Iguazu Falls in a small vessel offers a more extreme experience. At Niagara, on the other

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hand, the same tour is offered on a larger boat, shared by hundreds of people.

If, at Niagara Falls, the weddings of the sister of the Vice President of the United States and the brother of the Emperor of France inaugurated a tradition of weddings and honeymoons in the early 19th century, at Iguazu Falls, it wasn't until 1958 that Brazilian brides started to desire a honeymoon at one of the most impressive natural wonders in the world with the inauguration of the Hotel das Cataratas.

The main explanation for the pioneering of tourism at Niagara Falls is the arrival of the railway. As a result of the ease of overland access and the centrality of the connection between the United States and Canada, Niagara became a mass tourist attraction long before Iguassu. Aware of this convenience, Santos Dumont intervened with the government of Paraná precisely so that the tourism industry could be developed through improvements in access to Iguazu Falls.

The aviation pioneer had already passed away when a project was implemented to ensure roads and accommodations at

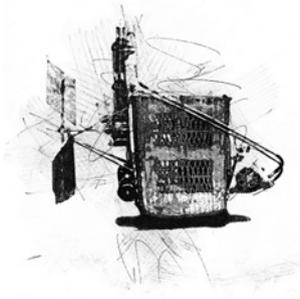
HONEYMOON

Iguassu. The Brazilian federal government built the Iguassu National Park in the context of competition with Argentina. In addition to an airport, the construction project included road improvements, a refurbishment of the river port on the Paraná River, and the establishment of trails near the Falls.

It was a significant public investment to make the Iguassu National Park a tourist destination, although unparalleled with Niagara Falls. The eight thousand kilometers between one and the other are still a limiting factor for more people to get to know the two waterfalls and draw their conclusions, as Santos Dumont did.

8

Borders



Currently, Iguassu and Niagara Falls are in the most significant border regions in the Americas and the world. These are heavily trafficked borders for people and goods, situated in regions that produce electrical energy and are surrounded by environmental preservation areas. In many ways, the immense waterfalls are part of two of the most dynamic borders in South and North America.

Just as with the two waterfalls, in some respects, we can compare the border regions between Brazil and Argentina, delimited by the Iguassu River, and between the United States and Canada, marked by the Niagara River. Economically speaking, the South American countries are part of a group of states with a standard of living ranging from low to medium, a developing industrial base, and average social and economic indicators. In the case of North America, it is the border between two states characterized by a greater income distribution homogeneity, a high quality of life, a consolidated industrial base, a high level of technological integration, and significant investment in research and development.

This caveat is paramount, given that the economic condition of nations begets disparities not only in the infrastructure facilitating park access but also in the interactions among the citizens of the bordering states. A

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temporal abyss existed between the advent of the railway at Niagara Falls in the early 1800s and the realization of a fully paved highway to Foz do Iguassu, materializing only in 1969.

* * *

The Iguassu Falls are situated in Foz do Iguassu and Puerto Iguazú. Foz do Iguassu is approximately 600 kilometers from Curitiba and 1,600 kilometers from Brasília, the capitals of Paraná and Brazil, respectively. Puerto Iguazú is located 300 kilometers from Posadas and 1,900 kilometers from Buenos Aires, the capitals of Misiones and Argentina. The Brazilian city has a population of 258 thousand, and the Argentine city has 80 thousand. Combined, the two cities gather 338 thousand inhabitants.

"Niagara Falls" refers to the twin cities on both sides of the border. In Canada, Niagara Falls is 130 kilometers from Toronto, the capital of the province of Ontario, and 500 kilometers from Ottawa, the capital of Canada. In the United States, the city is 650 kilometers from one of the major American urban centers, New York, and is equidistant from the country's capital, Washington DC.

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The Canadian city has 88 thousand inhabitants, and the American counterpart has 48 thousand, resulting in a population of 136 thousand in the vicinity of the conservation areas. Although small urban centers, one factor contributing to the tourism at Niagara Falls, reaching around 13 million annual visitors, is the proximity to major urban centers in North America. The Buffalo metropolitan area has more than 1.1 million inhabitants on the American side. On the Canadian side, the Toronto metropolitan area surpasses six million people. In addition, Ottawa, New York, and Washington D.C, equidistant from the Falls, together account for a population of 19 million, further elevating the number of potential annual visitors.

In the area of the Iguassu River, the immediate metropolitan region is not in Brazil or Argentina but in Paraguay, the most populous side of the Triple Frontier. It is the Metropolitan Region of Ciudad del Este encompasses about 600 thousand inhabitants. In Argentina, Greater Posadas has around 300 thousand people. In Brazil, the closest metropolitan region is Cascavel, located approximately 100 kilometers away and with a population of about 500 thousand inhabitants, followed by Curitiba, which is a 10-hour drive away and gathers three million people.

Therefore, the Iguassu Falls are farther from major urban,

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political, and commercial centers in their respective countries than the Niagara Falls. However, the resident population around the Southern waterfalls surpasses that of the Northern ones. Additionally, the confluence of the Iguassu River into the Paraná River produces a unique effect in South America compared to North America: it marks the most significant tri-national encounter in the Americas.

The existence of triple frontiers stands as a prevalent phenomenon in the realm of international relations. Among the 195 countries constituting the United Nations, 134 are characterized by borders shared with two or more nations. South America, specifically, boasts 13 instances of triple frontiers, with nine of these intersecting with Brazil. Conversely, North America lacks such triadic convergences, as Canada and Mexico find themselves separated by the extensive borders of the United States, which, in turn, maintains substantial territorial connections with its neighboring nations in the region.

Iguassu Falls are in the largest and most complex of South America's triple frontiers, internationally known as "the"

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Triple Frontier of our subcontinent. Despite the world record for clean energy generation by the Itaipu Binacional and the title of Natural Heritage of Humanity awarded to Iguassu National Park, the Triple Frontier is mainly known for the trade on the Paraguayan side.

In 1940, Brazil and Paraguay began a process of political rapprochement. While the first country sought to reduce Argentine influence over the Guarani nation, the second aimed to gain a land route to the sea. As a result of this mutual interest, a proposal emerged that led to one of the greatest engineering works of the 20th century in the Americas: the Itaipu Binacional hydroelectric plant.

To build Itaipu and provide Paraguay with access to the sea, bridges, and roads were constructed on both the Brazilian and Paraguayan sides of the border. The complete infrastructure was completed by the end of the 1960s, a period when both countries were under authoritarian regimes. This is not a mere detail. It is essential to bear in mind that this monumental project, responsible for immense environmental and human impacts, was only carried out because of the authoritarian period. In less than ten years, a quiet region of seven thousand people turned into a bustling construction site with over 100,000 inhabitants. In parallel, a free trade zone was established in the Paraguayan city of

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Ciudad del Este, which at that time was still called Puerto Presidente Stroessner, in honor of the country's dictator. In the 1990s, the city, already renamed Ciudad del Este after Stroessner's ousting, established itself as the largest commercial center in Paraguay.

From this rapprochement between Brazil and Paraguay, a paradox emerged. Alongside Brazil's project to turn Iguassu National Park into a "terrestrial Eden," the infrastructure of roads and bridges finally turned the region into an area for national and international tourism. Three airports were built, one on each side of the border, and the highways quickly became too small for the increasing flow of vehicles. Finally, as Santos Dumont had wished, a hotel and restaurant network was established in Foz do Iguassu in the 1970s. The infrastructure that facilitated the flow of people and goods at the Triple Frontier also boosted visitation and transformed Iguassu Falls into a mass tourism destination.

The first bridge constructed in the Triple Frontier region connected Brazil to Paraguay, formalized through the

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signing of the Treaty for the Construction of the Friendship Bridge in 1956. Remarkably, the architectural design of the bridge featured a cleverly designed arch to accommodate navigation requirements on the Paraná River, where the Iguassu River meets. In North America, the Rainbow Bridge links the cities of Niagara on both sides of the border, also showcasing an arch. However, despite the structural similarities, the arch holds significantly different symbolism: in the North, it represents the rainbow of Niagara Falls.

Another bridge emerged over the Iguassu River at the Brazil-Argentina border, initially slated to bear the name Fraternity Bridge. However, it underwent a renaming to Tancredo Neves following the untimely death of the president-elect on the eve of inauguration in 1985. In contrast, the Rainbow Bridge in Niagara was established close to the grand waterfalls in 1941, while the Tancredo Neves Bridge in Iguassu was positioned 20 kilometers from the Falls.

Between Brazil and Argentina, it is estimated that approximately 290,000 individuals and 3,000 vehicles traverse the Tancredo Neves Bridge monthly. In North America, the toll records affiliated with the Rainbow Bridge reflect a monthly average of 111,000 people and

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98,000 vehicles. Despite the substantial numbers, the regional dynamics differ markedly. A mere 30 kilometers from the Rainbow Bridge lies another connecting structure: the Peace Bridge, the second most strategic along the extensive U.S.-Canada border. The paramount Ambassador Bridge, situated 238 kilometers from Niagara Falls, holds the utmost significance.

Regarding the flow of people, the most pertinent bridges in the Americas, namely the Friendship Bridge and the Ambassador Bridge, stand 31 kilometers from Iguassu Falls and 238 kilometers from Niagara Falls, respectively. The former sees a daily passage of 97,000 individuals and 308 trucks, while the latter accommodates 68,000 people and 8,000 trucks daily. In the North American border's vicinity, numerous viaducts complement the landscape, where the Nexus program facilitates the expedited movement of "low-risk" citizens, striking a delicate balance between the flow of people and border control.

The suggested title for this chapter could be: "The Iguassu Falls and Niagara Falls Regions: A Reflection 90 Years After

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Santos Dumont's Passing." The aviator departed before the establishment of Iguassu National Park. Since 1932, tourism has witnessed substantial growth and enhancement in both Iguassu and Niagara. In Iguassu, the National Park marked only the commencement of a transformative journey. Various regional initiatives would subsequently position the Triple Frontier as one of the most emblematic areas in the Americas.

The extensive road and bridge network linking Brazil and Paraguay has significantly contributed to the surge in tourism at Iguassu Falls. Like the nearby cities, tourism infrastructure experienced rapid expansion from the 1970s, reaching consolidation and professionalization in the early 2000s. Tourism emerged as a pivotal economic activity, supported by a robust network capable of accommodating thousands of visitors annually.

Since the early 19th century, the Niagara Falls region has functioned as a crucial logistical hub, which is pivotal in fostering tourism development. This realization echoed Santos Dumont's insights in the early 20th century. More than a century later, the economic evolution of the U.S.-Canadian border serves as a continual source of lessons on optimizing shared space and harmonizing freedom of movement with state controls.

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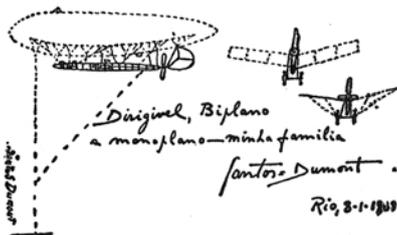
Ultimately, Iguassu Falls apparently maintains a distinctive contrast with Niagara Falls. The tourism "lag" perceived by Santos Dumont has been surpassed. Alternatively, one might discern an advantage. In Iguassu, the greater distance from major urban centers in Brazil and Argentina imparts a "wilder" aspect to the region, as Argentineans are keen to underscore. The vitality of nature represents a unique facet that renders a visit to Iguassu a markedly distinct experience from that of Niagara Falls.

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9

False Dilemmas



Two dilemmas weave through the fabric of this book. The first revolves around the pioneering era of airplane invention, prompting the question: Who indeed invented the airplane, Santos Dumont, or the Wright brothers? A Brazilian perspective unequivocally champions Santos Dumont, while an American response will invariably differ. The initial section of this book furnished evidence to debunk the fallacy of this inquiry concerning Santos Dumont's sojourn through Iguassu.

A dilemma suggests a choice, yet in the realm of international aviation, both Dumont and the Wright brothers played integral roles in the early 20th-century world of inventors. Aviation, akin to numerous other inventions, lacked a solitary progenitor, as some assertions might imply; rather, it emerged from the collective efforts of multiple individuals, with specific figures prominently standing out. In the annals of aeroclubs in the 1900s, Santos Dumont was celebrated as the first to soar publicly. At the same time, the Wright brothers were trailblazers in flight, even though the public documentation of their flights occurred post the 14-Bis. Hence, this dilemma is misleading, as all three were pioneers in aviation.

The second dilemma pertains to the two preeminent waterfalls in the Americas. The question persists: Which waterfall is more breathtaking— Iguazu Falls or Niagara

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Falls? The latter part of this book was dedicated to navigating a path inaugurated by Santos Dumont in 1916 when he again pioneered the public comparison of the two waterfalls.

During that era, Dumont was one of the select few who had acquainted themselves with both waterfalls and became the first Brazilian to juxtapose them in a widely circulated newspaper. When he visited Niagara, the aviator encountered a century-old tourism industry. In contrast, during his sojourn to Iguassu, there was not even a hotel "in those parts." While Niagara was accessible via a well-established railway network, Iguassu lacked even land access—an endpoint only reachable through Argentine territory. Yet, in terms of beauty, according to Santos Dumont, Niagara was "merely" an awe-inspiring waterfall adjacent to the majestic Iguassu Falls.

Today, Iguassu Falls and Niagara Falls are virtually equivalent in terms of tourist activity. Although a significant disparity exists in the annual visitor count, with Niagara hosting approximately ten million more, both colossal waterfalls have solidified their status as mass tourist destinations.

Following in Santos Dumont's footsteps, it became possible to unearth new parallels between Iguassu and Niagara. Despite being separated by eight thousand kilometers, both

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share a parallel history. Since time immemorial, Indigenous Peoples of South and North America have elucidated the geological formations through analogous mythologies. Early European colonizers are remembered in both regions as the initial white men to chronicle the splendor of the waterfalls. In more recent history, environmental conservation has imprinted its mark on the parks enveloping both Niagara Falls and Iguassu Falls.

Presently, the regions of Niagara and Iguazu stand as pivotal logistical points for North and South America, respectively. This is evidenced by the ease of access for a considerably larger population on the U.S.-Canadian border via the Niagara River compared to the Brazil-Argentina border via the Iguassu River. The distance from major urban centers preserves the splendid nature at Iguassu, while Niagara exudes a more urban ambiance.

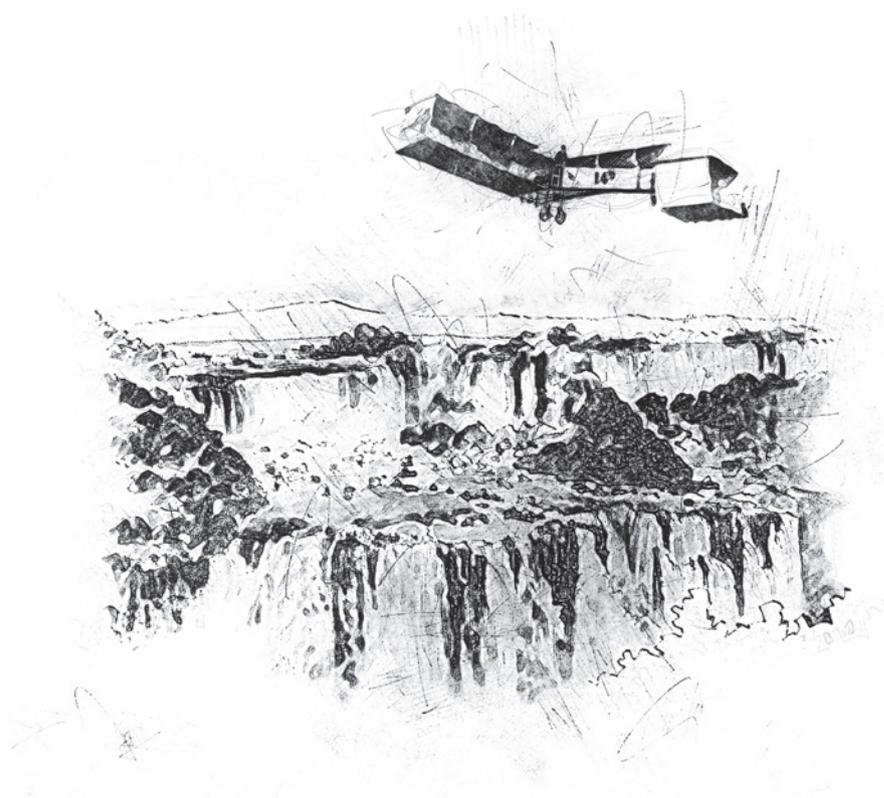
Lastly, two distinctly disparate elements characterize each of the waterfalls. Snow is a unique phenomenon at Niagara Falls, providing a spectacle of unparalleled beauty during winter, despite transportation limitations. In contrast, the specific phenomenon of admiring the falls with minimal water flow is exclusive to Iguassu during dry spells. Unlike snow, drought presents a peculiar condition that often resonates with people's environmental sensitivities.

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Incidentally, there is a historical record of a drought at Niagara Falls, which transpired on March 30 and 31, 1848. A substantial ice jam in the Niagara River obstructed the water flow, causing various disruptions, including psychological turmoil for some who believed it heralded the apocalypse. In Iguassu, droughts occur quite frequently, as documented in photographs since at least 1950. Subsequent decades have witnessed several drought episodes, with a marked increase in recent years.

In conclusion, the resolution is that we confront another false dilemma. Both Iguassu Falls and Niagara Falls exude distinct beauty. However, visual evidence, akin to Santos Dumont's observation, concludes that Iguassu is "larger, much larger" than Niagara. More than a century after this realization, those hailing from Brazil, the United States, Canada, and Argentina can utilize aviation to draw their conclusions. Modern aircraft facilitate traversing the Americas and soaring over the waterfalls.

FALSE DILEMMAS



REFERENCES

ALCARÁZ, J. **Misiones a través de los relatos de viajes**. Posadas: Edunam, 2009.

AZARA, F. D. **Viajes por la América del Sur**. Montevideo: Imprenta del Comercio del Prata, 1850.

BALSADÚA, F. D. **Pasado - Presente - Porvenir del Territorio Nacional de Misiones**. La Plata: Instituto Geográfico Argentino, 1901.

BARROS, E. F. X. Planta dos Grandes Saltos do Iguassú ou de Santa Maria. [1897]. In: NASCIMENTO, D. **A hulha branca no Paraná**. Curitiba: Turnauer & Machado, 1914.

BARROS, H. L. Santos Dumont. In: ABREU, A. A. **Dicionário Histórico-Biográfico da Primeira República (1889-1930)**. Rio de Janeiro: CPDOC/FGV, 2013. Disponível em: <<https://cpdoc.fgv.br/sites/default/files/verbetes/primeira-republica/DUMONT,%20Santos.pdf>>. Acesso em: 4 jun. 2022.

BLANC, J. **Before the Flood: The Itaipu Dam and the Visibility of Rural Brazil**. Durham: Duke University Press, 2019.

BLANC, J.; FREITAS, F. **Big Water: The Making of Borderlands Between Brazil, Argentina and Paraguay**. Chicago: University of Arizona Press, 2018.

BOLTON, H. E. The Epic of Greater America. **American Historical Review**, 38, n. 3, p. 448-474, abr. 1933.

BRASIL. **Decreto-Lei n. 1.035 de 10 de janeiro de 1939**: Cria o Parque Nacional do Iguassú e dá outras providências. Rio de Janeiro: Presidência da República, 1939.

BROWN, J. L. Pan American Cooperation in Aeronautics. **Journal of Air Law and Commerce**, Dallas, 9, n. 3, 1938.

BTOA. **Border Traffic Statistics issued by the Bridge and Tunnel Operators Association**. Disponível em: www.bridgeandtunneloperators.org. Acesso em: 7 abr. 2022.

CAMPBELL, M. F. The Day Niágara Stood Still. **Canadian Geographical Journal**, p. 28-32, jan. 1960.

CARR, J. M. **Niágaras of Ink: Famous Writers at the Falls**. Albany: State University of New York Press, 2020.

CARVALHO, J. M. D. **A formação das Almas: o imaginário da República no Brasil**. São Paulo: Companhia das Letras, 1990.

CATARACTS of Iguassu 1920s. Dirigido por: Burton Holmes. [192-]. Publicado pelo canal Travelfilmarchive, 2008. 1 vídeo (3 min 40 s). Disponível em: <https://youtu.be/WLX5WLhDUSk>. Acesso em: 17 mar. 2022.

CATARATAS DO NIÁGARA BRIDGE COMISSION. **Traffic Statistics**. Disponível em: <https://www.Niagarafallsbridges.com>. Acesso em: 7 abr. 2022.

CERVO, A.; BUENO, C. **História da política exterior do Brasil**. Brasília: FUNAG, 2012.

CHARLES, V. M. **Maiden of the Mist: A Legend of Cataratas do Niágara**. Markham: Fitzhenry & Whiteside, 2001.

CONVERSANDO com Santos Dumont. **O Estado de S. Paulo**, São Paulo, p. 1, 11 mai. 1916.

CORRÊA, M. S.; ALDÉ, L. **Meu Vizinho, o Parque Nacional do Iguaçu**. Foz do Iguaçu: Ecocataratas, 2009.

DULCI, T. S. **As Conferências Pan-Americanas (1889-1928):** identidades, união aduaneira, arbitragem. São Paulo: Alameda, 2013.

FERREIRA, L. D. C.; LOUREIRO, M. J. G.; ARIAS NETO, J. M. **O Legado de Marte: Olhares Múltiplos sobre a Guerra do Paraguai**. Curitiba: Appris, 2021.

FREITAS, F. **Nationalizing Nature: Iguazu Falls and National Parks at the Brazil-Argentina Border**. Cambridge: Cambridge University Press, 2021.

HEILIG, S. The dirigible balloon of M. Santos Dumont. **The Century Illustrated Monthly Magazine**. New York, p. 67-68, nov. 1901.

HENNEPIN, L. **A new discovery of a vast country in America [1698]**. Chicago: A. C. MaCLURG & CO., 1903.

HERNÁNDEZ, P.; NÚÑEZ CABEZA DEVACA, A. **La relación y comentarios del Governador Alvar Núñez Cabeça de Vaca, de lo acaescido en las dos jornadas que hizo a las Indias**. Valladolid: Francisco Fernández de Córdova, 1555.

HOBBSAWM, E. **A Era dos Extremos: o breve século XX**. São Paulo: Companhia das Letras, 1995.

HOFFMAN, P. **Asas da loucura: a extraordinária vida de Santos-Dumont**. Rio de Janeiro: Objetiva, 2010.

JASKOSKI, M.; SOTOMAYOR, A. C.; TRINKUNAS, H. A. Borders in the Americas: theories and realities. In: JASKOSKI, M.; SOTOMAYOR, A. C.; TRINKUNAS, H. A. **American Crossings: Border Politics in the Western Hemisphere**. Baltimore: Johns Hopkins University Press, 2015.

JOSEPH, G. M.; LEGRAND, C. C.; SALVATORE, R. D. **Close Encounters of Empire: Writing the Cultural History of U.S. – Latin American Relations**. Durham: Duke University Press, 1998.

JUSIONYTE, I. **Savage Frontier: Making News and Security on the Argentine Border**. Oakland: University of Carolina Press, 2015.

LE PETIT JOURNAL. Une sensationnelle expérience d'aviation au bois de bologne. **Le Petit Journal**, Paris, p. 1, 25 nov. 1906.

LIMA, Jackson. **Poor Niágara! Eleanor Roosevelt esteve nas Cataratas?** Blog de Foz, 2009. Disponível em: <https://bitly.com/TZKhk>. Acesso em: 17 mar. 2022.

LISBOA, M. T.; MARTÍNEZ, F. E. M. Path dependence in the Tri-Border Area. **Canadian Journal of Latin American and Caribbean Studies**, Toronto, p. 1-26, 2021.

LOUVAIN, P. O Marco das Três Fronteiras: símbolo da integração latino-americana e de resolução pacífica dos litígios internacionais. COELHO, I. et al. **Anais do XVII Encontro Estadual de História da ANPUH-SC**. Joinville: ANPUH, 2018.

MAPA. Medições ao norte do patrimônio de Foz do Iguaçu. Curitiba: [s. n.], 1941.

MAEDER, E. J. A. **Atlas territorial y urbano de las misiones jesuíticas de guaraníes**: Argentina, Paraguay y Brasil. Sevilla: Instituto Andaluz del Patrimonio Histórico, 2009.

M. SANTOS-DUMONT rounds Eiffel Tower. **The New York Times**, New York, 1901.

MURGEL, A. **Parques Nacionais**. Rio de Janeiro: Imprensa Nacional, 1945.

MYSKIW, A. M. **A fronteira como destino de viagem**: a Co-lônia Militar de Foz do Iguaçu (1888/1907). Guarapuava: EDUNICENTRO, 2011.

MYSKIW, A. M. Ser colono na fronteira: a singularidade da Colônia Militar de Foz do Iguaçu (1889/1910). **Perspectiva Geográfica**, Cascavel, 6, n. 7, p. 1-20, 2011.

NASCIMENTO, D. **Pela Fronteira**. Curitiba: Typografia da República, 1903.

NIÁGARA REGION. **Niágara Tourism**. Cataratas do Niágara: Niágara Canada, 2018.

PARANÁ. **Decreto n. 653**. Curitiba: Presidência do Estado, 1916.

PEYRET, A. **Una visita a las colonias de la Republica Argentina**. Buenos Aires: Imprenta Tribuna Nacional, 1889.

PMFI. **Inventário Técnico de Estatísticas Turísticas**. Foz do Iguaçu: Prefeitura Municipal de Foz do Iguaçu, 2018.

PRUNER, R. R. **Frederico Engel**: pioneiro no turismo e hotelaria em Foz do Iguaçu. Blumenau: Nova Letra, 2014.

REBOUÇAS, A. Excursão ao Saldo da Guayra ou Sete Quedas pelo Capitão Nestor Borba - Notas e Considerações de André Rebouças [1876]. **Revista do Instituto Histórico e Geográfico Brasileiro**, Rio de Janeiro, p. 65-87, jan. 1898.

SANTOS Dumont. **Diário da Tarde**, Curitiba, 5 mai. 1916.

SCHOULTZ, L. **Estados Unidos**: poder e submissão. Bauru: EDUSC, 2000.

SILVA, M. A. **Breve História da Trílice Fronteira**. Foz do Iguaçu: 100Fronteiras, 2022.

SILVA, M. A.; CASTRO, I. C. S. **Além dos limites: a Trílice Fronteira nas Relações Internacionais Contemporâneas**. São Paulo: Alameda, 2021.

TENTH Annual Banquet of the Aero Club of America, held at the Hotel Biltmore, New York, January 12, 1916. **Flying**, New York, V, n. 1, fev. 1916.

THE \$10,000 Pan-American Aviation Trophy. **Flying**, New York, V, n. 1, fev. 1916.

THE Pan-American Aeronautic Federation. **Flying**, New York, V, n. 4, mai. 1916.

UDC. **Pesquisa sobre o perfil de pessoas que atravessam a Ponte da Amizade**. União Dinâmica de Faculdades Cataratas. Foz do Iguaçu. 2018.

UDC. **Pesquisa sobre o tráfego de veículos – Ponte Internacional da Amizade e Ponte Internacional Tancredo Neves**. Centro Universitário Dinâmica das Cataratas. Foz do Iguaçu. 2018.

WACHOWICZ, R. **História do Paraná**. Curitiba: Vicentina, 1995.

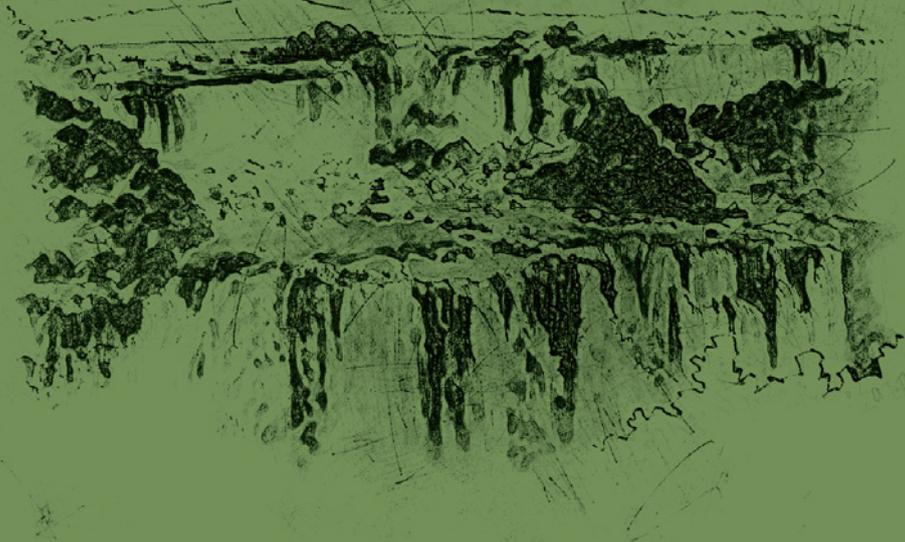
WACHOWICZ, R. **Obrageiros mensus e colonos: história do oeste paranaense**. Curitiba: Vicentina, 1982.

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