500 YEARS OF COCA ERRADICATION POLICY IN PERU

A Thesis

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Table of Contents

I.Introduction	3
The Problem:	3
Argument:	5
Methods:	5
Acknowledgements	8
II.Historical Eras of Coca Cultivation, Consumption and Control	8
1.The Inca Era (pre-1527)	8
2. The Colonial Era (1528-1855)	12
Consumption and Physical Effects of Erythroxylum coca in Colonial America	13
The Colonial Era	15
3.The Globalization Era (1855-1949)	21
The International Debate	22
The Peruvian Debate:	27
4.The Antinarcotic Era (1914-Present)	30
III. Reflection/Future Research:	42
References Cited Front Bookm	ark not defined

I. Introduction

The Problem

Heidi first experimented with cocaine in 1985. As a young woman, she felt invincible; she was living life in the fast lane and cocaine provided her with a euphoria, incomparable to the euphoria of alcohol or marijuana. As time passed however, her high dulled and she became addicted to cocaine. Her euphoria transformed into an uncontrollable hell; her desire for cocaine drained her income, strained her family relations and ravaged her body. In 2005, Heidi lost her job and her son was sent to live with relatives. In 2006, at five feet, six inches tall, Heidi weighed less than 90 pounds; she had hit rock bottom and after relapsing from a short period of sobriety Heidi attempted suicide. I remember my father, sick with worry, crying on the phone, praying his sister was still alive. I remember family conversations, discussing the adoption of my cousin, to remove him from an unhealthy environment. After my aunt attempted suicide a second time, I wrote her a letter, telling her how much her family loved her and pleading her to stop her drug abuse. She has been sober for a year and a half and I dedicate this thesis to her long battle and victory.

The numerous problems caused by coca cultivation and cocaine production and distribution are international. Heidi is not alone in her struggle with cocaine addiction; in 2004 the United States' National Survey on Drug Use and Health estimated that approximately two million people regularly used cocaine or crack and 14.8% of all American adults had experimented with the drug at least once in their lifetime. The long-term effects of the cocaine are severe: as the intensity of the euphoric sensation decreases over time, users typically respond by increasing their dosage, leaving them susceptible to overdoses, a condition of paranoid

psychosis and death (DEA, 2009). The consequences of the US demand for cocaine are only felt by the populations who consume the drug; violence funded by the lucrative cocaine trafficking networks is widespread in much of Latin America. Violent leftist organizations such as *FARC* and *Sendero Luminoso* and Mexican cartels such as the Gulf Cartel and *Zetas* are now largely funded by cocaine dollars. Coca cultivation also brings negative environmental implications such as erosion and rainforest destruction (Gootenberg, 2008).

The Erythroxylum coca plant, a small Andean shrub and main input in the manufacture of cocaine, has a long history of socio-political significance. Evidence dates the ritualistic use of the coca plant among Andean tribes at approximately 4,500 years, make it one of the first plants to be cultivated in Latin America (Streatfield, 2002). In 1961, the United Nations Commission on Drugs and Crime determined that the coca leaf in its natural form was a narcotic and established a plan of action to entirely abolish indigenous coca chewing and cultivation within twenty-five years (Morales E., 2009). The United States government has since spent billions of dollars in eradication and alternative development projects in Bolivia, Colombia, Ecuador and Peru but with little success. Today, conflicts between traditional cocaleros (coca farmers) and national and international government agencies persist; in 2003 Peruvian coca farmers organized to form CONPACCP (Confederación Nacional de Productores Agropecuarios de las Cuencas Cocaleras del Perú), striking against unfair national and international eradication policies that targeted their "legal" production (Pallet, 2004). This conception of "legal" coca production and use, held by CONPACCP indigenous populations and native Peruvians can, arguably, only be understood in its proper historical context.

Argument

The purpose of this thesis is to explore several important questions revolving around the significance of Peruvian coca such as: When did coca cultivation begin in the Andes? Where *can* coca be cultivated and where *has* coca been cultivated? How have the regional and international perception of coca changed throughout history? Most importantly, I will examine why coca eradication has never been completely successful in the Peruvian Andes. Is coca cultivation an outcome of the neglect of rural development *or* does coca cultivation represent valuable crop traditionally cultivated by Andean peasants for centuries and unfairly demonized by Westerners?

To answer these questions, I have divided my thesis into four main chapters describing the evolution and the history of Peruvian coca cultivation and coca policies. In order to lay out the history, I have divided the history of coca into specific eras that each exhibit specific and distinct regional and global aspects of the plant's cultivation during these different periods. These four marked historical eras on the subject of coca use over the past 1,000 years are categorized as following: the Indigenous era (pre-1527), the Colonial era (1527-1855), the Globalization era (1856-1949) and the current Anti-Narcotic era (1914-present). These eras can further be divided into sub-sections which will be identified in the paper. It is important to note that these "eras" often are related and overlap at times. In reviewing these eras, I plan to lay the foundation for understanding current traditions and social attitudes towards the coca leaf exhibited today in Peruvian society.

<u>Methods</u>

I completed my initial research on coca cultivation, particularly on the modern eras, using the resources, books, databases and microfilms, of the OSU library system. Though there were

large quantities of literature and statistics available, I noticed several "surges", or period when there appeared to be larger quantities of research, in literature. The study of cocaine and coca cultivation is very much linked to the international attention it receives and as a result, coca and cocaine literature boomed in 1985, 1992-1993, and 2008. For example, prior to the cocaine boom in the late 1970's, there is very little written on coca policies. Additionally, there were major differences in the quantitative statistics of coca cultivation and cocaine production and traffic between those reported by nations and those by NGOs. Oftentimes, US eradication statistics would report higher levels of successful interdictions and Peruvian operations would report higher numbers of hectares of land under coca cultivation, thus qualifying them for more international/US aid.

In addition, course materials from Geography 601, Spanish 565 and International Studies 538 were used in my initial research. I chose to study the Peruvian coca trade because I was not allowed to study abroad in a country with travel warnings, at the time, both Colombia and Bolivia had active travel warnings. During the winter and spring quarters of 2008, I wrote several grants that outlined a study abroad program in Lima, Peru and field research in the Peruvian and Bolivian Highlands and national archives of Lima and La Paz. Each grant I received dealt with a specific aspect of the coca cultivation; for example, the humanities grant I received was used towards archival research in Peru and Bolivia that focused on cultural uses of coca. The Arts and Sciences honors research grant, SBS research grant and Humanities scholarships were used to fund a study-abroad and field research trip to Bolivia and Peru from July through December of 2008.

While I was abroad, I spent approximately one month traveling in the Southern Apurimac valley, Cusco, Puno, Cochabamba and La Paz Bolivia. During this travel, I visited museums, talked to locals and engaged in traditional practices that used the coca leaf. I spent the next five months in Lima, Peru. I lived with two host families in Lima; my first host-father was a military colonel and shared many of his experience about coca control with me, my second host-father was a retired economist and shared his completely different perspective. While living in Lima, I attended classes as a full-time student at the *Universidad Pacifico*. This University is a leading institution in South America in economics and business management. I took courses that were related to my thesis topic, such as *Intro to Peruvian Law*.

During this period, I interviewed Peruvian military officials, diplomats, coca farmers, individuals affected by the Peruvian coca industry and ex-narcotraffickers. During my weekends, I traveled around Peru. I visited the upper-Huallaga and Apurimac valleys, Ayacucho, Huaraz and Cuzco. These excursions were not always easy; I was forced to endure forty-hour bus rides, I had to pay off corrupt police officers at the Peruvian-Bolivian border, I faced language and trust barriers in many of my interviews and was almost robbed and kidnapped while traveling from Tocache to Juanjui in the back of a pickup truck carrying cacao. During my travels, I was fortunate enough to visit coca farms, both licit and illicit, and interview people affected by US policies in the region. Due to the controversial and illegal nature of the coca industry in Peru, all names of people interviewed have been changed. On several occasions I used the resources of the Peruvian national archives housed in the *Biblioteca Nacional* in Lima, Peru. Upon my return to the United States I attended seminars and key-note speaker events in subject with relevance to

coca or cocaine, I continued to make and follow-up with valuable contacts in the field and began organizing and analyzing my data.

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II. Historical Eras of Coca Cultivation, Consumption and Control

1. The Inca Era (pre-1527)

Though the Spanish conquest of the great Inca Empire has been well-documented and incorporated into world history, little is known about the actual Incan empire. The absence of a comprehensible Incan language has confined many aspects of everyday life in early Peru to remain a mystery. Thus, much of the Incan coca policies revolving around the restriction of coca consumption to aristocracy and military personnel and eradicating traditional use among conquered tribes is speculation. This first era of coca control policy is important because it marks the beginning of a five-hundred year debate of coca control. The Incan government's jurisdiction over coca consumption ended a period of non-regulation that had lasted thousands of years and set the stage for state interventions in coca cultivation and consumption for the next five centuries.

The social use and reverence of the coca leaf stretches back over 4,000 years. In its earliest history, during pre-Incan times, the coca leaf was probably used by all members of society. Historian Enrique Mayer (2004) hypothesizes that the coca leaf was the first Andean merchandise used as quasi-money, a mode of exchange, a standard of value and method of debt payment. Native to the eastern Andean highlands, coca leaves have been found in archeological sites stretching from southern Colombia to Chile, a testament to its extensive use in pre-Columbian trade. Coca was most commonly used and exchanged in the potato trade, a practice which continues into modern times. "With coca, we don't lack anything, the coca brings food to our house" said a present-day farmer (Mayer, 2004, p. 201).

Coca leaves also played an important role in the religious life of the pre-Incan peoples. During the pre-Incan period, the veneration of coca leaves was a societal practice that stretched across all regions of Peru and was inclusive of all social classes. Several Andean myths recount the supernatural origins of the coca leaf, however due to the absence of comprehensive writing systems, its ancient spiritual value cannot be conclusively determined. Colonial sources account Inca legends describing the origins of the coca leaf as a beautiful woman. Found guilty of adultery, she was executed, cut in half and buried and the coca shrub grew and blossomed over her severed body. In memory of her beauty, men collected the leaves and placed them in their pouches only removing the leaves as an offering after sexual relations (Gagliano, 1994).

Another Aymara myth tells the story of a tribe of highland people who angered their god Khunu. Near starvation, they stumbled across the *khoka* plant, they sucked on its leaves and were restored to life (Gagliano, 1994). Additionally, evidence of *chacchar*, coca chewing, can be found in early ceramics and other artifacts bearing images of small pipes, *varillas*, introducing

the combination of limestone and coca leaves to the mouths of the people. Additionally, large quantities of coca leaves have also been found in pre-Incan offerings and mummies; a number of pre-Colombian tribes would stuff the sarcophagus with coca leaves to ensure a safe journey into the afterlife, much like the Greek tradition of placing a coin in the mouth of their deceased (Llorens, 2004).

Historians believe coca became an integral part of Incan society following the military conquest of Cusco by Inca Roca between 1250 and 1350 AD. Incan soldiers implemented the mastication of the coca leaf after viewing its powerful and beneficial properties among Cusco residents. The military usage of the leaf exploded, as the coca alkaloid's natural properties warmed the soldiers, quelled their hunger and gave them energy. The coca pouch was eventually integrated into the Incan warrior's uniform (Parkenson, 1983). Also, during this time, the Incan soldiers began to offer coca leaves to the mountain deities as small sacrifices to ensure a safe passage through the high mountain passes. This practice is one of the first Incan religious usages of coca.

By the 15th century, the Incan empire controlled coca production in Peru. Incan religion stated that coca was a divine gift from the sun god, *Inti*, and the god commanded that only his offspring were to be permitted to chew the leaf. "Full control" of the leaf's regulation was held by the monarchs and permission to *chacchar* was a great honor, typically reserved for the aristocracy and those who performed special tasks or favors for the emperor. Though the majority of Peruvian lands are capable of sustaining the coca crop, production was limited to the high-altitude valleys surrounding Cusco. Geographer Danial Gade speculates this decision was strategic to the Incan civilization's survival; sand flies native to the lowland Amazon forest

regions contracted a disfiguring and fatal disease to the peasants who worked the lowlands. When necessary, the Incan central authority would trade with conquered Amazon tribes, however more typically the central Incan government practiced policies of disease avoidance instead of the maximization of production (Gade, 1979).

Within the valleys surrounding Cuzco Incan society employed a small labor force that dedicated their lives to cultivating the leaves for the emperor. Due the terrible working conditions of the coca *mitas* and high mortality rates of the *camayos*, coca workers, there is speculation about whether conquered natives or exiled prisoners worked the farms. All coca leaves produced on these farms were promptly delivered to Cusco, where the central Incan government would carefully regulate its consumption (Las Casas, 1968).

The pre-Columbian regulation of the coca leaf was the most successful in all of history; coca production was strictly regulated and consumption was limited to the elites of society and confined to be used solely within a religious context. The Incas considered the coca to be a symbol of divinity and originally its use was exclusively restricted to the royal family "and in most cases, society respected the idea of the upper class' exclusive right to chew coca leaves" (Mortimer G., 1901, p. 59). Instead of banning the leaf, the Incan aristocracy controlled consumption through its creation of a society that longed to respect the wishes of their gods; common people abstained from consuming coca to honor their king and religious figures and to avoid punishment. In essence, the Incan government adopted a multifaceted approach to coca control policies; in limiting cultivation to the valleys surrounding Cusco, the capital of the Incan Empire, officials were able to successfully manage the supply of coca leaves and due to the

creation of societal values that venerated the leaf and exclusively designated its use for the Incan aristocracy, officials successfully controlled the coca demand.

Despite the initial successes of coca regulation, the Incan model proved to be only as strong as the government. Over time, restrictions were relaxed and other demographics, such as traveling merchants, soldiers and coca producers, were permitted to chew the leaves. As these professions required strenuous physical labor and long periods of walking without sleep, the energizing effect of the leaves were proven advantageous to the empire. Eventually, during the Incan Civil war, from 1527 to 1532, the government was not able to control the consumption of the leaf, and it is widely believed that during this time, both production and consumption rapidly increased and were extended to all classes, much as they had been in pre-Incan times.

2. The Colonial Era (1528-1855)

The Peruvian Colonial Era had important cultural and economic consequences on the patterns of coca consumption and cultivation and began the first true cultural conflict revolving around the cultivation and use of the coca leaf in Peru. During this period, the physical use of coca leaf, though profitable for the Spanish, became associated with being indigenous. This era was characterized by two debate: Was chewing the coca leaf a harmful vice that afflicted and demonized indigenous populations or a valuable nutritional supplement necessary for survival in the Andes? Additionally, was profit maximization in mines, which required coca, or the complete Catholic conversion of indigenous populations, which banned coca, the most important goals of the Spanish Conquest in Peru? This second era in coca cultivation and control is important because it key in the development of modern coca customs exhibited today among indigenous tribes and establishes eradication as a "plausible" policy option.

Prior to Spanish conquest, the Inca economy was run by a strong centralized government that appropriated land and distributed crops throughout conquered territories; in essence, the central economy was a vehicle to avoid massive starvation (Earle, 1994). In addition, the Incan political-economy regulated wealth production, the creation of forms of currency including shells, metals and coca leaves, in order to avoid inflation and concentrate wealth within a small tribal aristocracy. The bloody transfer of power from Atahualpa to Pizarro in 1532 brought drastic changes in production, output and in social attitudes regarding the sacred leaf. During the mid-1530's Alonso Borregan, a Spanish historian, documented the coca leaf's potential for commoditization; in his agricultural assessment of the Incan societies he specifically noted coca, ají, hot peppers, and cotton as merchandise with a high value to Incan people. The fortuneseeking Spaniards promptly realized the potential worth of the coca leaf and were quick to extort its social value: in 1539 a tithe was placed on the coca leaf, and Spanish entrepreneurs used coca as a method of payment for hard labor, and the Spanish traded coca leafs for reserves of gold and silver, the latter of which was deemed "valueless" by indigenous populations (Gagliano, 1994, p.26-29).

Consumption and Physical Effects of Erythroxylum coca in Colonial America

Emerging in the sixteenth century, three distinct forms of coca consumption emerged: traditional religious use, social and nutritional use, and abuse. Spanish documents as early as 1532 relate coca's use in religious ceremonies; coca was offered as a sacrifice to sun gods, in fertility rites and by religious leaders (shamans) in special rights and traditional cures. Because the Spanish government did not regulate coca cultivation or consumption among Andean peasants, the Spanish conquest inadvertently disseminated the habit of coca mastication from

small elite to all Andean indigenous populations, disseminated the cultivation of the leaf from Cusco to the whole of Peru and thus the custom of *chacchando* became fashionable and a vital component of everyday indigenous life nationwide.

During the typical colonial Spanish work day, miners and farmers would be permitted to chew coca five times a day. In this practice three leaves are selected from a bundle, shiny side up and held between the thumb and forefinger. The leaves are then chewed with a small "ilipt'a" (ash), activating the coca alkaloid. The *chacchar* ritual lasts for twenty to forty minutes and ends with the careful removal of the wad from the mouth (Allen, 2005). The coca wad is then carefully discarded on the ground, returning to the "sacred" earth; this coca wad is considered holy and is not permitted to be spit or swallowed. This daily coca leaf consumption during meal times was encouraged by the Spanish Viceroys as a nutritional "supplement"; widespread famine in the 16th century threatened massive civil unrest, and the coca leaf quelled the hunger and rebellion of indigenous populations. These practices differed from the practices under the Incan Empire because coca chewing had become popularized and more casual. Though coca was still used in religious offerings and important spiritual rituals, the prominent colonial coca use transformed the *chacchar* into a practice comparable to drinking a cup of coffee for Andean populations. These "modern" chewing rituals, prominent today, trace their roots to this colonial era. Socially, today, coca is exchanged when meeting new friends, weddings, before work or during demonstrations.

The first trends of coca abuse also arose under Spanish colonial rule. For example, in 1574 Physician Nicolas Mondardes provided evidence in a treatise that natives chewed a combination of tobacco leaves and coca leaves to purposefully achieve an "out of their senses"

stupor (Gagliano, 1994, p. 30). This development is important because it represents the first account of indigenous populations abusing the coca leaf to escape the harsh and miserable conditions of Spanish Conquest. Though a relatively minor component of the Colonial coca debate, the manipulation of coca leaves as narcotics would become extremely important in the 19th century. The two most important developments in Andean coca mastication during the colonial era were the inclusion of coca rituals among all Andean indigenous populations, and the first abuses of coca as a narcotic.

The Colonial Debates

The two primary objectives of the Spanish Conquista were revenue and Christianization; though profitable as a commodity, the indigenous use of the coca leaf did not align with the Catholic clergy's "holy" ambitions. The Spanish therefore were faced with a difficult and strategic decision between the profit-driven exploitation or the "moral" eradication of the cultivation of the coca leaf. Among the clergy of the Catholic Church there were two dominant positions taken on the issue of eradication: the humanitarian eradication of unsafe working conditions of *camayos*, the indigenous workers who cultivated the leaf, and the clerical eradication, based on the indigenous idolatry associated with the consumption of the coca leaf.

The capture of Cusco in 1532, the administrative capital of the Incan Empire was an important victory in the Spanish conquest and colonization of the Americas. Though Spanish authorities were quick to stamp out all relics of Incan religion, toppling ancient temples and replacing them with gaudy cathedrals, surprisingly, Spanish authorities decided to continue and expand the Incan traditions of coca cultivation in the Eastern Andean slopes, because it improved working habits of the indigenous population. However the working conditions in coca

plantations were extremely dangerous; Bartólome de las Casas, a Catholic priest and indigenous activist, as well as many other clergymen admonished the terrible working conditions of the Camayo coca peasants in the tropical Eastern Andean valleys, leading a social campaign in both Spain and the Americas to improve indigenous coca cultivation conditions. The Incan government, as previously stated, avoided cultivating coca leaves in the jungle regions because of disease infestations and the great dangers of working in the hot climate for non-acclimatized people. The death rates were appalling, estimates ranges from one-third to one-half of the camayo working force dying within a year; some Spanish officials went as far to claim the coca plantations were responsible for the 'genocide' of the Andean natives (Gagliano, 1994). As previously mentioned, the tropical Amazon valley regions of Peru were the spring of many fatal illnesses, including the dreaded sand fly disease. When the Spanish changed the sites of the Incan plots of selective coca production, the Spanish unknowingly thrust thousands of natives into an almost certain death. Many times, the Camayos were indentured servants of tribal leaders; though forced-labor practices were forbidden by official Spanish ordinance, language barriers between the white coca plantation owners and their laborers prevented any infractions from being uncovered. Humanitarians argued that the production modes of coca were inhumane and its eradication would prove to be beneficial to the survival of Incan tribes.

The religious clergy held different views but similar solutions regarding the Inca's 'sacred' leaf. Typical of the contemporary popular opinion of missionaries, during the 1550's one monk stated, "God only knows how many idolatries and how much witchcraft would cease if there were no coca" (Gagliano, 1994, p. 48). Though coca leafs were diffused to the general population during the Spanish conquest, they still maintained their religious and ceremonial

importance. Shamans offered coca leafs to "pagan" deities, residents tossed coca leafs to the mountain cairns for protection, and coca offerings were commonplace in fertility and marriage rites (Gagliano, 1994, p. 58). These religious uses of coca openly demonstrated the Catholic Church's failures to completely convert the native peoples from Incan and Aymara religions to Catholicism. In the forward of the Huarochiri Manuscript, the first Spanish-Quechua translation of Incan religion, Frank Salomon remarks,

It is important to remember that by the date when the manuscript was written (around 1608) the cults of the *huacas* (incan deities) had coexisted with Christianity for more than a lifetime. If *huaca* priests had retained the loyalty of people officially bound to Christianity, it was in all likelihood because they had succeeded under the adverse conditions and the church hegemony, in presenting the *huaca* religion as comparable in cogency with the church's teachings. It is possible that by 1600 local thinkers and perhaps priests had been engaged in remobilizing and reconceptualizing the inheritance of the the *huaca* religion so as construe it as a "faith"... who (indigenous religious leaders) could bear comparison with those (claims) of the Catholic Church

(Salamon, 1991, p. 3)

In the Council of the Indies in the early 17th century, therefore religious clergy of the Catholic Church outlawed the 'religious' use of coca leaves, however, this decree was virtually impossible to enforce, as there was no method of determine how the indigenous tribes would chose to use the leaves. While Incan populations could claim to use the coca leaf for its energizing properties, oftentimes it was still used in rituals such as *Purucaya*, the Pachacuti Incan death ritual (Zuidema, 2002).

The majority of claims that Incan religions were still thriving and rumors that coca still held a significant presence and importance in Incan rituals, voiced by Catholic clergy members, were dismissed by the Spanish crown and eventually coca became accepted by the Catholic clergy because of its powerful role as a work stimulant. Those arguing the human rights abuses

of coca cultivation, however, made serious gains in the form of legislation limiting work hours, ending forced labor, and improving working conditions in the Eastern Andean foothills in areas of coca production. The Cañete Coca ordinances of Cusco in the 1550's attempted to improve the health of indigenous populations by limiting coca leaf mastication, increasing indigenous access to food and halting the expansion of coca cultivation. In addition, to decrease infection from the "mal de los Andes" Cañete suggested importing African slaves, who were "better suited" to work the tropical climates (Gagliano,1994). Two decades later, the limited successes of coca restrictions required Spanish religious, economic and political authorities to meet again to discuss coca eradication. In many ways, these humanitarian concerns were hypocritical; though the Spanish worried about working conditions among *camayos*, little attention was given to the deadly and arguably worse conditions of Spanish gold and silver mines.

The Second Council of Lima reinforced the Cañete Laws and applied quotas on the coca production. According to this legislation, new coca plantations planted after March 15th, 1571 were to be burned and fined. However, the Spanish crown had other intentions; Phillip II encouraged small farms to produce higher yields of coca on existing lands to circumvent the law. Increased coca production kept workers in the Potosi mines calm; as long as the mine workers were able to consume coca leaves at reasonable prices, there were no revolts. Viceroy Toledo enacted several ordinances, attempting to protect indigenous workers in the coca trade, however under his "mita" system all humanitarian concerns and social trepidations linked to the coca trade were set aside to feed the insatiable demand of the miners of Potosí and Porco.

Throughout the coca discussions of Cañete and subsequent debates, Spanish entrepreneurs countered religious and humanitarian claims stressing the profitability of the leaf.

The Spanish found this highly demanded coca commodity could be taxed, creating high revenues for all who entered into this business, including even the religious clergymen, such as Bishop of Cuzco. The true formation of a Spanish-controlled coca commodity industry began in 1546 with the discovery of the "Cerro Rico". Situated at a breath-taking altitude of 13,420 feet, Potosí is considered to be the highest city in the world, but more importantly it lies at the foot of a mountain once claimed to be made purely of silver. Toledo's *mita* system required all males between the ages of eighteen years-old and fifty years-old to work for a period of four months in the Potosí mine every seven years. Work days lasted nearly 10 hours and on average eighty percent of the indigenous workers died in the mines; daily rations of coca were given to workers to increase their energy, output and resistance to the cold (Barron).

Potosí was the largest colonial city during this era, with a population of over 200,000 people. The large population growth of Potosí and subsequent demand growth for coca was one of the most important developments in the Spanish coca trade. This demand directly connected the cities of Cuzco and Potosí into a system of interdependence; the coca leaf was considered by indigenous miners as the single most important recompense for their labor and the city of Cuzco with the money produced in the trade made it one of the most powerful and wealthy cities in Latin America (Numhauser, 2005, p. 15). The trade of coca leaf in Potosí alone was valued over \$500,000 annually and coca leaves could be sold at nearly double the price found in Cuzco and surrounding areas (Mortimer, 1901). During this period, trade routes between Cuzco and Potosí were established to supply massive amounts of coca leaves. Up to 3,000 baskets of coca were regularly transported by packs of llamas from Cusco to Potosí. Spanish merchants employed

healthy Indians to oversee the llamas in the arduous journeys. Indigenous chiefs forced young men into this four month journey and paid them a fifty pound basket of corn (Gagliano, 1994).

The colonial debate concluded with the realization that the commercial benefits of coca outweighed the social costs of inhumane working conditions present in the production, transport and consumption phases of both coca and the mining with which it was associated. Spanish industrialists who took advantage of the colonial coca "boom" acquired fortunes as much as four times their original investment and returned to Spain to "enjoy their wealth in more cultivated and luxurious surroundings" (Gagliano, 1994, p. 43).

Coca production lulled in the 18th century; high indigenous mortality rates, oversaturation and the substitution of *Yerba Mate* (an energizing drink from Paraguay) reduced the profitability of the coca trade. Coca chewing in the Andes was associated only with indigenous populations and became a social stigma, associated with poverty and backwardness. There were several attempts during the following years under the Spanish crown to banish and eradicate the leaf, however the public and ruling officials showed little interest or support in this goal. Coca chewing before, during and after work hours became a common custom throughout Peru. Though many Europeans and elite of Peru continued to argue mastication was hazardous to health, the fervor of coca debates subsided and the topic of coca as a major policy issue descended out of the public eye until the late 18th century.

The colonial discussion around the mastication of the coca leaf concluded that the leaf was important for traditional ceremonies but more important as survival technique to endure arduous working conditions. The Colonial discussion ended concluding that the coca leaf was

beneficial to the health of indigenous populations. An important characteristic of the "colonial" coca debate was its patriarchal overtones; indigenous voices were not recorded or valued in the debate, the actors arguing the virtues of exclusively indigenous practices were most commonly prominent Spanish landowners and church officials. Though the coca leaf was diffused to lower-class members of the former-Inca empire, the custom of *chacchar* never was accepted by the Spanish ruling class.

3. The Globalization Era (1855-1949)

According to Eduardo Galeano, Latin America has specialized in "losing" since colonial times when the Spanish crown pillaged the gold and silver reserves of Peru. He continues to argue that, "It [Latin America] continues to exists at the services of others' needs, as a source and reserve....the raw materials and foods destined for rich countries which profit more from consuming than Latin America does from producing" (Galeano, 1973, p. 1). This quote is extremely pertinent to the industrialization and globalization of the coca leaf and derived cocaine during the late 19th and early 20th century. During this period, there were two major debates: the international debate, which revolved around the question of the safety of the popular use of cocaine and how to maximize profits in the industry, and the Peruvian debate, which revolved around the question of how to keep profits earned by coca leaves within Peruvian boarders. During this time period, several important developments in the coca industry occur: the principal consumers of coca shift from indigenous populations to the occidental masses, though profit remains in foreign hands, control of the coca industry transfers from Spain to Germany, France, the Netherlands and the United States, most importantly this period marks the transformation of a leaf into an internationally criminalized narcotic.

As a result of the diffusion of coca to lower classes under the Spanish, and the institutionalization of the leaf's stimulating properties in the mining, farming and transportation industries, coca became an integral part of Andean culture and survival. Quechua and Aymara words describing coca rituals such as "chacchar" and "cocalo" (a measurement of time used to describe the length of coca flavor) were integrated into the regional Spanish vocabularies and coca was accepted as aspects of Peruvian society. Additionally, mestizos and European lower-class mine workers began to use coca tea as a stimulant. Despite the drastically decreased level of coca profits in the eighteenth century, the good was never abandoned by the Spanish crown as an invaluable source of tax income; in the 1750's the Spanish government received approximately three million dollars in revenue (Nivenny, 2003, p. 18). While the coca leaf was not accepted by the colonial aristocracy in Lima, an international curiosity would soon emerge in Europe.

The International Debate

In 1539 Don Antinio Julian, a Jesuit missionary suggested the European diffusion of coca chewing to solve continental hunger concerns, likewise Don Pedro Crespo, a naturalist and vice regal officer in La Paz, Bolivia, advocated the leaf's energizing and healing properties for European consumption; but these testaments had little following. During the next century, the coca leaf received little attention in Europe. The European enlightenment had a profound impact on the initial research and future industrialization of the coca leaf. During this period, scientists took interest in classifying and researching plant and animal life and the coca leaf was not an exception. As early as the first half of the 18th century, scientists across Europe were interested in the stimulating properties of the leaf; the coca plant was transported from the Peruvian Andes

to the French botanical gardens in 1735, and though it was the subject of numerous research abstracts, no real publicity was devoted to the plant. King Phillip II of Spain experimented chewing the leaf but found its taste revoltingly bitter and the sensation not pleasing to the European palette. Though many dismissed coca because of its social stigma as a habit reserved for the uncivilized and impoverish indigenous groups of the Americas, the prevailing view held by the scientific and pharmaceutical communities was one of panacea. Following the Spanish wars of Independence, foreign travelers flocked to the new Andean nations and described in published narratives; though at times they exaggerated "descriptions of prodigious feats of strength and endurance performed by the undernourished, coca-chewing Indian porters and guides", coca was typically described in a positive light (Gagliano, 1994, p. 105). Substantial European and American interest in the curative and simulative properties of the coca plant; at the time, it was rumored that coca-chewing cured the common cold and venereal disease and increased longevity to 120-130 years. Mantegazza, an Italian scientist proposed the rapid diffusion of coca leaves across Europe as a cure-all drug, however the tendency o of the leaf to spoil in humid conditions made a large-scale trans-Atlantic transport virtually impossible during this time. As a result of difficult transportation conditions and minor cosmetic consequences of blackened gums, bad breath and staining of the face resulting from *chacchando*, coca-chewing was never fully accepted or adopted by European and American societies.

The Coca industrialization began to boom in the late-19th century upon extensive experimentation and product developments. In Germany in 1855, Chemist Friedrich Gaedcke successfully isolated the cocaine alkaloid, the active agent in the leaf from the plant. Soon after this breakthrough, in 1860, Albert Neinman drastically improved the purifying process of coca, intensifying the numbing and euphoric sensations of the compound, creating the modern drug,

similar to products seen in today's markets. Pharmacists across Europe immediately and haphazardly began developing different uses for the drug, treating ailments ranging from stomach disorder and sore throats to fatigue and decreased sexual desire. Though cocaine was sold in many forms the most common varieties were invented by Dr. Lewis Lewis of Philadelphia, who combined coca with tobacco leaves and sold the cigars as anti-depressants in the United States and Vin Mariani, a French chemist who combined coca with alcohol creating a coca elixir wine that increased vigor and cured depression (Gootenberg, 1999).

Though Vin Mariani's elixirs were extremely popular across Europe and the United States and endorsed by powerful officials and celebrities, the two largest developments in the industrialization of coca were the invention and popularization of modern cocaine and the invention of a US coca beverage without alcohol. In the 1880s, after extensively experimenting in laboratories, German chemists Neinman and Lossen determined that cocaine could be used in complicated eye surgeries and Koller, a close contemporary of Freud determined that this cocaine solution could effectively and easily be administered as a topical anesthetic. The actual chemical properties found in the cocaine alkaloid have three distinct effects on the body: the restriction of blood vessels, the production of dopamine and the disabling of dopamine receptors. The first mentioned effect enabled cocaine to effectively be used as a surface anesthetic, the restriction of the blood flow to the operating site made surgery easier while diminishing the pain of the patient. The second two effects of the alkaloid create the euphoric sensations felt by the user (Cocaine: Global Histories, 1999).

Cocaine was regarded by scientists as a cure-all drug and officially prescribed and sold over-the-counter to treat ailments ranging from hay fever and headaches to an anesthetic for complex surgeries and seasickness. Pharmaceutical companies, including the American Parke-

Davis company of Detriot, began to market cocaine in cigarettes, lozenges, snuff, elixirs and topical creams (Streatfield, 2002, p. 77).

The successful application of cocaine in the medical field and popularization of Coca beverages immediately boosted the international demand for coca leaves, boosting the prices for raw coca leaves throughout Europe to record levels. To combat high prices, fueled by an increased demand and rocky supply, due to Peru's involvement in the War of the Pacific, Britain and the Netherlands looked to expand the supply through efficiently growing coca leaves in Asia (Gootenberg, 2002). The prices of cocaine, due to increased availability of coca leaves, dropped drastically across the globe and its products became more accessible to the middle and lower-class consumer markets.

Another application of cocaine, formulated principally by Sigmund Freud and during the late 1880's was the prescription of cocaine to treat morphine and alcohol addictions. In the United States, following the civil war, addiction was a huge problem among veterans; in his studies, Freud found that former morphine addicts almost instantly lost their cravings for the drug under the influence of cocaine. This application was considered a major breakthrough in medicine and met with great enthusiasm by the American and European publics. During the early 1900's, cocaine consumption reached the height of its international legal popularity; middle-class Americans could purchase pure refined cocaine over-the-counter or in local bars mixed with whiskey (Streatfield, 2002). Though the drug was widely used in controlled setting, occurrences of cocaine addiction and abuse began to emerge during this period; stereotypical "abusers" included prostitutes, African-Americans, the "jazz and Hollywood scenes" and upperclass artists (Gootenberg, 2008, p. 204).

The mixture of alcohol and cocaine/coca derivatives which was widely popular in European elixirs such as Vin Mariani, spread to the US markets in the 1880's with John Pemberton, an Atlanta native, who tried to cash in on the coca wine industry. Though Pemberton originally produced alcoholic 'copy cat' coca wines, in 1885, Atlanta outlawed the sale and consumption of alcohol; instead of cutting his losses, Pemberton combined coca extract with kola nut extract and created the Coca-Cola brand beverage. The business grew rapidly, and after only 40 years of business, Coca-Cola was worth more than 50 million dollars (Streatfield, 2002, p. 81). Coca-Cola continued to expand and thrived amidst the prohibition of cocaine in 1914.

By 1910, the addiction incidence of cocaine in the United States became a serious social problem; the addiction to cocaine was arguably more severe and widespread than the morphine addiction it was designed to cure. As a result, political leaders were forced to take action against the drug and drafted legislation in 1914 that drastically limited the US public's access to the drug. Coca-Cola, however was able to escape these regulations; though during this period still produced a slightly narcotic effect, through extensive lobbying campaigns, managed to evade US laws prohibiting coca imports. Written into the Harrison law of 1914 (US anti-drug legislation), Coca-Cola's No. 5 recipe limited coca's use to "natural flavoring", a use deemed "acceptable", "controllable" and "safe" by the US government (Gootenberg, 2008, p. 200). By 1930, upon the passage of the Porter act, the protection of Coca-Cola's importation of non-medicinal coca leaves was permanently cemented in US policy.

During the US prohibition era, recreational use of coca drastically decreased. In the early 19th century, most cocaine "dealers" were crooked pharmacists and dentists and the implementation of tighter medicinal regulations effectively constrained illicit cocaine markets.

Additionally, the prohibition of alcohol provided alternative, more profitable underground

opportunities for gangsters and dealers than those of cocaine. The addicts who continued to use cocaine during the prohibition period either died, as cocaine drastically shortens expected lifespan, broke their addictions, or illegally obtained their supplies from dealers who lived in prominently Latin neighborhoods. It is important to note that cocaine and coca beverages were Western inventions. During the globalization era of coca's evolution, coca use in Peru remained an important cultural practice in the Andes. There were virtually no cases of cocaine abuse or cocaine markets in Peru during this era (Gootenberg, 2008).

The Peruvian Debate

Coca was both a miracle and curse to the economy of Peru. Following the bust of the guano industry and devastating loss in the War of the Pacific, Peruvian scientists saw an incredible opportunity in the exploitation of the coca leaf to meet world market demands. As the coca leaf is native to the Andes Mountains, Peru felt it should have the "birthright" to cocaine production and profits. In the late 19th century, coca cultivation was limited to Bolivia and Peru; as Bolivia lacked a seaport and access to world markets, Peruvian coca appeared to have a clear monopoly in the business. Due to the sensitivity of coca leaves to humidity, instead of transporting the coca foliage in bulk overseas and risking the spoiling of the export, the Peruvian government developed a coca refining industry within their borders. This modernization of the coca trade was extremely profitable: in 1900 Peru was both the leading exporter of raw coca leaves and raw cocaine (Gootenberg, 1999).

Coca production in Peru was centered around the city of Huanuco, a small city in the Huallaga valley because of the high quality of alkaloid content found within the regional variety of leaves. In the 1880's Arnaldo Kitz used "Bignon" refining techniques, an easier and more

economic approach in cocaine refinement, to establish crude cocaine factories across the region, and by 1890 the Peruvian cocaine industry was dominated by several large factories in Huánuco and Lima/Callao (Gootenberg, 1999). German pharmaceutical companies, specifically the Merck Company (which was later confiscated and nationalized by the US during World War I) invested their technology and doctors in these Peruvian plants. Huánuco and the surrounding Huallaga experienced high levels of immigration from Lima and Southern Europe to help support this industry and by 1918, Huánuco boasted 14 legal cocaine factories, constituting 30% of the Huallaga regional economy (Gootenberg, 1999).

While Germany welcomed this switch and imported larger amounts of crude coca paste than coca leaves, US tariffs from the 1900 continued to favor the bulk import of leaves, allocating the refining processes to laboratories located in the United States. This policy angered Peruvian authorities; though the US purchase of raw Trujillo and Huánuco leaves still constituted a significant portion of Peruvian exports, the majority of the profit was added to the leaves abroad. After 1905, prohibition fever was running high in the United States and crude Peruvian cocaine was strongly discouraged in US markets. The US government chose to favor the cocaine produced by domestic businesses such as Maywood Chemical Company of New Jersey. In 1922, the Jones-Miller act was ratified; this US drug legislation banned both coca and cocaine imports, almost destroying the Peruvian cocaine industry and Peruvian national economy.

Additionally, due the Dutch, Japanese, English and German expansions of the cultivation of the leaf in Southeast Asia, specifically Java, coca leaf markets became saturated, drastically cutting the value of the leaf. The Dutch cultivation was mainly responsible for the oversaturation of coca in international markets which had profound effects on the Peruvian coca industry.

The Dutch coca producers convinced European markets to exclusively buy from a "European source". The loss of the US coca market and the European cocaine market crippled the coca industry in Peru. Within ten years, the Peruvian cocaine market had shifted from a monopoly in the global market to less than a sixth of the world share (Gootenberg, 1999). Production became limited to Huánuco (medicinal) and Trujillo (Coca-Cola) coca leaves and the main consumers of Peruvian coca returned from the European and American elites to the indigenous peasantry.

In the 1930s there was a great debate in Peru related to the future of the Coca industry. Outspoken visionaries, in attendance at the 'modern' Lima Conference were angered at the successes of Japanese and Indonesian cocaine; Peru, they felt, should have the exclusive right to exploit the native coca plant. Though many argued there was no future in the production of cocaine, coca enthusiasts prevailed and as a result of these conferences Peruvian hopes regarding the coca industry were boosted and the government decided to reinvest in the commodity, and aimed to win back lost European and American markets. During this period, Peruvian entrepreneurs attempted to consolidate the production, drying and refining processes within their own boundaries while improving the quality of the final cocaine product. Edmundo Paz Soldán, a prominent intellectual and business leader, criticized both the foreign-owned cocaine industry as well as Peru's sensitivity to wavering and prohibitionist demands.

In 1934, Soldán established a three-part plan to combat the foreign control of the industry, claiming that, "Peru should enjoy the native and abundant coca of Andean valleys into noble products of the medicine and commercial industry" (Gootenberg, 2008, p. 354). His plan attempted to establish a national coca monopoly named "Estanco" which ideally would have regulated domestic production and consumption. The components of Estanco included research and technological factories that would produce high-quality cocaine, the creation of social

programs aimed at ending indigenous "abuse" of coca (surprisingly, Soldán was not an advocate of traditional coca chewing practices and spent much of his life trying to rid the countryside of traditional habits), the funding of a modern drug-abuse education and prevention program and the creation of a Peruvian corporate infrastructure that would market Peruvian cocaine to international modern medical markets. On both national and international fronts, Soldán's demands were seen as extreme and leftist and furthermore failed to accept the realities of the diminishing share of the Peruvian cocaine market and declining coca prices in the world market. Within two years, almost all hopes of Estanco and coca profits vanished from the Peruvian congress.

4. The Modern Era (1914-Present)

The modern era of coca cultivation, control and consumption is politically and economically the most complicated of all the historical discussions. Presently, the four major legal coca/cocaine products (medical anesthetics, natural flavoring compounds in Coca-Cola, traditional dried leaf and ENACO, the national coca product monopoly of Peru, products) only account for 8% of the total Peruvian coca leaf production. Illicit coca, the base of cocaine, crack and coca paste, dominates the Peruvian black market (UNODC, 2008). During the 1980's recreational cocaine use boomed internationally, specifically in the United States, and the Andean countryside responded. Since the 1980s, coca producing nations, such as Peru have faced immense pressure from the US government to restrict coca cultivation and decrease international supply of cocaine. The UN Single Convention of 1964 established protocol that requires nations to physically destroy illicit or wild cultivation of coca leaves and phase out traditional use of coca. The enforcement of these policies has utilized many strategies ranging

from aerial spraying of herbicides to alternative economic development; however, demand has remained constant over the past ten years. Today, conservative estimates number cocaine addicts in the United States alone at two million. The main question in the modern debate is whether international regulation should be targeted at controlling coca supply in the Andes or cocaine demand in developed countries *and* whether or not indigenous coca rituals should be protected or forcibly abolished.

The international regulation of coca production in the Andes began well before the formation of the UN. The League of Nations was the first international organization to question implementing an international ban on cocaine. Following the cocaine addiction epidemic of the early 20th century, the international community collectively recognized the potential dangers that cocaine posed to the health of the general global population and began to formulate ways to regulate the narcotic drug industry. The Hague Convention of 1911-1912 sought to bureaucratize narcotics industries, tracking production and monopolizing the industry, hence limiting production and availability of cocaine. American diplomats further sought to cut off drug supply at the source by setting strict containment and reduction programs. Surprisingly, Peru refused to sign the document at the conference, and was the only nation in Latin America that declined to sign off on their "interests in coca" (Gootenberg, 2008, p. 209). Though the League of Nations gathered statistics on drug production in the Andes, no major advancements in eradication policy were made.

Cocaine abuse in Peru remained virtually non-existent during the first half of the 20th century. Coca continued to be used principally by indigenous mountain populations. Though many social attitudes discriminated against such indigenous customs, in the 1920's, an important Peruvian social movement emerged called *indigenismo*. There was a small explosion of literature

revolving around problems and topics that specifically plagued Quechua and Ayamara populations, such as lower quality healthcare and education. This literature defended traditional practices and customs held by indigenous population, such as coca use. However, during the 1930's, amidst the world economic depression, there was also a backlash towards indigenous populations. Philosopher Alejandro Deustua blamed Peru's misfortunes to the indigenous race, which he claimed had had stopped evolving. Jose Maria Arguedas, the most influential author of the period advocated the creation of a culturally pluralistic state that rejected assimilation and stressed cultural pride and identity. A major project proposed by Arguedas was the bi-lingual education of Quechua-speaking populations (Garcia, 2005). Such movements favored the traditional use of coca as they considered it an integral part of the history and culture of Peruvian indigenous population. ENACO (Empresa Nacional de Coca), was therefore born in the 1950s to combat cultural discrimination against the Andean coca leaf and to provide legal markets for Coca-Cola and the other pharmaceutical companies that remained active. During the 1970's under President Velasco, Peru experienced a second wave of indigenismo. According to Maria Elena Garcia, "It is important to note that under Velasco what was valuable about Incan imagery and the Quechua language was not that they were "Indian" but that they were "Peruvian" (Mayer, 2002, p. 22). During the early 20th century, coca was used to identity lower class indigenous people, it became a social stigma synonymous with poverty and backwardness. In 1970's during the second wave of *indigenismo*, open coca chewing became a popular display of protest against indigenous discrimination. According to Enrique Mayer "Since coca is a stigma, those who use it openly in defiance of the discrimination it provokes are affirming among themselves the ties of brotherhood and solidarity against the discriminatory mestizo world"

(Mayer, 2002). Thus, traditional forms of coca use have been reintroduced and cemented into Peruvian society as a symbol of cultural solidarity and pride.

During the 1940's there was a brief interruption in US prohibitionist policies towards

Peruvian coca and cocaine. World War II cut off all trade with the Eastern Asian coca markets of

Indonesia and Japan and the US relied exclusively on Peruvian coca. In 1943, US importation of

coca leaves, destined for both beverage and medicinal markets, peaked at 447,396 metric tons;

the last licit boom of coca in modern history. After the war's end, United States' anti-narcotic

opinions prevailed and serious talks or eradication and regulation policy emerged on the world

scene. President Truman established permanent research bases for American agronomists to

research the regional economies and soil qualities of the Huallaga. Additionally, from 1947
1950, the newly formed United Nations launched a Commission of Enquiry on the Coca leaf,

ultimately banning the native chewing habits, cultivation and medicinal production techniques in

1964. The Peruvian government, amidst immense international pressure and threatened with

international embargos if the agreement was rejected, signed in 1964. Meanwhile, the illicit

cocaine industry in Peru and global trafficking routes were rapidly developing.

In 1949, the last licit cocaine factory, owned by Enrique Paz Soldán, closed in Huánuco, marking the beginning of a new and distinct "rebirth" of the coca industry. Cocaine abuse, though consistently common in Europe since the 1890's, began to intensify among the American youth in the 1950s specifically among black and Latino minorities. Complex smuggling routes, organized and controlled by Latinos, emerged in Chile and Cuba, supplying the US underground markets with hundreds of tons of purified cocaine. Though Peruvian cocaine factories were officially closed, the skilled labor and resources needed for cocaine production were still present. The Huallaga valley continued to produce high quantities of coca leaves and chemists located in

clandestine laboratories in Lima replaced cocaine factories. Cocaine was then transported by commercial flights or in ship cargo to Panama, where it was then redirected to La Habana, and purified and shipped to the US to be distributed by the Cuban population of New York City. (Rouner, 2008). A large percentage of the cocaine transported to Cuba, stayed in Cuba, as Havana and the Batista regime had notoriously racy reputations. Prostitution, gambling and drug abuse were glamorized in the 1950's and the massive quantity of US tourism to Cuba during this era supported the spread of the "mambo cocaine" culture to the United States. Another important transformation during the Cuban-dominated cocaine trade, was the return to the imported Peruvian coca leaf instead of Peruvian cocaine. As a result of a combination the willingness of key Peruvian cocaine "gangsters" such as Eduardo Balerezo to work abroad, and the Cuban desire to increase profit, cocaine refining technology was sent abroad from the Andes. Peru returned to its designation as solely a coca leaf-producing nation and Cuba took a larger share in the profit, refining cocaine and transporting the final product to American markets. On the other hand, the Cuban dominance in cocaine markets proved advantageous to US counter-narcotic policies, as the centralization of the cocaine industry made it more transparent and easier to track. For example, in 1957 over 12 kilos of cocaine were seized on the island alone. Cocaine trafficking routes changed with the 1959 Cuban revolution, the political climate and expulsion of US nationals forced Cuban drug dealers to flee from Havana to Miami and Mexico, dispersing once centralized underground networks across Central America and the Caribbean. Specifically, during the 1960s and 1970s, Peruvian coca production allied with Mexican Panamanian, Ecuadorian and Colombian markets (Gootenberg, 2008). This diffusion of trafficking routes complicated US interdiction policies aimed at the middleman and forced authorities to re-think their policies.

Following the failed leadership of General Belaunde the 1960's, a highly nationalist force emerged in as a major actor the Peruvian political scheme. This group detested the passive international reputation that Peru had acquired under in the 1960's and in 1970 they placed Velasco Alvarado to the Presidency. Alvarado concentrated on breaking US influence in Peruvian domestic politics by strengthening foreign trade and domestic relations with communist nations, Western Europe and Asia. Another important diplomatic advance under Velasco was the emergence of multilateral relations with Latin American third world nations that shared common political and economic goals. These political trends had profound impacts on the coca trade. During the 1970's, US drug agencies were expelled from Peru and thus there are virtually no statistics about coca cultivation or cocaine trafficking during this period. Under Velasco, Peru received international prestige for their independence and became a leading voice in the third world. However, towards the latter half of the 1970's, when opulence began to fade, government authorities, under re-elected General Belaunde, looked to the United States for aid.

Coca production intensified during the 1960's and 1970's. Failed military resettlement experiments, aimed at developing the Andes specifically the Huallaga and jungle valleys left many Peruvian peasants stranded in the most developed illicit coca growing areas in the world without any form of livelihood; a large number of these populations turned to the drug trade for subsistence. Throughout the 1970's and 1980's, the Huallaga valley supplied the world drug trade with over half of the demanded coca leaves and paste (Gootenberg, 2008). Thousands of poor Peruvians, mostly from coastal areas, saw the potential in coca production and flocked to Huanuco and Tingo Maria (Morales E., 1990). Production was controlled during this time by violent and autonomous gangs that often clashed in pursuit of expanding their territory. In 1971

President Nixon declared a "War on drugs" and 'successfully' concentrated his efforts in the capture of marijuana smugglers in the US. In response to the marijuana shortage, American youth turned to experimentation with cocaine. In 1972, US authorities estimated that 25,000 Peruvian families survived by growing coca and over 100 clandestine coca paste labs existed in the Huallaga (Gootenberg, 2008). The US government acted immediately and funded the salaries and budgets of the Peruvian Secret Service, however little is known about US official policy after 1973, as documents are still classified by the US government. US action against cocaine in the 1970s was limited; the government did not see cocaine as a threat and classified the narcotic as a "soft drug". By 1977, there were an estimated 4.1 million regular cocaine users in the US. International markets became saturated with excess cocaine, and drug traffickers and cartel leaders chose to diversify their market and introduced crack cocaine to lower-income black neighborhoods (Gootenberg, 2008).

The crack epidemic of the 1980s forced US authorities to classify cocaine and its derivatives as a "hard" drug and as a result, American cocaine suppression abroad intensified. The combination of a Bush-Reagan military war against drugs in the Andes and political and economic crisis in the Andes led to rapid growth in cocaine production and elevated levels of violence in the Peruvian countryside (Gorriti, 2008).

In the 1980s *Sendero Luminoso* was born in the small mountain city of Ayacucho, a Quechua word meaning "corner of death". Although the leftist group originally coincided with the growth of legal liberal political movements of the mid-1980's, their expansion into upper-Huallaga valley and coca trade transformed the Shining Path into one of the most violent and powerful actors in modern Peruvian history. The combination of a failed government agricultural land nationalization project in the 1970's, which left many farmers without a stable source of

income, increased cocaine demand in the United States and the spread of advanced drugproducing technology to the Upper-Huallaga valley created a "gold rush" mentality. Hundreds of
immigrants flocked to the region, eager to grow coca, which fetched more than 30 times the
profit of other regional crops. During the 1980's Peru was the largest producer of raw coca paste,
this paste would then be sent to cocaine refineries in Medellin and Cali, Colombia (Kay, 1999).
This drug trade was run by local bosses, who violently forced peasants to grow and deliver coca
at whim.

In 1983, the Shining Path was forced to leave Ayacucho by military pressure and the Maoist-inspired group took note of the dire economic circumstances of the Huallaga peasants and began recruiting for their organization. The economic crisis incited by Alan Garcia's economic policies in 1985 strengthened the Shining Path's hold over the Huallaga valley and as a result, the majority of the coca trade. The Shining Path filled the absence of government authority in the region; they collected taxes, recruited and trained an active militia and provided peasants with "protection" from drug traffickers and eradication agents (Kay, 1999).

By 1983 the Shining Path had complete control over the Upper Huallaga Valley. They imposed a "moral code" upon the inhabitants of the *Selva*, abolishing prostitution, punishing drug addicts and creating a pseudo-union guaranteeing higher wages and better working conditions for peasants in the coca industry. A crucial victory consolidating the Shining Path's hold on the illicit cocaine trade was the acquisition of the Huallaga's airstrips. *Sendero* charged Colombian cartels from \$3,000-\$10,000 per landing, financing the arms trafficking, salaries and violent operations crucial to their survival. During the 1980's, it is estimated that approximately 65%-75% of residents in the Huallaga valley were involved in coca production; while the military focused on eradication, the Shining Path gained considerable sympathy and support

from disenfranchised peasant farmers. According to General Arciniega Huby, "If we repress 50,000 coca farmers, we create 50,000 recruits or collaborators for *Sendero*" (Clawson, 1996, p. 183).

The eradication attempts of the US government and Peruvian authorities had virtually no effect on the coca output of the Huallaga Valley in the 1980's and early 1990's. The successes celebrated by the DEA and CIA were extremely localized, and often the farmers affected by the foreign eradication agent enlisted the help of the Shining Path for revenge. During this period, the Shining Path's violent attacks intensified, targeting eradication officials and government buildings; when the Peruvian government approved plans for US fumigation, Sendero and Huallaga peasants organized massive roadblocks and violent protests (Gorriti, 2008). This intensification led to drastic changed in US eradication policy; instead of focusing the "war on drugs" against supply agents, principally coca farmers, the US government and Peruvian forces targeted the middlemen, drug refiners and traffickers.

A combination of three nationwide events crippled the Peruvian coca industry in the early 1990's; the quadruple digit inflation in 1990, the capture and incarceration of Abimael Guzmán, the leader of the Shining Path and in 1995, coca prices collapsed. In 1989, the Peruvian inflation rate was 2775%, the highest inflation rate in the world at the time, simultaneously real wages dropped nearly 60% and over 100,000 hectares of alternative crops were destroyed in severe droughts. Thousands of farmers turned to coca cultivation for survival (Kvinta, 1990). The number of hectares used for coca production skyrocketed, triggering an oversaturation the market and subsequently causing prices for sun-dried bulk leaf to fall. In 1992, the leader of the Shining Path, Abimael Guzmán, was captured by Peruvian authorities and the Shining Path collapsed. Unable to maintain cartel-driven prices, the symbiotic relationship between the

Shining Path and Peruvian farmers disintegrated; rural *campesino* militias began to attack remaining cells of the Shining Path, eroding the social base of the movement. The Peruvian government began to cut-off the Shining Path's access to illegal flights destined for Colombia, effectively cutting off the principal markets of Peruvian coca growers' crops and the Shining Path's principal source of income.

Fujimori was the longest serving-president in Peruvian history, but also has a long record of human rights abuses and corruption. Though Fujimori brought inflation under control, poverty soared in Andean regions. The violence of the war against *Sendero* was responsible for more than 69,000 deaths and many peasants were forced by the Peruvian military to fight, and an excuse for Fuijimori to suspend Peruvian's constitutional liberties. Additionally, allegations surfaced that Fujimori employed torture techniques to extract valuable intelligence and killed thousands of countryside peasants, without proof they were in any way connected with the Shining Path. Montesinos, the government chief of military intelligence, was a symbol of the bribery, corruption and thuggery of the Fujimori regime. In 1999, Montesinos was unveiled as the mastermind behind the Colombian "drugs for arms" swap with Colombian guerrillas (Starn, 2005).

An important development in the modern cocaine industry of Peru was the militarynarco-trafficker alliance. During the mid-1990's both parties shared the common goal of
defeating Sendero's hold on the Huallaga region; these two parties worked together to create a
broad front against the Shining Path, to gather intelligence regarding coca growing in the region
and often these relations became corrupt. Military officers and local police offered to provide
narco-traffickers with protection, including intelligence regarding laboratory raids and reporting
false reports of coca-cultivating areas to DEVIDA and the DEA, in exchange for money. In

addition, retired soldiers who returned to the Huallaga after their service turned to drug trafficking as a career option. In a personal interview, Juan, an ex-narco who worked in a cocaine factory near Tingo Maria, accounted his personal experiences related to the militarytrafficker connection, "Many of my friends when they returned from service became traffickers, they already have necessary training and return with weapons. Once, there was a face-off between the police and the Narcos of my factory, we were tipped off ahead of time, and escaped the factory by throwing military grenades at the police" (Juan, 2008). Jose, another trafficker from Tocache, whom I interviewed in November, told similar stories, "We had better guns than the police and better intelligence. I had served in the military before, and came from a humble background. I joined the Narcos to use my military experience and to make a lot of money" (Jose, 2008). Despite US efforts and funding, cocaine production and cultivation is on the rise in Peru. US policies of fumigation have been internationally criticized for endangering the delicate ecosystems of Amazon Rainforest. Additionally, as many families survive on the illicit cultivation of coca, forced eradication leaves them destitute and targets of the recruitment of anti-American militias such as the Shining Path.

III. Conclusions

Coca cultivation has proven to be one of the most stable and significant crops in Peruvian history. After carefully analyzing these four eras and their distinct historical discussions, it is clear that eradication is not a viable solution. Coca cultivation continues due to a lack of regional infrastructure and economic opportunity, corrupt police and military forces and cultural heritage. The most successful of coca control policies, those of the Incan Empire, were based on the

control of demand, not supply. It would be far more profitable for the United States' government to concentrate on addiction recovery than rural cultivation.

An interesting trend I noticed throughout the eras was a series of exceptions and hypocrisies exhibited by the party controlling production. During the Incan times, though the coca leaf was a holy gift designated for the rich and powerful, both the Incan princes, Atahualpa and Huascar allowed their military forces to consume the leaf, in hope they would receive a martial advantage During the Spanish conquest and colonization, though church authorities disagreed with the "pagan" consumption of coca, they gladly collected tax incomes from the leaf. During the globalization debate, the US government refused to import cocaine, but imported thousands of tons of dried leaves to produce cocaine and beverages within their own borders. Finally, today while the US government claims the cultivation of coca plants causes violence, the billions of dollars in profits of the drug trade, used to arm drug cartels, are accrued in the satiation of US demand. The lower class farmers of Peru have never effectively reaped the benefits of coca production, the majority of profits to this day remain in foreign hands while farmers are targets for both military and cartel bribery and violence.

In the years to come, unless there is a significant drop in the worldwide demand for cocaine, I believe illicit coca production will increase in Peru. The main agricultural staples of coca growing regions, corn and rice, face disastrous competition against US subsidized crops. As seen in the late 1980's and early 1990's during times of economic crisis, coca production thrives; though the US-Peruvian free trade agreement could be beneficial to the nation in the long-term, in the short-term, I suspect there will be economic crisis in rural areas. Finally, coca cultivation is an outcome of the neglect of rural development *and* a culturally important symbol of Andean

society. I believe that due to the profitability of the leaf compared to other regional crops and the strong presence coca has in Andean Culture, eradication will be impossible.

Reflection/Future Research

Over the course of the last year, I have learned about other cultures, economic theories, agriculture and time management. This thesis has shown me the complexities of foreign policy and the many sources that influence it. Though I feel that I bit off more than I could chew, I feel this project will serve as wonderful background research in future investigations. I would like to continue studying several aspects of the coca problem in the future. I feel an comparative econometric analysis of the Huallaga and Apurimac valleys would be both interesting and beneficial. Each of these valleys has a distinct history of coca production and agricultural development. I am also curious in studying the relationship between the Shining Path and Colombian and Central American trafficking organizations. This summer, I plan on writing a Fulbright to return to Peru. Although many of the coca-cultivating areas are dangerous, I feel that significantly more research must be completed in these regions to create a more responsible and effective foreign policy in the Andes.

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Me and Angie Hidalgo in Ledoy, a small town located in the Huallaga Valley