<u>Investigating a Century-Long Hole in History: The Untold Story of *Ayahuasca* From 1755-1865</u>

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¹ Richard Schultes, Wade Davis, *The Lost Amazon: The Photographic Journey of Richard Evans Shultes* (San Francisco: 2004), 56.

² Gerardo Reichel-Dolmatoff, *The Shaman and The Jaguar: A Study of Narcotic Drugs*

Abstract:

This thesis illuminates the lost history of *ayahuasca* and argues that a larger institution, the ethnocentric and economically focused European milieu, prevented eighteenth and nineteenth-century Europeans from further investigating this mysterious plant-based hallucinogenic infusion. A myriad of factors contributed to these triumphal trade winds of prevailing European thought—ethnocentricity, consequent internalization, economic avarice, and European geo-political domination. In addition, there were other fateful historical circumstances beyond the influence of European paradigms that may have prevented *ayahuasca* from entering mainstream history.

This thesis begins an understanding toward the reasons that led to a century of historical cover-up—the skeleton of what occurred is laid out, with hopes of the flesh to be filled in later. Significantly, this story brings light to the limits of western intellectual paradigms, for although the impetus to further understand this vine of souls was in the fingertips of talented intellectuals, the prevailing European milieu impeded further intellectual investigation.

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Introduction

"It happened at the beginning of time. In the beginning of time, when the Anacondacanoe was ascending the rivers to settle mankind all over the land, there appeared the Yajé Woman...the woman left the maloca and gave birth to the yajé vine in the form of a child...he cut the umbilical cord. This is why yajé comes in the shape of a vine."

-Translation of Deasano Creation Myth, The Shaman and the Jaguar (1975)²

"There was a woman among them [the first Tukano men], the first woman in Creation...when the Sun Father had created her in the House of the Waters, he had pregnated her body through the eye; by looking at his radiance she had become pregnant and now she was about to give birth to a child, a child that was going to be called yajé, the narcotic vine, a superhuman child that was born in a blinding flash of life."

-Tukano Creation Myth, Beyond the Milky Way (1978)³

"Ayahuasca can save the world." - Anthropologist Luis Eduardo Luna (2015)4

Imagine if there was a single cure-all, one remedy that could cure Parkinson's disease or cancer in one person, and the same remedy that could bring yet another person closer to nature in effort to protect this planet. What if there was a single remedy for disease as global warming, and the same remedy for war as for addiction; a remedy that not only cures, but also increases one's sense of well-being and appreciation for the life of all sentient and non-sentient beings. What if in addition to curing, this mysterious remedy also could teach, bringing you the exact and essential knowledge not that you want, but which you need at that precise moment? Certainly if there was something on earth that was capable of performing

² Gerardo Reichel-Dolmatoff, *The Shaman and The Jaguar: A Study of Narcotic Drugs Among the Indians of Colombia* (New York, 1975), 17.

³ Richard Evans Schultes, *Where the Gods Reign: Plants and People of the Colombian Amazon* (London, 1988), 182.

⁴ Douglas Main. "Exploring Magical Worlds with Ayahuasca Drinkers." *Newsweek* 23 March 2015. Web.

what we might call miracles, we would already know about it, and if not, we would want to know more. Thus, it may come as a surprise that western academia has known of a plant concoction with these capabilities for nearly four centuries, yet even more surprising, we are no closer in understanding it now than those who first encountered it.⁵

Deep in the Amazon, many believe there to be an ancient plant-based hallucinogenic infusion whose application is infinite: *ayahuasca*. It is also known as *yagé*, *yajé*, *caapi*, *cipó*, *bejuco de oro*, *hoasca*, *natem*, *shori*, and *pilde* by numerous tribal peoples throughout various regions of South America. In traditional context, *ayahuasca* is an infusion prepared by boiling the stems of *Banisteriopsis caapi* bark and vine together with various admixtures of plants (over one hundred have been identified), most commonly of the Rubiaceious genus *Psychotria*. The result is a thick and sap-like, dark-purple beverage, with an unimaginably putrid smell and repulsive taste, that creates what many call the most powerful hallucinogen known to man.⁶

Ayahuasca comes from the Quechua language (literally "aya" as corpse or soul, and "huasca" as rope or vine, or "vine of souls,") and refers to both the liana *B.* caapi vine, as well as the healing hallucinogenic infusion. Contrary to popular belief,

⁵ Daniel H. Efron, *Ethnopharmacological Search For Psychoactive Drugs:* 1967 (Washington DC, 1967), Charles W. Domville-Fife, *Among the Wild Tribes of the Amazons* (London, 1924), Marlene Dobkin de Rios, *Visionary Vine: Hallucinogenic Healing in the Peruvian Amazon* (Prospect Heights, 1984). Sponsored by the U.S. Department of Healthy, Education, and Welfare, Efran's work provides multiple cases in which *ayahuasca* and other psychedelics could be used medicinally. De Rios mentions a case study specific to cancer, as well as many psychosomatic ailments, and Domville-Fife provides examples of *ayahuasca*, as early as 1912, being used to cure Parkinson's and Berri Berri.

⁶ Hernando Garcia Barriga, *Flora Medicinal de Colombia* (Bogota, 1975) 54-68.

the vine itself does not contain any psychedelic qualities, but rather the alkaloid monoamine oxidase A (MAO-A), which allows the psychoactive chemical Dimethyltriptamien (DMT), from leaves of the tree *Psychotria viridis* (considered lethal on its own; *chacaruna* in Quechua), to flow unrestricted for hours rather than just a few minutes—a chemical phenomenon. That is, the psychoactive effects do not come from the vine for which the brew is named, but rather from leaves of *P. viridis*.⁷

To fully understand *ayahuasca*, it is necessary to understand how deeply imbedded in Amazonian culture it is. Multiple indigenous tribes who have separate and distinct languages include *ayahuasca* as an integral part of their worldview, representing it in creation myths as giving birth to the first man. This is illustrated in the creation myths quoted at the beginning of this thesis, where the *yajé* vine was brought into the world through childbirth (in the Tukano myth, through a miraculous conception), and the vine took the form of a superhuman infant.

In addition, indigenous peoples and shamans consider this not only a sacred plant, but also a plant teacher, one that can be used as a cognitive tool. This epistemological phenomenon may be difficult to grasp—ayahuasca is not only at the

⁷ Dobkin de Rios, 79. Richard Evans Schultes and Alfred Hoffman, *Plants of the Gods* (New York, 1979), Richard Evans Schultes, *Where the Gods Reign: Plants and People of the Colombian Amazon* (London, 1988), 152, 166; Dennis J. McKenna and G. H. Towers, "Biochemistry and Pharmacology of Tryptamine and Beta-carboline Derivatives: A Mini Review," *Journal of Psychoactive Drugs*, 16(1984): 347-358, Luis Eduardo Luna, *Vegetalismo: Shamanism Among the Mestizo Population of the Peruvian* Amazon (Stockholm, 1986), and Ralph Metzner *Sacred Vine of Sprits: Ayahuasca* (Rochester, 2006). For more botanical an ethnobotanical detail, see Schultes/Hoffman, for more chemical detail on the "unique synergistic interaction between the active alkaloids in the plants," consul McKenna, and for multiple South American uses, consult native-born Luna.

foundation of Amazonian indigenous worldview, but simultaneously a source of knowledge—shamans drink *ayahuasca* to communicate with plant teachers in "The University of the Forest." ⁸ This significance put on the plant only adds to the mystery of its failure to receive academic and historical attention.

Multiple clinical trials show a wide range of medicinal benefits of *ayahuasca* from helping psychosomatic ailments such as PTSD, addiction and depression, to curing physical ailments such as Parkinson's, diabetes and cancer. It may be difficult to imagine that anything as spectacular as what I am describing, something certainly worth investigating, could have escaped western pharmacopeia and academia for centuries. This plant is not evil, or dangerous, so why has this millennia-old cognitive tool not received much deserved intellectual inquiry?⁹

⁸ Plutarco Naranjo, "Hallucinogenic Plant Use and Related Indigenous Belief Systems in the Ecuadorian Amazon," *Journal of Ethnopharmacology* 1(1979): 121-145; Luis Eduardo Luna, "Plants as Teachers Among Mestizo Shamans of Iquitos, Peru," *Journal of Ethnopharmacology* 1(1987): 89-116. Luis Eduardo Luna *Ayahuasca visions: The Religious Iconography of a Peruvian Shaman* (Berkeley, 1991), Marlene Dobkin de Rios and Roger Rumrrill, *A Hallucinogenic Tea, Laced with Controversy* (London, 2008). For more on native creation myths see de Rios on Shipibos, esp. 55-57, and Luna on Tukano and Conibo tribal creation myths. Luna's article is useful in understanding epistemological power of *ayahuasca*, also see Chip Horner "The University of the Forest" Plant Spirits in Ayahuasca Shamanism" MA thesis, University of Colorado at Boulder, 2012.

⁹ Dennis J. McKenna, "Clinical Investigations of the Therapeutic Potential of Ayahuasca," *Pharmacology & Therapeutics* 102 (2004): 111-129, esp. 117-118 on the "Hoasca Project." With researchers from nine universities around the world (Brazil, the United States, and Finland) convening in Manaus, the study compared individuals of the UDV church who had consistently utilized *ayahuasca* for more than ten years with a control group comprised of people who have never consumed the tea. The study covered botanical, phytochemical, toxicological, neuroendocrine, pharmacological, clinical, and psychiatric aspects, resulting in the most intensive and exhaustive study on the medical aspects of *ayahuasca* to this day. Published in scientific literature, the results indicated that its use is not only safe, but can have surprising and significant mental and physical medical benefits.

What little we do know about *ayahuasca* is still debated: its origin remains unknown and how long it has been consumed by humans remains a mystery.¹⁰

Perhaps the largest mystery of all is how Amazonian peoples found, amongst 80,000 different plant species, a synergistic relationship of the potentially deadly *P. viridis* with the *B. caapi* vine and combine these species into a wondrous healing phenomenon with extraordinary effects. Its psychological and chemical mysteries abound, yet its history has yet to be memorialized.

Historiography Part I: Discovering a Gap in History and Historiography

This thesis began with an in-depth investigation into shamanism, which has come to be of great interest to anthropologists, while receiving minimal attention from historians. While few historical works on shamanism exist, even fewer focus on *ayahuasca*. One historian, an expert in the field of entheogyns, concluded, "Numerous psychoactive plants and regions are under-researched and require initial or additional research." This dearth of scholarship peaked my curiosity and motivated this exploration of *ayahuasca* and the belief structure that found, recognized, and embraced its potential—shamanism.

Since Russian anthropologist Sergei Mikhailovich Shirokogorov first attempted to define shamanism in the early twentieth century, shamanic literature

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¹⁰ Juan P. Ogalde, et al., "Uso de Plantas Psicoactivas en el Norte de Chile: Evidencia Química del Consumo de Ayahuasca Durante El Periodo Medio (500-1000 d. C.)," *Latin American Antiquity* 21(2010): 441-450. Groundbreaking article that used gas chromatography and mass spectrometry to analyze 32 Bolivian mummies, with 2 testing positive for *B. caapi*. Before this report, the evidence of *ayahuasca* use in antiquity was sparse, and this report challenges many academics who claimed its use was a more recent phenomenon with evidence of use dating back to 1400 B.C. ¹¹ Mark Merlin, "Evidence for the Tradition of Psychoactive Plant Use in the Old World," *Economic Botany*, 57 (2003): 318.

has routinely focused on the word's definition. However, due to the adaptive form of shamanism around the world, no single definition seems to do justice. The ubiquitous critique of most definitions has been as over-generalized or too universal, with one critic calling for "shamanisms." One historian critiqued not the definition, but rather the word itself, calling it a western imperial construct. This definitional debate and multiplicity of definitions has shaken this term empty of its historical meaning, leaving us not with clarity, but rather with confusion.¹²

Given this landscape and my goal of illuminating, not obfuscating the discussion, I have endeavored to find a definition of shamanism that applies to *ayahuasca*. Nearly a century after the first attempt to define shamanism, anthropologist Jonathon Horwitz finally provided a definition (albeit a western one) of shamans which is helpful in understanding the larger term shamanism as it applies to *ayahuasca*: "A shaman is someone who changes his or her state of consciousness at will, in order to journey to another reality, a 'non-ordinary reality,' the world of spirits, where he meets with his spirit helpers to ask for help, power, or knowledge for himself and/or others. Mission accomplished, the shaman journeys back to ordinary reality where he uses or dispenses the newly gained knowledge

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¹² For the evolution of this definition see: Merete Demant Jakobsen, *Shamanism: Traditional and Contemporary Approaches to the Mastery of Spirits and* Healing (New York, 1999): *x-xiii*, 1-16. The phenology begins with S.M. Shirokogoroff to Eliade, from where it subsequently branches in several directions. The inserted definition comes from anthropologist Jonathan Horwitz, former member of Michael Harner's *Foundation for Shamanic Knowledge*. For definition critiques and need for shamanisms, see Jane Atkinson, "Shamanisms Today," *Annual Review of Anthropology* 21 (1992): 313. For shamanism as a western construct and tool of imperialism see Michael Taussig, *Shamanism, Colonialism, and the Wild-Man* (Chicago, 1986), 143.

and/or power."¹³ The significance of this definition, as opposed to others, is its focus on epistemology and the ability to gain knowledge during a journey to another reality, a critical aspect of *ayahuasca* that many previous definitions of shamanism had left out.

While historian Mircea Eliade's seminal work on shamanism is enormous in scope, even he recognized it was "not a complete study on shamanism...we plead guilty in advance to the inevitable gaps and imperfections." Specifically, there is a large gap concerning *ayahuasca*, one this thesis, on some levels, attempts to fill in. Other historians have also recognized the dearth in literature on shamanism. Gloria Flaherty admitted that historical work on shamanism is severely lacking, calling for future historians to, "begin viewing shamanism seriously within the historical context in which it vanished," continuing, "Perhaps it is time for a shamanology." In this manner, this thesis attempts to unveil *ayahuasca* from historical obscurity--to begin filling in the gap--by examining it in the context within which it was lost.

As historians we ought to accept this challenge of understanding *ayahuasca* in its original and natural context. When was *ayahuasca* first encountered and when did it vanish? As early as 1760, *ayahuasca* was mentioned in the published works of Jesuit priest Franz Xavier Veigl, and by the mid-nineteenth century, *ayahuasca* had received additional scholarship, with both Europeans and non-Europeans publishing commentaries. Native-born Ecuadorian Manuel Villavicencio, while researching his *Geografía del Ecuador*, provided a detailed description of his

¹³ Jakobsen, 8-9.

¹⁴ Mircea Eliade, *Archaic Techniques of Ecstasy* (New York, 1994), xxvi.

¹⁵ Gloria Flaherty, *Shamanism and the Eighteenth Century* (Princeton, 1992), 208, 215.

personal experience with this hallucinogenic infusion in the 1850's. Around the same time, expert botanist Richard Spruce not only wrote about *ayahuasca*, but also identified it taxonomically, and even sent multiple specimens back to the Royal Botanical Gardens Kew in London. Yet mysteriously, after all of these accounts, *ayahuasca* vanished for nearly one hundred years, until its reemergence in the late twentieth century. Not only is the historiography of *ayahuasca* far from complete, but also its history has a mysterious hole.

Consequently, this thesis is the story of how a mysterious Amazonian sect of shamanism and its ceremonial ritual of *ayahuasca* remained lost to the mists of time, despite three encounters that should perhaps have spurred further inquiry. This is not the story of great peoples, or even a great plant, while surely those themes will permeate through the pages. And this is not the examination of a single historical moment, event, or person, but rather an examination of the failure of history to recognize something I believe deserves historical inquiry. To my knowledge, there is no work that has identified this gap or attempted to link its roots to historical events. This study begins to illuminate the lost history of *ayahuasca*, it brings an historical aperture to the table, laying out the skeleton of what occurred with hope for the flesh to be filled in later.

In answering the question of why *ayahuasca's* history was never pursued, I hope to use a methodology coined by historian of the Atlantic World Londa Schiebinger: "aganatology," or the study of culturally-induced ignorance. This

¹⁶ Beginning in 1966 with Richard Evans Schulte's article "The Search For New Natural Hallucinogens," *Lloydia* 29 (1996): 293-308, but much more popular in his 1979 *Plants of the Gods*.

method takes a 180-degree opposite perspective from our traditional historical concerns of epistemology—my intention is to answer not "how we know" but rather focus on what we do not know, and the possible reasons we do not know it. I will argue that this cultural ignorance is a result of a prevailing European way of thinking that simply could not understand, or value, *ayahuasca*. Yet as we will see, there are other fateful historical circumstances beyond the influence of European paradigms that may have prevented *ayahuasca* from entering mainstream history. Historiography Part II: Historic Rationalization of the Gap

To limit the inquiry to a realistic scope, I had to narrow my investigation: What historic obstacles from 1755-1864 prevented *ayahuasca* from entering western culture? This chronological setting begins around 1760¹⁷ with Father Veigl's early glimpse of *ayahuasca*, and ends with Manuel Villavicencio and Richard Spruce's contact a century later. Despite the amazing capabilities of these three men, none of these accounts resulted in *ayahuasca* receiving further academic attention.

This more precise question requires a historiography more deeply focused on traditional historical scholarship and interpretation. The first area of concern is the infamous clash of cultures and civilizations known to historians as "The Encounter," with special interest to the ensuing cultural and botanical exchange dubbed "The Colombian Exchange" by Alfred Crosby. Second, sociopolitical histories highlighting the west's rise to dominance, or what has been called

¹⁷ We do not know the exact year when Father Veigl encountered *ayahuasca*, but we do know it was after his arrival in Lima (1755) and before the 1767 expulsion of the Jesuits. We do know that Spruce and Villavicencio had encounters as early as 1850, with Spruce leaving the Americas in 1864.

"The Great Divergence," illuminate European ethnocentricity and the force behind this rise: economic avarice. And finally, various botanical histories provide insight to eighteenth-century botany and the increasing importance on botanical knowledge as power.

This segment of the historiography begins with "The Encounter" precisely because there are multiple recurring effects of singular importance that were ignited by Columbus. Alfred Crosby, Jared Diamond, Charles Mann, and Niall Ferguson all provided various interpretations of this epic cultural collision, and they all agreed on one thing: at the time of Columbus' arrival in the New World, Europe was not the superior power, and no one could have predicted its meteoric rise to global dominance. As all of these historians (and Diamond as geographer) agree that Europe was less civilized, less technologically advanced, slower and smellier than the rest of the world. No European city came close to the magnificent Aztec capital of Tenochtitlan, and no European civilization could compare to the Inca's largest organized culture on the planet, linked through and intricate and seemingly infinite highway system. Paradoxically, despite these shortcomings, Europeans looked down on Amerindians as inferior—the birth of an ethnocentric attitude that would reinforce a false sense of European superiority. Simultaneously, "The Columbian Exchange" encouraged an exploitative and economic focus towards the Americas that overlooked *ayahuasca*. Thus, Europeans were ethnocentric on one hand and monetarily motivated on the other, both of which were elements of the

intellectual paradigm that may be responsible for Father Veigl's inability to see value in ayahuasca. ¹⁸

While The Encounter might have commenced a *false* sense of superiority, over the next few centuries, Europeans would achieve an extraordinary degree of geopolitical domination—becoming *truly* superior. Known "The Great Divergence," this event reinforced European ethnocentricity, but once again with a paradox: this ascent to preeminence was only possible with help from the allegedly inferior Americas. Europe had plagues and famine, and with the post-Encounter Little Ice Age (1300-1870)¹⁹, was slowly clunking along, seemingly hanging on for survival. But as a result of "The Columbian Exchange," silver, gold, and botanical commodities propelled Europe into a dazzling ascendance. Items from Peru, such as the potato and guano, fueled European ascendency by keeping Europeans alive at home, while *cinchona* (quinine) from Peru allowed Europeans to survive in the tropics. One result of this overarching cultural and geopolitical dominance (in addition to continuing the economic focus) was that in order to be heard, the world outside of

¹⁸ Jared Diamond, *Guns, Germs and Steel: The Fates of Human Societies* (New York, 1999. Works in a similar tradition include Charles Mann, *1491: New Revelations of the Americas Before Columbus* (New York, 2005), Niall Ferguson, *Civilization: The West and The Rest* (New York, 2011), Alfred Crosby, *The Columbian Exchange: Biological and Cultural Consequences of 1492* (Westport, 1972). While Diamond's Pulitzer Prize winning work uses geographical explanations to explain the post-Columbus rise of the west, Ferguson uses six institutions, or "killer-aps," including competition in economics. Mann's work revises the ethnocentric stance of the Americas as an "empty wilderness," and Crosby's uses environmental determinism as a reason for European expansion and development. John Chasteen is missing from this list because, while his work is a watermark for modern Latin American history, he argues Latin America's current violence is due to the deeply rooted and inherited violent nature of its denizens.

¹⁹ Charles Mann links this environmental catastrophe to the annihilation of 70-90% of native population from diseases, and the consequent overgrowth of the land natives had managed for centuries.

Europe was now forced to use ethnocentric "western conceptual apparatuses,"²⁰ such as the English language. This factor played a significant role in native-born Ecuadorian geographer Manuel Villavicencio's work being overshadowed.

The monetary focus on the Americas momentarily shifted from bullion to botany in the early eighteenth century, as plants filled in the gap left by declining silver imports. The legacy of the Columbian Exchange allowed for botanical commodities²¹ to become big business during the eighteenth and nineteenth centuries. Botanical gardens germinated and then sprouted up all across Europe and became a symbol of power, meanwhile, botany and botanists rose to the top of scientific hierarchy. One of the best European botanists in the nineteenth century was Richard Spruce, who not only encountered *ayahuasca* several times in his fifteen years collecting tropical specimen in South America, but even sent a box full of *B. caapi* specimen to the Royal Botanical Gardens Kew.²²

The Itinerary of this Journey: An Outline of the Chapters to Come

²⁰ Ferguson, 73.

²¹ Colombian Exchange items native to the New World: squash, pumpkin, sweet potato, peppers, tobacco, cocoa, beans, vanilla, corn, tomatoes, potatoes, turkey peanuts; Colombian Exchange items from Europe: banana, sugar cane, grapes, honeybees, livestock, onions, citrus, olives, peaches, pears, grains, diseases (influenza, malaria, diphtheria, measles, smallpox, typhus, whooping cough). ²² Londa Schiebinger and Claudia Swann, Colonial Botany: Science, Commerce, and Politics in the Early Modern World (Philadelphia, 2005), Alfred Crosby Ecological Imperialism: The Biological Expansion of Europe, 900-1900 (New York, 1986), and Richard Grove, *Green Imperialism: Colonial Expansion, Tropical Island Edens, and the* Origins of Environmentalism, 1600-1860 (Cambridge, 1995). Inventions and technological advancements once considered uniquely European developments, are accredited to the relationship between European metropole and New World colony. Crosby's environmental determinism is reinforced in his sequel, and Grove argued that early modern industries sparked a need for environmental conservation.

My intention for this thesis is twofold. First, I would like to introduce the reader to a largely unknown phenomenon, one which I believe deserves more attention. Second, by exploring three early opportunities when this phenomenon could have come to light, but did not, I hope to begin an understanding toward what obstacles kept *ayahuasca* "lost in the mists of time and to the ravages of history."²³

The lens though which Europeans viewed the world during the eighteenth century was obfuscated by a social milieu that prevented a full understanding of New World shamanism. A myriad of factors contributed to these triumphal trade winds of prevailing thought—these factors included ethnocentricity, consequent internalization, economic avarice, European geo-political domination, and a simple twist of fate.

I began this story by briefly chronicling historical and non-historical works on shamanism to show the gaping hole in history that should belong to *ayahuasca*. Next, I wanted to provide a brief historical background of the events and elements that very well may have combined to create this blinding European cultural ignorance: The Encounter, The Great Divergence, and the rise of botany.

In the first chapter, the focus is to understand the historical background so that later, we can better understand the three men who encountered *ayahuasca*. I will provide examples of this prevailing European thought, attempting to show how it may have prevented western acceptance of *ayahuasca*.

Chapters two, three and four will dive deeper into *ayahuasca*, using it as a case study to explore the social milieu that prevented *ayahuasca* from entering the

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²³ Schiebinger, iii.

pages of history. We will see how three unique and very capable men encountered this mystical source of knowledge deep in the Amazon during the eighteenth and nineteenth centuries. A Jesuit, a native-born Ecuadorian, and a Victorian botanist did not identify *ayahuasca* as taboo, but rather, all three provided instances when this mystical plant-based concoction could have, and should have, risen to the surface. Why not?

<u>Chapter 1</u> The Lens through Which Europeans Viewed the World

"Condemnation without investigation is the height of ignorance."
-Albert Einstein

In order to understand the limited perception of the world that irrigated European thought, let us momentarily journey away from *ayahuasca* to explore the European ethos in four cases: cartography, internalization, economics, and botany. This will reveal the ethnocentricity within European thinking which provided the misconception of superiority, and often resulted in, and was reinforced by, an internalization of outside ideas as their own. Simultaneously, we will see the increased attention on economics through mercantilism and early capitalism, which coincided with an increased focus on botany. In this manner, we may near an understanding of the Eurocentric ethos, which was reinforced by internalization and characterized by a focus on economics.

Ethnocentric Ethos and European Internalization

To begin an understanding towards the lens through which Europeans viewed the world, and how it may have prohibited *ayahuasca* from entering mainstream history, two aspects of this lens need to be understood: first, ethnocentricity; and second, internalization.

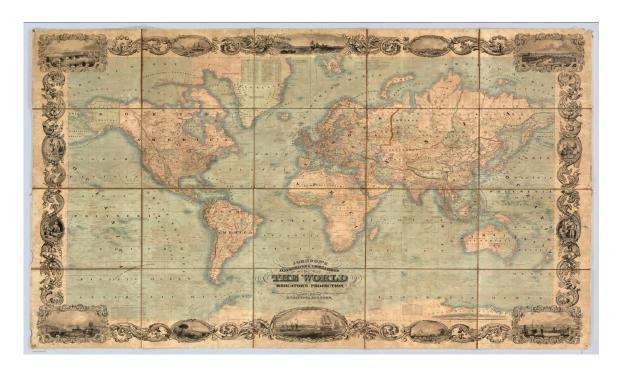


Figure 1 An 1847 Mercator Map Projection: A visual representation of Eurocentricity²⁴

The terms ethnocentric and Eurocentric so often filled the pages of relevant histories that I fear they may have lost their meaning. Thus, we will momentarily voyage away from the field of history into the realm of geography in hopes to visualize these terms' literal meaning. What better tool to understand how Europeans viewed themselves compared to the rest of the world than cartography? Critical geographers argue all maps are political, providing a specific view as created by the artist that can promote imperialistic or colonial ideals, not necessarily the truth or the world as it is—in this manner, the 1569 Mercator Map Projection provides a uniquely European perspective of the world. Created by Flemish cartographer and mathematician Gerardus Mercator, the map literally shows

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²⁴ Griffing, D., *World on Mercator's Projection*. 1847. Oil on canvas. David Rumsey Map Collection. Web.

http://www.davidrumsey.com/luna/servlet/detail/RUMSEY~8~1~200142~3000 091:World-On-Mercator-s-Projection-

Germany and Europe at the center of the world, above Africa and the Americas, and inaccurately depicted as larger than both. In this fashion, the Mercator Map was less an objective view, and literally a European ethnocentric view, one which European travelers would have used to navigate their trans-Atlantic voyage.²⁵

This ethnocentricity aspect in European thinking was reinforced by the illegitimate claiming of ideas as their own, or internalization. For centuries, Europeans relied on the 3 Great Discoveries—gunpowder, nautical compass, and printing press—falsely believing these Asian inventions to be their own, becoming what one cultural historian dubbed a "badge of European honor." This internalization peaks in Germany, at the center of the Mercator Map, with the alleged fourteenth-century invention of gunpowder or *schwarzpulver* in German. A false myth was created, furthering European superiority by crediting German priest Berthold Schwarz with the invention of gunpowder—yet this man never existed, and gunpowder was around centuries earlier in Asia. By claiming outside inventions as their own, Europeans undermined foreigners while praising

²⁵ Diamond, 176; Joe Bryan, "Where would We Be Without Them? Knowledge, Space, and Power in Indigenous Politics." *Futures* 41(2009): esp. 25-26; Immanuel Wallerstein, *The Modern World System-Volume 1: Capitalist Agriculture and the Origins of the European World Economy in the Sixteenth Century* (Berkeley, 2011): esp. 33, he describes the Mercator Projection Map as another way of the core exploiting the periphery; Michel Foucault *Power/Knowledge: Selected Interviews and Other Writings* 1972-1977 (New York, 1977): esp. 74 for a detailed description of maps as a form of power; Mann, 119, challenging European ethnocentricity; Ferguson, 31, uses the Scientific Revolution to challenge Eurocentricity as a "distasteful prejudice;" Mercator Map prompted philosopher of epistemology John Dewey arguing maps as a form of power because every inquiry has an inevitable bias, see James W. Garrison, "Dewey on Metaphysics, Meaning Making, and Maps" *Transactions of the Charles S. Peirce Society* 41 (2005): 818-844. The alarming fact is that this tool of western imperialism is still the map we use today (as opposed to the Gall-Peters Projection which attempts to correct the exaggerations).

themselves, a cultural phenomenon historians describe as European internalization.²⁶

Thus, long before Columbus set sail for India, an attitude of internalization was birthed in which Europeans adopted or stole the inventions of others in a positive feedback loop that reinforced their own ethnocentric ethos. The dual forces of ethnocentricity and internalization that were deeply imbedded in the minds of many trans-Atlantic voyagers contributed to the prohibition of the intellectual progress of *ayahuasca*. Father Franz Xavier Veigl was born in the center of the Mercator Map, and as we will see, his ethnocentric attitude was certainly a factor in his repeated confusion of indigenous practices.

European Economic Focus: From Mining to Bioprospecting in the New World

In 1492 Christopher Columbus relied on Asian technology, specifically the nautical compass and gunpowder, to discover, not an uninhabited or unclaimed New World, but rather the North East trade winds, a discovery for which Columbus certainly earned recognition. Doing so, he sparked an exodus of wealth and knowledge from the Americas to Europe commonly referred to as The Colombian Exchange, which *ayahuasca* was not included in. At first Europeans relied heavily on precious metals, but as the silver supply declined, biological commodities gained

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²⁶ David Boruchoff, "The Three Greatest Inventions of Modern Times: An idea and Its Public," in Hock, Klaus, Maclenthun, and Gesa, *Entangled Knowledge: Scientific Discourses and Cultural Difference* (Munster, 2012) 133-163, For internalization done by historians, see E.H. Gombrich, "Eastern Inventions, Western Response," *Science in Culture* 127 (1998): 193-205. Noteworthy 20th century intellectual Sir Ernst Hans Josef Gombrich argued that modern intellectual historians often underrate the role of Eastern inventions, excluding the Orient from Progress.

increased importance by filling in the gap left by silver; so much so, they became referred to as "green gold."²⁷

For centuries after his discovery, gold and silver bullion rode these trade winds to feverishly float wealth from the entrepôts of New Spain and New Grenada to the metropole, the amount of which is hard to fathom. Historians of world history conservatively estimate that the Americas exceeded 80% of the world's silver production in the longer eighteenth century, producing over 150,000 tons of silver. However, due to a global economic supply/demand phenomenon, the purchasing power of silver was further increased: "The combination of low supply-side production costs in Spanish America, and Chinese led demand-side elevation in silver's value generate probably the most spectacular mining boom in history."

Consequently, during the first few centuries following the Colombian Exchange, silver quickly became the most important commodity. This seemingly endless flow of capital provided Spain with the resources to compete on the world stage as a nation, and among other things, laid the foundation for a new, albeit somewhat

²⁷ Mann, 53. Alfred Crosby and Londa Schiebinger both use the term green gold. Other botanical histories refer to white gold in sugar and cotton, see Svent Beckert, *Empire of Cotton: A Global History* (New York, 2015) and Sidney Mintz, *Sweetness and Power: The Place of Sugar in Modern History* (New York, 1986). Other works in this tradition of botanical histories include Marc Aronson and Marina Tamar Budhos, *Sugar Changed the World: A Story of Magic, Spice, Slavery, Freedom, and Science* (Boston, 2010), for chocolate and tobacco see Marcy Norton, *Sacred Gifts, Profane Pleasures: A History of Tobacco and Chocolate in the Atlantic World* (Ithaca, 2008), for coffee see Mark Pendergrast, *Uncommon grounds: The History of Coffee an How it Transformed our World* (New York, 1999). These are a few examples of botanical histories, where the trend of historians has been to focus on profitable botanical plants while marginalizing less known, non-economic plants like *B. Caapi*.

violent, economic-focused ideology that added to the mindset of eighteenth-century European trans-Atlantic voyagers. ²⁸

As northeast trade winds blew new wealth to Europe, they also blew new ideas concerning what to do with said wealth—Mercantilism. Fusing the interests of merchants with interests of the state, mercantilism increasingly relied on military force of the state to accumulate monetary reserves through a positive balance of trade.²⁹ Renowned mercantilist Jean Baptiste Colbert, controller general of finances under King Louis XIV from 1662-83, had a primary goal familiar to the rest of Europe: "to decrease France's reliance on imports and to increase its production of luxury goods for export."³⁰ Overtime, competition increased over the accumulation of wealth, evolving mercantilism into its early forms of capitalism, or more accurately war capitalism.³¹

Colonization, coupled with monopolization of new markets, was the norm as this emerging new economic world order, which was propelled by competition amongst European states. By the nineteenth century, the fusion of state funded military might that followed trade routes and encouraged merchants to exploit

²⁸ Dennis O. Flynn, Arturo Giraldez, "Born with a 'Silver Spoon': Origin of World Trade in 1571" *Journal of World* History 6 (1995): 209. Richard Garner, "Long-term Silver Mining Trends in Spanish Americas: A Comparative Analysis of Peru and Mexico" *The American Historical Review* 93 (1988): 898-935.

²⁹ A great example of state-privateer fusion, or better understood as a state sponsored pirate, is in the case of Piet Heyn, a Dutch privateer and later naval captain who is remembered as the only person to ever capture the Spanish fleet—sixteen ships in total--bringing wealth to himself and his nation during the 80 Years War with Spain. When looking at the inserted graph, around 1620, silver begins its descent, possibly a result of Heyn's 1624 attack that prevented a year's worth of mined silver from reaching Spain. His legacy continues today in a fight song sung when the Netherlands play Spain in soccer.

³⁰ Schiebinger, 36.

³¹ For more on the evolution of economic ideologies, see Beckert Ch. 2.

colonies, evolved to be called war capitalism. A direct product of mercantilist ideals and the colonial precursor to the capitalism we know today, the term was coined by global economic historian Sven Beckert: "With increasing frequency, Europeans inserted themselves, often violently, into global networks...heavily armed privateering became the symbol of this new world of European domination, as their cannons filled boats and their soldier-traders, armed private militias and settlers capture land and labor, and blew competition, quite literally, out of the water."³² The consequence was yet another positive feedback loop, this time economic, in which wars rewarded the winners with profits, which in turn, were used to fund more wars.

³² Beckert, 37, war capitalism defined on 38.

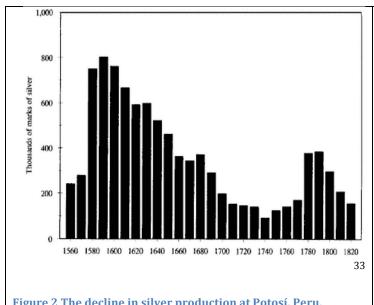






Figure 3 Potosí, before it became the largest city in the Americas.

However, a crucial turning point in history happened around 1750, when silver production, quite literally, hit rock bottom.³⁵ While the flow of bullion came to a halt, the New World remained a cow to suckle in the eyes of Europeans. What would fill in the gap left by silver, what would be the new milk suckled to nourish the core at the expense of the periphery? Plants and plantations, or Green Gold. Consequently, Europeans implicitly aimed to commandeer comprehensive

³³ Alejandra Irigoin. "The End of a Silver Era: The Consequences of the Breakdown of the Spanish Peso Standard in China and the United States, 1780's-1850's." Journal of World History 20(2009): 207-243.

³⁴ De Bry, T., *Potosi Silver Mines.* 1596. Engraving. Web. http://www.lasalle.edu/~mcinneshin/356/wk06/potosi.htm

³⁵D.A. Brading and Harry E. Cross. "Colonial Silver Mining: Mexico and Peru." *The* Hispanic American Historical Review 52(1972): 545-579. Many factors were responsible for the decline of the Silver Era: eighteenth-century miners lacked the technology to dig beyond the water table; the supply of mercury for amalgamation declined; increased inefficiency in the Spanish fleet system; continual burden of multiple wars. Plants do not permanently replace silver and gold, only temporarily. resulting in an increased focus on profitable plants.

and at times classified knowledge of the botanical world, and this accumulation of botanical knowledge in Europe led to an increased importance placed on botany and botanists.³⁶

In the sixteenth and seventeenth centuries, New World silver led to a focus on hording bullion, a practice referred to as Mercantilism (which slowly evolved into war capitalism). When silver began to decline during the mid-eighteenth century, this economic focus transferred from metallurgy to botany. By the eighteenth century, "sugar had become the most important cash crop imported to Europe from the Americas, and Peruvian bark was the most valuable commodity by weight."37 While plant mercantilists applied their mercantile ideology to plants in the seventeenth century, during the eighteenth and nineteenth centuries, professional botanists, bioprospectors and even biopirates scoured the Americas for green gold. Under this new economic world order described as war capitalism, private institutions and governments often violently challenged one another to secure New World plants, and in this way, plants became a source of power.

The Emergence and Power of Botany and Botanists

During the eighteenth-century Atlantic World, knowledge of the natural world became inseparably linked to global power. Botany was "big science and big business," and, "an essential part of the projection of military might into the

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³⁶ Schiebinger, 7; Beckert, 35.

³⁷ Schiebinger, 8.

resource rich East and West Indies."³⁸ The onset of plant mercantilism resulted in botany being the most funded science behind cartography.³⁹

While today we consider various fields of botany to include taxonomy, anatomy, morphology, and phenology to name a few, in the eighteenth-century botany was different. It encompassed all of these fields but had one primary objective: profits. The father of modern taxonomy, Carl Linnaeus, often saw his taxonomic innovations as secondary to his many economic schemes. Denis Diderot, in his *Encylopédie*, lamented how eighteenth-century botanists waste their time with nomenclature and taxonomy instead of plants' ability to profit. This European understanding was directly transferred to the New World. Richard Grove describes the way Europeans looked at the Americas: "a concept of making use of the land purely as a source of profit, regardless of the soil or the capacity of the island to feed itself." 40

This focus on botany, as Linnaeus put it, was "to render service to the state," and this thinking was not limited to Sweden. The Dutch created a botanical garden in Amsterdam and a laboratory in Leiden, and the French had Jardin Royal des Plantes and Jardin de Roi in Paris. British collectors established the Chelsea Physic Garden and the Royal Botanical Gardens Kew. The sixteen hundred gardens that sprouted up across Europe by the end of the eighteenth century were not only the

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³⁸ Schiebinger, 5.

³⁹ Mann. 86.

⁴⁰ Schiebinger, 6-7. Grove, 209. It should be noted that while this economic focus was the norm, not all Europeans thought this way. Specifically, eighteenth-century French horticulturist Pierre Poivre fought for conservation on Mauritius. However, nineteenth-century French naturalist Georges-Louis Leclerc, Comte de Buffon, director of Jardin du Roi in Paris, still was economically focused, but did so in the name of science and patriotism.

laboratories of colonial botany, but the gardens themselves acquired a meaning as symbols of economic power. 41

This eighteenth-century economic view of botany also increased the power of botanists, whom have been described as "agents of empire." Londa Schiebinger describes two types of botanists: botanists de cabinet like Carl Linnaeus, or Kew's director George Bentham whom remained ensconced in Europe. These armchair botanists were quite different from botanists de voyageurs, like Victorian botanist Richard Spruce, who voyaged to the New World and encountered ayahuasca multiple times during his fifteen years collecting botanical specimen in South America. However, bioprospecting was not limited to botanists; even priest voyagers were "always in search of useful plants in addition to souls," as in the case of Father Franz Xavier Veigl. In fact, all were encouraged to hunt for plants: European travelers were armed by European powers with rules and instructions so that captains, missionaries, and other amateurs could collect specimen. 43

⁴¹ Grove, 4, 7, 75; Schiebinger, 11. Grove also refers to the botanical gardens as symbols of power through Edenic representation, or by "recreating Paradise or Eden." It should also be noted, gardens were another example of European internalization, as Grove points out they were an eighth-century Arab invention adopted by Europeans.

⁴² Schiebinger, 57.

⁴³ David Mackay, "Agents of Empire: The Banksian Collectors and Evaluation of New Lands" in David Phillip, *Visions of Empire: Voyages, Botany, and Representations of Nature* (Cambridge, 1996); Schiebinger, 23-24, 37.

<u>Chapter 2:</u> _History's Early Glimpse: A Jesuit's Eighteenth-Century Mentioning of *Avahuasca*

"Of the plants worth mentioning, it is necessary to mention in the first place the hayachuasca, which means, 'bitter rope,' and is used only for superstitious practices and witchcraft. This plant is in the form of a ribbon, like the bark of the tallest tree. The Indians, taking the concoction prepared with I don't know what ritual, fall into a prolonged state of complete unconsciousness." 44

As early as 1755 the head of a Jesuit mission in Quito voyaged into the depths of the Amazon and encountered shamans practicing their use of *ayahuasca*. Although Father Veigl chronicled biological specimen that were profitable commodities considered green gold—indigo, vanilla—he had little to say about *ayahuasca*. We will see how Father Veigl, over two centuries after the initial 1492 clash in cultures, was still unable to comprehend native culture, whether due to superstitious beliefs or economic views, and how natives themselves may have contributed to his lack of understanding.

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⁴⁴ Franz Xavier Veigl, *Noticias detalladas sobre el estado de la Provincia de Maynas en América meridional hasta el año de 1768*, (Iquitos, 1798), 180.



Figure 4: Along the northern portion of the Ucayali River, near Iquitos, was where Father Veigl found ayahuasca.

Father Veigl found value in food plants, dye plants, poisonous plants and their cures, but *ayahuasca*, how did he perceive it? It is quite surprising that he included in his *Noticias Detalladas Sobre el Estado de la Provincia de Maynas* at all, but even more surprising that he called it "a plant worth mentioning." In fact, it is one of the first plants he wrote about, before any of the economic or colonizing plants. He clearly stated its use as "only for superstitious practices and witchcraft," and goes on to state that natives used this witchcraft, combined with the flower *floripondio (Datura stramonium)* to produce thunderstorms. It is quite possible that this plant was seen as an obstacle to Christian thinking⁴⁶, yet Veigl's words and tone

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⁴⁵ Anonymous. *Ayahuasca in the Amazon Basin.* Digital Map. Web. http://www.singingtotheplants.com/2012/04/on-origins-of-ayahuasca/
⁴⁶ In an August 23, 1683 letter from New Granadian Jesuit Father Juan Lorenzo Lucero to the Viceroy of Peru, Melchor Navarra y Rocafull, Lucero described *ayahusaca* as a devilish plant: "They put together these evil herbs [*Datura*, *Banisteriopsis*, and others] with guañusa and tobacco, also invented by the devil, and allow them to boil until the small remaining quantity of juice becomes the

did not describe this plant as threatening to Jesuit religious or economic aspirations. It was "worth mentioning," but not worth selling, industrializing, or bringing back to Europe. Veigl still chose to mention it as opposed to disregard it, possible evidence of his dedication to knowledge, a characteristic typical of Jesuits--such a meticulous intellectual could not ignore a mysterious, undiscovered plant. At times, the fogged European lens through which Veigl viewed the New World prohibited him from understanding why native people lived the way they did, and caused him to focus his work on plants with perceived value, either in the marketplace or value in their ability to survive the tropics.⁴⁷

Father Franz Xavier Veigl—The Jesuit

As a Jesuit priest, Father Veigl was beautifully educated and a bonafide eighteenth-century intellectual who would have been well-read, familiar with Linnaean classification and emerging scientific theories, and a master in linguistics. This expertise led to a number of Jesuit scientific discoveries, most notably, *cinchona*⁴⁸, or Jesuit's bark, which contained quinine and enabled Europeans to

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quintessence of evil, and the faith of those who drink it is rewarded by the devil with the fruit of malediction;" Victor Patiño, *Jiminez de la Espada*. 1928 Díario (Madrid, Publication del la Real Sociedad Geografía) 626. It should be noted that none of the anthropological works in my bibliography mention Father Lucero, with few crediting Veigl before Spruce. While Lucero saw *ayahuasca* and other plants as a direct threat to his Spiritual Conquest (and possibly colonization efforts, for he is writing the Viceroy), seventy years later Father Veigl no longer views it as diabolical. Disturbing from an academic perspective is that Lucero's possible earliest encounter with *ayahuasca* has been known since 1968, yet not mentioned in any historiographies.

⁴⁷ Medicinal plants were critical aspect of eighteenth-century bioprosepecting, for without them, many Europeans were unable to survive the tropics. In addition, *materia medica*, as it was called, was also extremely profitable. Schiebinger, 25-29. ⁴⁸ Another example of European internalization is the word *cinchona*, whose etymology was derived from the Countess of Chinchon and her accompanying myth,

survive in the malaria infested tropics. In addition to the Society of Jesus' focus on academics, Jesuits were also experts in economic enterprises (with successful cattle ranches and lucrative cotton, cacao, tallow and *maté* farms), which was certainly a factor in Charles III's decision to expel the Society of Jesus from Spain and her dominions on 27th February 1767.⁴⁹

Consequently, Franz Xavier Veigl was focused on certain botanical specimen and had a disregard for others. Those plants that were valued from his perspective were those with profitable market value and those that aided in survival. This limited focus was combined with the quintessential characteristic of The Encounter—the inability to understand natives. These dual forces contributed to an incomplete understanding and analysis of *ayahusca* and the near-permanent submerging of Father Veigl's early glimpse.

Who was Father Veigl?

an appellation selected by Carl Linnaeus in 1742 in her honor; Jesuit's bark follows a similar trend, crediting Jesuits, with Peruvian bark being less ethnocentric. Most recently, it has been argued natives never had a need for quinine (for malaria did not exist until after The Encounter) and thus this would be accurately dubbed a uniquely European discovery of Iesuits, but not the Countess. Londa Schiebinger Plants and Empire (Cambridge, 2004) 5, 7, 26, 35-37; Jane Achan, et al, "Quinine, an Old anti-Malarial Drug in a Modern World" Malaria Journal 10(2004), esp. 1. ⁴⁹ For more on economic factors of Jesuit expulsion, especially *aldea* competition with encomiendas, see Olga Merino and Linda A. Newson, "Jesuit Missions in Spanish America: The Aftermath of the Expulsion" *Revista de Historia de América* 118(1994): 7-32. For scientific prowess of the Jesuits, see Steven J. Harris, "Jesuit Activity in the Overseas Missions, 1540-1773" *Isis* 96(2005): 71-79; specifically Jesuit's Bark, see Schiebinger, esp. 28, 84, 214-215. For a detailed description of the sophisticated global economic empire of the Jesuits and "the pertinacity of Eurocentrism", see Dauril Alden. The Making of an Enterprise: The Society of Jesus in Portugal, its Empire. and Beyond. 1540-1750 (Stanford, 1996), esp. 255-298, 321, 376, 402.

Only bits and pieces of Father Franz Xavier Veigl's life and work remain. We are left without a portrait, and even the year he was born has been debated.⁵⁰ Whichever the year, most are certain he was born in Graz, Austria, quite literally the epicenter of the Mercator Map.⁵¹ In 1738, a teenage Franz journeyed to Vienna, the Hapsburg capital of Europe, to devote his life to serving the Society of Jesus. In typical Jesuit fashion, he studied extensively and became a master of the humanities and expert in Latin, the vernacular language of science.

As early as 1746, Franz Xavier requested to serve overseas, but for the next decade he had to live his desire to travel vicariously through his colleagues and other travelers, until he was finally assigned to Quito, Ecuador, in 1753. It took two years of preparation, but by but 1755 Veigl arrived in South America, shortly before the violent earthquake which killed at least 40,000 people and destroyed a large part of the city and its churches.⁵²

This earthquake had a large effect on how he perceived his missionary work in the New World. A letter home to his brothers provides evidence to Veigl's motivation to become a missionary. He wrote that it was an act of divine providence of the all-mighty father that gave him the opportunity to lend his services during the tragedy of the earthquake. Continuing with the religious theme, Veigl hoped that the "large number of heathen savages, yet converted, will give me the zeal for their conversion." However, Father Veigl admits that his motivation was not limited to

⁵⁰ Federico Schwab, *Bibliografía etnológica de la Amazonia Peruana: 1542-1942* (Lima 1944). The year is debated between 1723 or 1724.

⁵¹ Refer to Mercator Map, p. 17 of this thesis.

⁵² Charles F. Walker, *Shaky Colonialism: The 1746 Earthquake-Tsunami in Lima, Peru and its Long Aftermath*, (Durham, 2008); Alexander Gates, *Encyclopedia of Earthquakes and Volcanoes* (New York, 2007).

the salvation of natives, but provides an opportunity for personal advancement, "Perhaps, this event also makes it possible to advance my own output, the object of my only desire." Veigl goes on to say that his own desires are not as important as those who suffer without God, further lamenting the need for "salvation of the Indians." 53 It is not my place to say what Veigl meant by his words, but it seems clear that he saw the dire situation in the Americas as an opportunity, not only to spread Christianity, but for personal advancement—something which may have served to further fog his already obscured lens. While the goals of spiritual conquest may have prohibited understanding a century earlier (in the case of Father Lucero), from Father Veigl's eighteenth-century work we will see that proselytization was secondary to economic enterprise.

Eight years after his arrival in Quito, he was promoted to head of the missions of Maynas, the province of current day Northwest Peru where the Ucayali, Napo and Amazon rivers all converge. In 1765 Veigl journeyed up the Ucayali River and returned via the Mañon River. It is during this exploration, shortly after his promotion, and just years before the expulsion of the Jesuits, where we find Father Franz Xavier Veigl deep in the Amazon rainforest encountering *ayahuasca*.

Clash of Cultures: Father Veigl's Inability to Understand Natives, A Eurocentric and Profit Focused Cultural Ignorance Typical of "The Encounter"

While Veigl's Jesuit education certainly put him in the class of elite eighteenth-century intellectuals, it may have simultaneously blinded him to the

⁵³ Veigl, 14.

value of indigenous knowledge concerning the natural world and furthered his inherited ethnocentricity and economic focus. Despite his familiarity with Catholic mysticism, Veigl's eighteenth-century perception relied more heavily on rational scientific explanations: "We missionaries were declared enemies of superstitious beliefs and practices of magic, since the *salvajes*, due to their limited understanding of the forces of nature, only know to discern these effects as the result of sorcery or superstitious beliefs." It seems that Father Veigl was more of an intellectual and scientist than clergyman, a factor which may have allowed him to see a slightly wider and more accepting perspective than his Jesuit predecessors. At the same time, however, it seems his Eurocentric and economic focused background, reinforced by his education, were obstacles in Veigl's ability to understand Amazonian natives and thus *ayahuasca*.

It is not surprising that Veigl's European way of thinking caused him to be confused by native culture, unable to understand why natives lived the way they did—quintessential cultural ignorance. However, this was especially true regarding economic enterprises, not just a European focus, but also a Jesuit specialty and demonstrated in his numerous pages devoted to profitable plants. When encountering natives dying clothes with añil and indigo, he struggled to comprehend how such "industrious women" had "not the slightest hope of order to sell it with utility to other parts of the world."⁵⁴ While natives viewed dyes ones way, "calling them by other names than their color,"⁵⁵ Veigl's perspective seems limited to economic potentials. He likely wondered why the "impoverished"

⁵⁴ Veigl. 181.

⁵⁵ Veigl, 181.

natives"⁵⁶ lacked ambition for an economic enterprise of their own, one that would bring Progress. Textiles and dyes were a lucrative industry,⁵⁷ one Veigl possibly foresaw exploiting to benefit the Society of Jesus as well as himself. His European and Jesuit background, with strong ties to economics, acted as obstacles that prohibited him from understanding native peoples—typical of "The Encounter." If he could not understand native peoples, it would be very difficult to understand ayahuasca.

Another example of Father Veigl's cultural confusion and his monetary focus came with the lucrative commodity of Vanilla. Once again, it was his European superiority coupled with a monetary focus that obfuscated his understanding of indigenous use of Vanilla. While natives most likely saw Vanilla as a plant, Veigl saw it as a commodity. "It is extremely strange. The Indians do not appreciate its beautiful fruit or even its thin aroma, but only carry a vanilla bean tied, hanging between their clothing."58 It is not surprising that Veigl could not understand why such a valuable commodity, green gold, was appreciated by natives for any reason other than its potential for profitable industries. Due to his cultural blindness, Father Veigl could not understand natives and couple with his monetary focus, he could not see or understand native value of ayahuasca.

A Two-Way Street: European Milieu and Native Protection

⁵⁶ Veigl, 14.

⁵⁷ At one point, *cochineal*, a red dye derived from an insect that lives on the copal cactus, had one of the best weight:value ratios, with eighteenth-century biopirates attempting to steal specimen from Mexico to be cultivated in the Caribbean colonies. Schiebinger. 6.

⁵⁸ Veigl, 182.

Without a capacity for profit, *ayahuasca* would not have been on the radar of many eighteenth-century New World voyagers, however, that was not the only factor that may have prevented further inquiry into *ayahuasca* (and is in no way meant to marginalize eighteenth-century Europeans). Father Veigl's inability to understand native culture also prohibited him from seeing any potential medicinal benefits of *ayahuasca*. It seems strange, then, for him to have been able to see a value in other plants that could heal. Father Veigl lists an entire collection of antivenoms to reptiles, insects, and even poisonous darts.⁵⁹ This list has even more detail than any of his entries on economic plants of indigo or vanilla. How to harvest, how long to boil, what color the anti-venom should be, how to apply, how to reapply...If Father Veigl was able to absorb this much exact information about dozens of other medicinal plants, why not *ayahusaca*?

Father Veigl seemed paranoid that natives were always hiding something from him, "I have to admit that the majority of properties of similar plants may only be discovered little by little under special circumstances. The Indians themselves are apprehensive. In addition, even in the cases when they have obtained knowledge of their properties, either by tradition or by their own experience, they are used to hiding them with great suspicion to the missionaries. Hence, they hide to the missionaries both the positive as well as negative effects of such plants, even though they know their uses perfectly well, and even apply them on a regular basis."

⁵⁹ Veigl, 184-87.

⁶⁰ Veigl, 180.

With a plant that is considered, sacred, the "mother of all plants," and at the very foundation of Amazonian indigenous worldview, it is not too surprising that Indians might have wanted to hide the true knowledge of this plant. Further, natives that had experienced the barbarity of European civilizing forces were often resentful towards white men, hiding everything they could. While the larger European milieu may have blinded Father Veigl from understanding natives and ayahuasca, it may have also worked to fuel native resentment towards Europeans. This resentment may very well have encouraged natives to hide or protect their knowledge.

When Father Veigl encountered *ayahuasca*, he did not see an economic or medicinal value in the vine, possibly due to his European background, or native hiding of such knowledge. If the Jesuits had not been expelled shortly after his glimpse of *ayahuasca*, it is quite possible that Father Veigl would have earned the respect of Amazonian natives who may have been more willing to share their sacred plant. Further, with more time spent in the Amazon, away from Europe, Father Veigl would have had more time to investigate *ayahuasca*. And it is possible that the more time he spent away from Europe, the more his allegiance might have shifted away from Europe and its focus on economic gain, enabling him to garner their trust.

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⁶¹ Luis Eduardo Luna, *Vegetalismo: Shamanism Among the Mestizo Population of the Peruvian* Amazon (Stockholm, 1986), 15.

 $^{^{\}rm 62}$ Spruce, 108. This concept will be elaborated on in Chapter Four.

But the fact remains that Veigl had only a limited glimpse of *ayahuasca*, and further, this glimpse was originally recorded in Latin, and sent only to Rome. This limited readership, along with Veigl's European background and native's resentful attitude toward westerners, all contributed to preventing his early glimpse of *ayahuasca* from receiving further investigation and emerging into mainstream history.

Chapter 3

The "First Published Mentioning" 63 of Ayahuasca, "the magic drink" 64: Manuel Villavicencio's 1858 Geografía del Ecuador

"When I drank ayahuasca, my head immediately began to swim, then I had seemed to enter a flying journey, wherein I remember seeing the most delightful landscapes, great cities, lofty towers, beautiful parks, and other gorgeous things." 65



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Perhaps the closest opportunity *ayahuasca* had to emerge into academic discourse came by means of Manuel Villavicencio's *Geografía del Ecuador*: "We will not pass in silence one of the things that draws our attention. It is a vine which the [Indians] use to guess, predict, and answer correctly the difficult questions...after

⁶³ McKenna, DeRios, and Schultes; widespread agreement that failed to recognize Father Veigl or Father Lucero's earlier glimpses. Father Veigl's work was published well before Villavicencio's, however, in Latin and German, only translated in the early twentieth century.

⁶⁴ Manuel Villavicencio, *Geografía De La República Del Ecuador*, (New York, 1858), 371.

⁶⁵ Villavicencio, 373.

⁶⁶ Villavicencio, ii.

the last dream gathers up the memories that were in the visions, it shows you the decision you should make...To the Indian who drinks it [ayahuasca], should be given the answers...the rarest of phenomena."67 By transcending cultural barriers himself, Manuel Villavicencio was able to understand and articulate the epistemological value in this hallucinogenic infusion, or magic drink, which also transcended these barriers.

Manuel Villavicencio 's description of *ayahuasca* in his monumental geography appears in the section on the wild and remote eastern province, which was difficult to reach, less colonized, and occupied by the seemingly primitive Jivaro tribe. It was here that Villavicencio imbibed the "magic drink." As part of his immersion into the Jivaro culture. His graphic and colorful description of the rituals of the Jivaros provided a powerful and captivating backdrop for his introduction of *ayahuasca*. Manuel Villavicencio elaborated that it was the custom of the Jivaros after battle to "cut off the heads of their enemies and take them to their homes for a ceremony with the skin of the face and removed intact scalp and dried in a hot stone mold; long hair of his enemies are braided at his naked waist."68 When he wrote about the daily morning ritual of purging induced by an emetic plant (even forcing infants to do so with a pen), he was able to see beyond vomiting as primitive: "Although this use seems laughable at first sight, however, we believe it to be the reason why the Jivaros have such good health."69 Compared to shrinking heads, removing scalps, and forced purging, Manuel Villavicencio's experience of

⁶⁷ Villavicencio, 374.

⁶⁸ Villavicencio, 361.

⁶⁹ Villavicencio, 386.

ayahuasca--his delightful "flying journey"-- seems almost tame. It appears that the context of the surrounding Jivaro culture gave Villavicencio the freedom to write candidly about what might have otherwise seemed a very strange and intimidating experience.

Manuel Villavicencio was a particularly capable spokesman for *ayahuasca* as an Ecuadorian with a broad western education and deep understanding of the European ethos and worldview. Unlike Father Veigl, Manuel Villavicencio saw beyond the cultural barrier of Eurocentricity and economic focus to recognize an epistemological value. Villavicencio was a *criollo*, or someone with Spanish ancestry born in the Americas, a social status secondary to Iberian-born *peninsulares*. This perspective provided him with a less myopic lens than Father Veigl, for Villavicencio could understand both European and native cultures. While he admired and even imitated the divergent nineteenth-century European superiority, his allegiance remained to his "fellow compatriots." It was not Manuel Villavicencio's own ethnocentricity that acted as an obstacle to the progression of *ayahuasca*, but rather the larger, overarching geo-political dominance of Europe during the early phases of "The Great Divergence."

Allegiance to Europe or Ecuador?

Villavicencio was born into an elite Ecuadorian family and was surrounded by art and culture from an early age. Educated at the University of Quito, a young

⁷⁰ Villavicencio, *xiii*.

Manuel received an education equal⁷¹ to those in Europe and prided himself with knowledge of European nineteenth-century economic, industrial, and geo-political Progress.⁷² He used his knowledge of Europe to attract European investors in effort to manifest his dream for Ecuador as a reality: to follow a western industrial template of "telephone lines and railroads"⁷³ in order to awake the "spirit of enterprise"⁷⁴ among his fellow Ecuadorians. He even mimicked Eurocentricity when he described the exact location of Ecuador "with respect to the meridian of Paris."⁷⁵

As a result of his western education, Manuel Villavicencio knew to indulge an economically focused Europe, which gave his book the tone of a promotional pamphlet. He often eulogized his country, "Our country is rich and fruitful in all types of productions...It harbors the most precious soils and rich mineral surfaces, infinite wood for construction, the most useful gums and resins, an immense variety of animals and beautiful birds...Everything is great." City after city, Villavicencio systematically lists each city's location, population, and capacity for industry. For example, "Concepcion-located in the interior of the country...it has a total of 150 Indian families...Its principal industry is tobacco and a little of gold from Pucuno river...The women of this town are white and the most beautiful in the region."

⁷¹ Schiebinger, 52; Spain considered its colonies an extension of itself (New Spain) and thus universities, as well as hospitals, were "equal in the Old world as in the New."

⁷² David Spadafora, *The Idea of Progress in Eighteenth-century Britain* (New Haven, 1990); Niall Ferguson and Jared Diamond apply this to Europe as a whole. Robert Nisbet, *History of the Idea of Progress* (New York, 1980).

⁷³ Villavicencio, 264.

⁷⁴ Villavicencio, 21.

⁷⁵ Villavicencio, 24.

⁷⁶ Villavicencio, vii.

⁷⁷ Villavicencio, 400.

Despite his intention of luring European investors, Villavicencio was not ashamed of the practices of indigenous peoples of Ecuador, and honestly portrayed his compatriots.

Even though Mr. Villavicencio imitated and indulged this European attitude, his true allegiance remained to Ecuador and its peoples. To show off his own enlightened education, he repeatedly referenced known Europeans like Alexander von Humboldt, as well as "practical men" and "French academics." However, he eschewed any superiority complex when he surprisingly valued Indian knowledge as equal to European: "I use the information provided to me by Indians on the places I could not go in the same way as these European sources."

While Villavicencio was certainly aware of Eurocentricity and imitated it in an attempt to promote his own country and encourage industrialization, he was not consumed by it. While an admirer of modern Europe, he criticized his country's colonial history. In his brief history of the Spanish conquest, he concluded: "The barbaric and ruthless regicide made the Spaniards owners of the Ynca Empire." Manuel Villavicencio did not get so obsessed with Europe's meteoric rise to dominance that he lost touch with his own country, but rather maintained allegiance and loyalty to Ecuador by emphasizing and preserving the barbarism, not altruism, of Spain. Perhaps this allegiance led him to view with pride anything from his country that was foreign to Europe, including Jivaro culture or *ayahuasca*.

<u>Obstacles To The Recognition of Geografía del Ecuador, And Consequently Ayahuasca</u>

⁷⁸ Villavicencio, viii.

⁷⁹ Villavicencio, iix.

⁸⁰ Villavicencio, 5.

When Manuel Villavicencio was introduced to *ayahuasca* in the eastern provinces of Ecuador in the nineteenth century, he very well may have been the best chance for *ayahuasca* to enter academia due to his hybridized background. His detailed description of his experience demonstrates this, so what obstacles stood in the way?

"The empire on which the sun never sets"⁸¹ was a phrase used to describe the global dominance of the British Empire during the nineteenth century, yet this could also apply to Europe as a whole: "from the middle of the nineteenth century to the middle of the twentieth, the West ruled over the Rest."⁸² A shadow of geopolitical dominance made it exceedingly difficult for outsiders to be heard.

Unfortunately for Manuel Villavicencio, two other geographies of Ecuador were published in the second-half of the nineteenth century, both by westerners:

American explorer and geographer George Earl Church and German Theodore Wolf.

By 1868 George Earl Church had become "the leading authority on the Amazon Region." The United States government recognized his authority in South America when the Senate hired Church to compile a special report on Ecuador. At the same time, German Theodore Wolf, born at the center of the Mercator Map, was working on his *Geography and Geology of Ecuador*. Church's readership captured English speakers while Wolf's found ethnocentric Europeans. The result was that Manuel Villavicencio's lifework was overshadowed by western academics, resulting

⁸¹ Philippa Levine, *The British Empire: From Sunrise to Sunset* (New York, 2007).

⁸² Ferguson, 21.

⁸³ George Lauderbaugh, *The History of Ecuador* (Santa Barbara, 2012), 8.

in limited readership—to this day, no one has seen a need to translate Villavicencio's work out of Spanish.

In sum, while Manuel Villavicencio was not consumed by ethnocentricity himself. While he occasionally mimicked it to lure European investors, he transcended it himself when providing a natural and honest description of *ayahuasca*. It was the underlying geo-political dominance of the west that prohibited his work from receiving wide readership--a lost chance for *ayahuasca* to enter western academia. Compared to Father Veigl, Manuel Villavicencio provided a more detailed, candid, and well-informed opinion of *ayahuasca*, one not eclipsed by a superiority complex or focus on profits. Nonetheless, his book is remembered as the first South American geography authored by a South American as well as the first published mentioning of *ayahuasca*.

Chapter 4:

A Teacher Turned Botanist Classifies *Ayahuasca* as *Banisteriopsis caapi* in 1852 And Recognized Its "Extraordinary Effects" ⁸⁴

"I had gone with the full intention of experimenting the caapi on myself, but I had scarcely dispatched one cup of the nauseating beverage, which is but half a dose, when the ruler of the feast—desirous, apparently, that I should taste all his delicacies at once—came up with a woman carrying a large calabash of caxiri (madnidocca beer), of which I must needs take a copious drought, and as I knew the mode of its preparation, it was gulped down with secret loathing. Scarcely I had accomplished this feat when a large cigar, 2 feet long and as thick as the wrist, was lighted and put into my hand, and etiquette demanded that I should take a few whiffs of it—I, who had never in my life smoked a cigar or pipe tobacco. Above all this, I must drink a large cup of palm-wine, and it will be readily understood that the effect of such a complex dose was a strong, inclination to vomit, which was only overcome by laying down in a hammock."85



Figure 5 Spruce in 1867, upon his return from the Amazon.

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⁸⁴ Richards Spruce, Alfred Russell Wallace, *Notes of a Botanist On The Amazon and Andes: Records of Travel on The Amazon and Its Tributaries, the Trombetas, Rio Negro, Uaupés...and the Shores of the Pacific, During the Years 1849-1864* (London: Macmillan, 1908), 425. It is worth noting that Spruce died before his complete work could be published. His friend A.R. Wallace used Spruce's diligent and scrupulous notes to complete the work for publication fifteen years after Spruce's death. Consequently, Spruce may have encountered *ayahuasca* years before Manuel Villavicencio, but his work was not published until fifty years after Villavicencio's *Geografía del Ecuador* (yet in many ways still overshadows it).

⁸⁵ Spruce and Wallace, 413.

⁸⁶ Spruce and Wallace, ii.

The great Victorian botanist Richard Spruce has been credited with identifying thousands of previously unknown species in South America. In November of 1852 he found *B. caapi* and witnessed an *ayahuasca* ceremony. This encounter encouraged him the following year to collect specimen to send back to England. In 1854, 1856, and 1857 Spruce once again found *ayahuasca* being consumed, and even cultivated by a variety of indigenous peoples in a variety of locations in the Amazon Basin. Richard Spruce was one of the best botanical minds of the nineteenth century, and in spite of his numerous encounters with *ayahuasca*, identifying it as *B. Caapi*, and sending specimen back to England, this mysterious Amazonian vine failed to receive further intellectual investigation.

Richard Spruce's Early Fascination With the Natural World

Baptized on September 10, 1817, in the small town of Ganthorpe in Yorkshire, Richard Spruce was the only son of a "highly respected schoolmaster" and grandson of a local farmer. A lifelong friend and fellow Ganthorpe denizen George Stabler wrote, Spruce, "at an early age developed a great love of nature. Amongst his favorite amusements were hiking and making lists of plants."87

Spruce excelled academically, mastering Latin and Greek. This skill in linguistics allowed him to easily absorb not only Spanish and Portuguese, but also three separate indigenous languages of South America—"Lingoa Geral, Berré, and

⁸⁷ Spruce and Wallace, xxiii; An insight to Spruce's motivation in spending so much time outdoors: At age eleven Spruce's mother died, prompting his father to remarry. Spruce described the relationship with his new mother as, "no more cordial than usually exists between stepmother and stepson." It is quite possible that the tension between these two forced a young Spruce to spend less time with his stepmother and eventual eight stepsisters, and more time exploring Yorkshire's botanical world; 250.

Quichua"—a skill his colleague Alfred Wallace claimed saved Spruce's life on more than one occasion.⁸⁸ Despite his early successes inside the classroom, from his youth it was the world outside the classroom that fascinated Richard Spruce.

Without any formal botanical education, by the age of sixteen, a teenage Spruce had compiled a list of 403 species found in his hometown alone. Unfortunately, his father's modest income was not enough to afford proper botanical training, and Spruce wound up teaching and tutoring at the Collegiate School in York.

Spruce despised his job as an educator, however, the schedule of teaching provided Spruce with long breaks and thus ample opportunity to botanize. An added bonus for him was that the region was filled with his favorite plants: bryophytes, or mosses and liverworts. During his summer break of 1841, Spruce discovered a previously unknown British plant, *Casex paradoxa*, still without any formal training. The next summer would be crucial for Spruce, as he traveled to Ireland to study mosses at an herbarium run by Thomas Taylor, a longtime fellow of Linnaean Society and expert on mosses and liverworts. Not only did Spruce receive a more formal introduction to botany, but more importantly, he was introduced to many of Taylor's colleagues, including Sir William Jackson Hooker, the Director of the Royal Botanical Gardens at Kew.

His serendipitous introduction to William Hooker could not have been better timed, for the next fall Spruce's employer, the Collegiate School, closed. Hooker and Spruce worked out a deal for Spruce to pursue a career in botany—the next summer, 1845, Spruce traveled to the Pyrenees as a private collector, financing his

88 Spruce and Wallace, xxii.

trip by selling sets of plants he collected to wealthy patrons. While his time and work in the mountains that border France and Spain was impressive in its own right, more importantly, this opened up Spruce's eyes to the life of a botanical explorer, a crucial tool for his lifework in South America. To put his time in the Pyrenees in perspective, the leading French authority on bryophytes, Léon Dufour, published a list of 156 mosses and thirteen liverworts; Spruce, still considered a novice, published in his 114-page scientific essay 386 mosses and 92 liverworts.⁸⁹ And once again the timing could not have been better. He had proved himself to the botanical world that summer, and the next fall, "the hot topic of botanical conversation was South America,"⁹⁰ where Spruce would spend the next fifteen years of his life as both a private collector and agent of the British government.

In contrast to Manuel Villavicencio's exaltation of the equatorial Amazon,
Spruce, more like most white men in the tropics, found it difficult to survive. Within
his first year, in addition to his own chronic ailments, he watched his dog "go mad"
in the new environment and was forced to kill him, "I saw all hope of saving him
vain and was obliged to shoot him." He overcame deadly scorpions, vicious vampire
bats, stinging ants, clouds of killer wasps, roaring cataracts, malaria, paralysis,
deafness in his left ear, and even an Indian's plot to murder him. While his mission
remained botanical, he could not help chronicling his sufferings, despite his own
intention of not filling his journal with "continual grownings." The burden of these

⁸⁹ Spruce and Wallace, xxx.

⁹⁰ Mary and John Gribbin, *Flower Hunters* (Oxford, 2009): 248-253.

⁹¹ Spruce and Wallace, 87.

obstacles certainly played on his psyche: "I was but too often in that state of prostration when to lie down quietly and die would have seemed a relief."⁹² As A.R. Wallace described in an 1894 obituary for *Nature*, "He was a man who, however depressing were his conditions or surroundings, made the best of his life."⁹³ With potential danger around each bend of every river, one may wonder how a schoolteacher turned botanist could have survived for fifteen years in South America's version of the White Man's Grave?⁹⁴

As Spruce himself said, he would not have survived without the help of natives, "I have in the house with me two Indians...One, at least, is an absolute necessity to prevent my dying." On August 18, 1852, Spruce wrote a letter to George Bentham, a botanist at the Royal Botanical Gardens Kew in London, and also to mutual friend, colleague, and Kew's director, William Hooker. Spruce emphasized his reliance on native knowledge of the natural world to survive during the rainy season which prohibited much hunting and fishing, "Never was I so near dying of hunger...I passed three days solely on xibé, which the Indians drink." Spruce continues that even without "furious rain...It is almost useless a person hunting here who has not been used from his infancy to threading the forest and to spying out the

⁹² Spruce and Wallace, 88.

⁹³ Spruce and Wallace, xliii.

⁹⁴ Phillip D. Curtin, "The End of the 'White Man's Grave'? Nineteenth-Century Mortality in West Africa," *Journal of Interdisciplinary History* 21(1990): 63-88; White Man's Grave is a term that refers to the high mortality rate among missionaries and colonists due to the disease environment in the tropical climate of West Africa during the early nineteenth century.

⁹⁵ Spruce and Wallace, 294.

⁹⁶ Spruce and Wallace, 298.

game in and among the trees, which requires an Indian's eye to do."97 In many ways, these unnamed natives deserve recognition for Spruce's success, yet their identities remain lost.

Part of Spruce's successful interactions with the Indians stemmed from his respect for the natives and his own kind and generous nature. "My Indian was quite naked so I gave him cloth to make a shirt and trousers."98 One can imagine the comedy-like skit that ensued as the Indian attempted to wear his first set of clothes, which Spruce compares to a child: "You have seen a child in England don his first buttoned clothes, what mixture of uneasiness and self-satisfaction he displays, and how awkwardly he steps out, and how he twists his neck reminding one of a turkey cock than of anything else."99 While Spruce was amused by the scene, he intentionally hid any signs of this in a pure act of kindness toward the Indian: "I was highly amused, but forbore laughing for fear of hurting the poor fellow's feelings."100

It was surprising that a European would care about a native's feelings, but this was a regular occurrence for Spruce. It is quite possible that as a voyager-inresidence, 101 Spruce's allegiance slowly shift away from his homeland. He lamented his own government's practice of kidnapping natives for labor, degrading such behavior as, "a great disgrace to the Royal government." 102 This made Spruce trust those Indians with less European contact more, for they did not violently resent

⁹⁷ Spruce and Wallace, 299.

⁹⁸ Spruce and Wallace, 302.

⁹⁹ Spruce and Wallace, 302.

¹⁰⁰ Spruce and Wallace, 302.

¹⁰¹ Schiebinger,33; defined *voyager in residence* as a bioprospector who spends a prolonged period in the same location. The trend is for allegiance to slowly shift away from their homeland and towards the land and peoples where they worked. ¹⁰² Spruce and Wallace, 294.

attempted the civilizing forces of Europe. In this manner, Spruce refers to "savage regions" and "savage peoples" opposite to traditional understandings. He saw those natives with first hand experience of violent European barbarism, not the naked Indian whom he clothed, as savage. That is, to Spruce, savageness was a result of European barbarism, allowing him to view the naked, less-civilized natives with respect and a more open mind. Spruce's kindness, generosity, and empathy and respect for the Indians allowed him to overcome any ethnocentric superiority complex he may have brought from Europe.

The Botched Shipment of *Ayahuasca*: Spoiled Specimen

Spruce's thoroughness and botanical capacity was repeatedly acknowledged and honored by his European counterparts who received frequent shipments of botanical specimens from around the world. No sooner did these specimens arrive, than European armchair botanists praised his work. Mr. Bentham wrote, "The specimens are excellent, and being so well packed, they have arrived in admirable order...It is one of the best tropical collections as to quality of specimen that I have seen." Sir Joseph Hooker, brother to Sir William Hooker and also a botanist at Kew writes on Spruce's excellent specimen, "I can remember the arrival of one consignment to Bentham at Kew, and marveling at the extraordinary fine condition of the specimens, their completeness for description, and the great fullness and value of the information regarding them inscribed on the tickets." Professor Daniel Oliver, who assisted Bentham at Kew, only confirmed these previous praises,

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¹⁰³ Spruce and Wallace, 336.

¹⁰⁴ Spruce and Wallace, 290.

¹⁰⁵ Spruce and Wallace, xliv.

¹⁰⁶ Spruce and Wallace, xliv.

"Mr. Spruce's specimens were most carefully collected, dried, and packed, extraordinarily so considering the difficulties of all kinds with which he had to contend...I may add, the duties of a trained collector could not have been better done."¹⁰⁷ It is hard to imagine any higher of a praise than from Hooker and Bentham, two botanists who for a generation manned the helm of the largest collection of plants in the world.

Consequently, it is hard to imagine a more capable or meticulous intellectual as Richard Spruce to forward the knowledge of *ayahuasca*. He far exceeded the capacity of his French counterpart in the Pyrenees, and as the heads of the Royal Botanical Gardens Kew observed, his Amazonian specimen were second to none. Given this, it seems even more surprising that *ayahuasca*, encountered by Spruce on multiple occasions, failed to surface into mainstream academia.

While *ayahuasca* remained under the radar, it is not because Spruce thought *Banisteriopsis caapi* had no merit. Instead he overcame his European background to recognize its benefits and add this species to his collection. Spruce found this liana all over South America--in current day Brazil, Venezuela, Peru, and Ecuador. It was one of few plants in such widespread usage, so much so he found it "planted" and "cultivated" along the banks of the Uaupés and Orinoco Rivers as well as at the "foot of the volcanoes Cotopaxi...I again saw Caapi planted." Spruce provided a lengthy description of *B. caapi*, more detailed than many of his other entries. The apparent ubiquitous nature of *B. caapi* prompted Spruce to have, "obtained a good many pieces, dried them carefully, and packed them in a large box, and immediately

¹⁰⁷ Spruce and Wallace, xliv.

¹⁰⁸ Spruce and Wallace, 422.

dispatched them down the river for England."¹⁰⁹ It would appear Spruce was no less meticulous here than with any other of his plant specimen, the same diligence that had been repeatedly praised.

Further, Spruce was surprised there was "no member of this family [Malpighiaceae] on record with strong medicinal effects."¹¹⁰ It is not clear what the medicinal effects are, but someone like Spruce, who was plagued with illnesses his whole life, would certainly know a medicinal plant when he saw one. It seems even more surprising then, that a medicinal plant, with extraordinary effects, did not receive further investigation. Why not?

The mystery can be partially solved when examining the story behind Spruce's *B. Caapi* specimen that he sent back to Europe. We will remember how his collections were routinely some of the best tropical specimen the Royal Botanical Garden Kew had seen, making the outcome of his *B. caapi* specimen that much more mysterious: "When Mr. Bentham came to open them in England, he found the contents somewhat injured by damp and [mold], and the sheets of specimen near the bottom of the boxes quite ruined." Considering Spruce's widely acclaimed retinue, who could have imagined that one of the world's best tropical botanical collector's *B. Caapi* specimen would be one of his only faulty specimen?

The simple twist in fate that unfolded was illuminated by Spruce's explanation, "I obtained a good many pieces of stem [*B. Caapi* vine], dried them carefully and packed them in a large box, and dispatched them down the river for

¹⁰⁹ Spruce and Wallace, 423.

¹¹⁰ Spruce and Wallace, 413.

¹¹¹ Spruce and Wallace, 415.

England in March 1853. The man who took that box and four others on in a large new boat he had built on the Uaupés, was seized for debt when about half-way down the Rio Negro, and his boat and all its contents confiscated. My boxes were thrown aside in a hut, with only the damp earth for floor, and remained there many months, when my friend [Senor] Henrique Antonij, of Manáos, whom I had advised by letter of the sending-off of the boxes, heard of the mishap and succeeded in redeeming them and getting them sent on to the port of Pará."¹¹²

Spruce overcame his own ethnocentricity, omnipresent dangers of New World, and his love of bryophytes, to be able to see a medicinal and extraordinary value in *ayahuasca*. Despite his open-mindedness and diligence, in the end, Nature herself ruined his specimen, preventing the ability for further scientific and botanical research on the plant. Even if Spruce's *B. caapi* vines arrived at Kew in perfect condition, it is quite possible that they may not have intrigued the economically focused Europeans.

"This is all I have seen and learnt of *aya-huasca*. I regret being unable to tell what is the peculiar narcotic principle that produces such extraordinary effects...Some traveler who may follow my steps, with greater resources at his command, will, it is to be hoped, be able to bring away materials adequate for the complete analysis of this curious plant." It would not be for another one hundred years that the west would hear about *ayahuasca* and continue the intellectual investigation Spruce hoped for.

¹¹² Spruce and Wallace, 416.

¹¹³ Spruce and Wallace, 425.

Epilogue

In this thesis I have investigated historical roots of a beneficial hallucinogenic drug, its plant sources, its debut in European history in 1765, its second appearance in the first South American geography and its designation as a formal plant specimen by botanist Richard Spruce in 1853. My investigation revealed that after a Jesuit priest who was a master of intellect in economics, a scholarly native-born Ecuadorian geographer, and an expert botanist all mentioned this mysterious vine in their work, nothing more was heard of *ayahuasca* for the next century. This prompted the central question of this thesis: why not?

I answer that question by examining the historical context in which these three intellectuals lived and worked from 1755–1865 and researching the European milieu at that time. I concluded that several phenomena combined to keep *ayahuasca* and the shamans who embraced it in obscurity: European ethnocentricity, internalization, and economic motivation yielded a false sense of superiority that prevented the acknowledgment of the significance of a plant used since antiquity by Amazonian natives. Serendipitous historic facts may also have contributed to this obscurity: the Ecuadorian geographer's work being eclipsed by other more prominent South American publications at that time, and the unhappy accident that the specimens Richard Spruce sent back to England, so meticulously packaged, would be left in a hut to turn moldy and useless.

What does this investigation teach us and where will it take us in the future?

The paramount conclusion that this investigation brings to light is the limits of a

western intellectual paradigm. Although the impetus to further understand this amazing medical phenomenon was at the fingertips of talented intellectuals, the prevailing European milieu, which is detailed in the historical annals and synopsized in this thesis, prevented *ayahuasca* from being pursued in a serious manner until a century later.

The investigation of *ayahuasca* has only become fashionable in the late 20th century, with the emergence of 1960's counterculture. At this time, Harvard professor and renowned botanist, the father of ethnobotany Richard Evans Schultes recognized the value in *ayahuasca* and caused a resurgence of this drug's influence. During a 1967 NIH symposium on psychedelics as medicine, ayahuasca was a major topic with a panel of experts devoted to discussing its potential. Not until 2008 did it become legalized in this country, yet under limited and restricted circumstances.¹¹⁴ To me the need for future investigation into this healing plant concoction is clear--we need to pursue it just as we would need to pursue any other potential cure for cancer, diabetes, or Parkinson's, regardless of any social taboo. In addition, many questions about ayahuasca remain answerable only with further investigation. It is impossible to say what the future of *avahuasca* will look like, but there has been a recent trend of overcoming social, cultural, and legal barriers, which leaves this author optimistic. In the legacy of Richard Spruce, I can only hope the future will bring a more complete understanding of this mysterious entheogyn.

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¹¹⁴ Gonzales v. Centro Espirita Beneficente Uniao de Vegetal UNIAO DO VEGETAL. Supreme Court of the United States. 21 Feb. 2006.

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