

## 5 Coca leaf transfers to Europe

### Effects on the consumption of coca in North-western Argentina

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Transfer of the consumption of coca leaves to Europe has been rare, but there has indeed been transference of discourse on the practice.<sup>1</sup> Actually, drugs and stimulating beverages prepared from coca leaves have made their way to Europe and North America. Various descriptions of coca had already reached the Western world prior to the advent of products like cocaine, Mariani wine, and Coca-Cola, so by the time that these products became known in the late 19th century, images of the Andean leaves already existed.

I will briefly consider such rhythms or stages of European discourse on the topic and focus on the effects of this situation in Argentina. There, the Europeanized North-western Argentine elite, aware of the discourse on this new stimulant, brought knowledge about coca leaves – which had formerly been relegated to being used by Indian peasants and urban workers – before the eye of the general public. I will consider the factors of transport systems, cultural changes, judicial and market systems, and ethnic situations, in order to understand why, from 1920 to the present day, coca-chewing has become a daily life routine in two provinces of Argentina's North-western region: Salta and Jujuy.

This region experienced the Spanish colonizing wave earlier and more intensely than did the rest of the country. Besides, it also retains various attributes that are specific to the Andean world. Since it was once controlled by the Incan Empire, the Quechua language was widespread there and is still spoken today in some areas. The presence of coca is one attribute – perhaps the most notable today – stemming from this history. The six provinces that constitute North-western Argentina (Jujuy, Salta, Tucumán, Catamarca, La Rioja, and Santiago) demonstrate a family resemblance in folk music and traditional cuisine. But the region is diverse, with more intraregional social and cultural variety than in any other part of the country. In this paper, I will use 'NWA' to refer to the sub-region formed by the provinces of Salta and Jujuy, home today to two million people.

The long history of coca in Western discourse is complex and varied. It is, however, possible to describe, from among the huge number of texts on the history of coca, a series of discursive formations arranged along the lines of Foucault's archaeology: a constellation of *énoncés*, or a corpus of utterances that are dispersed but feature a discursive formation. Due to the variety of discursive formations, effects can be deduced, foremost among which is the object of knowledge

itself. Actually, a discourse is capable of systematically forming the objects with which it deals. After all, not only were the actual coca leaves transferred to places beyond the indigenous Andean regions, but the object 'coca' was also transferred as a result of various discursive processes.

Since 1860, the topics of coca leaves and cocaine have been very entangled, though the focus here is on coca leaves because this chapter intends to shed light on the consumption of Bolivian coca leaves in North-western Argentina.

Obviously, the transfer of goods from one major cultural area to another is a complex process. Perhaps the simplest way of describing an intercultural transfer is supported by the Piagetian dialectic: a process of assimilation-accommodation in which some item, or some way of using it, is received and accepted because it is apt to occupy a place in a previously existing pattern of demand. As soon as such an item is included in the specific consumer patterns of an area, it can also change these patterns themselves. In his research on the adoption of tobacco in Europe, Fernando Ortiz introduced the term 'transculturation' in order to describe the complexity of such a process and the manifold directions in which it could go. Despite its almost complete absence in anthropological or sociological scholarship, it applies perfectly to the dynamics of coca consumption in North-western Argentina.<sup>2</sup>

### European encounters with coca

The first recorded European encounter with coca dates from 1499.<sup>3</sup> There follows a gap of fifty years until the following mention of coca in a Spanish chronicle from Peru. Most of the Spanish *cronistas de India* who mention coca leaves date from the period from 1551 (Juan de Betanzos) to 1653 (Bernabé Cobo). From the point of view of the Spanish Conquistadors, coca was considered to be an excellent source of tax revenue, but a hindrance to the progress of evangelization, since its association with Andean rituals caused it to be considered a talisman of the devil.<sup>4</sup> During the Second Lima Episcopal Council, and under subsequent bills passed around 1569, the so-called coca question was discussed. But coca was never effectively banned, and business in coca flourished prominently in the sprawling social jumbles that existed, for example, around the mines of Potosí.<sup>5</sup>

From the 16th to the 18th centuries, new stimulants took hold on the European market.<sup>6</sup> Distilled alcohol was a relatively recent invention. The others included new and unusual vegetable substances such as chocolate, tobacco, coffee, and tea. It took centuries to discover that all four of them contain alkaloids such as nicotine, caffeine, and theobromine. As we know, these first stimulants that arrived were eventually adopted into everyday Western life. Coca was not one of them.

The first definition of coca in a modern Spanish dictionary, the 1729 *Diccionario de Autoridades*, sums up the discourse on coca leaves in the 16th and 17th centuries. Comparing the plant to some European shrubs and mentioning its value in Indian culture, it is emphasized that in spite of the fact that Indian people did not swallow the leaves, according to them (this was recorded as "they say") coca provided and sustained energy. There is no mention of the word 'coca' in major

works of this time in other languages, either in the first editions of the Académie Française, or those of Samuel Johnson (1755), or of Noah Webster (1806). However, all of them contain articles on ‘coco(nut)’ and ‘cocoa’.

From 1735–1743, the great French-Spanish scientific expedition that measured a meridian arc at the equator line took place. There was also a team of scientists who covered large regions from Quito to the Amazon Basin. One of the leaders, the Spanish officer Antonio de Ulloa (1716–1795), also known as the author of the first European description of platinum, presented a supposedly first-hand description of coca, stating categorically that it was nothing but an American version of the betel nut. Since he also describes coca as a climbing plant, “twisting around other plants like a grape vine”, it is questionable whether he ever saw an actual coca plantation.<sup>7</sup>

Following the French-Spanish expedition, in 1753, an article on coca appeared in the *Encyclopédie* of Diderot-D’Alembert. It incorrectly mentions that coca seeds were used as coins like cacao seeds in Mexico. It states that the leaves were the “delight of Peruvians”, much like tobacco in Europe or the betel nut in the East. However, Jaucourt, the article’s author, admitted a lack of better information on “such a valuable plant”, and deplores the lack of botanical descriptions of it.<sup>8</sup> One of the leaders of the expedition, Charles M. de La Condamine, returned to Europe in 1745. He brought samples of *Hevea* rubber and specimens of the cinchona tree that later allowed for its Linnaean classification as *Cinchona officinalis*.<sup>9</sup> Joseph de Jussieu, the botanist of the expedition, continued travelling, collecting and categorizing herbs until 1771. Although most of his samples were lost, he managed to send coca specimens to his brother Antoine. These made it to the Muséum National d’Histoire Naturelle in Paris and were used by Jean-Baptiste de Lamarck to provide the Linnaean classification of coca in 1786.<sup>10</sup>

### Late colonial presence of coca in North-western Argentina

During these times, North-western Argentina was known as El Tucumán. After 1776, the Viceroyalty of Peru was divided, and the region, as well as that of Alto Perú (present-day Bolivia), became part of the new Viceroyalty of the Río de la Plata, under the control of the Viceroy in Buenos Aires. This Bourbon Reform was part of major disruptions that led to the significant Indian uprising known as the Tupac Amaru Rebellion of 1780–1782.

The uprising was catastrophic for the Yungas coca fields of La Paz, a major coca region. The resulting crisis led to a revival of the coca debate of two centuries earlier, the days of the Viceroy of Toledo. The Spanish Crown needed tax revenues as never before to pay its soldiers. A coca tax was welcomed, and its level was discussed by Ignacio Flores, Superior Judge of Alto Peru and President of the *Audiencia de Charcas*, and Francisco Sanz, Governor of the Buenos Aires region. Flores had suggested a high tax, but Sanz, who just had introduced a tobacco tax, argued that increasing taxes on coca was a high risk because it was an essential commodity for workers in demanding jobs such as those involved in mining. This revived the old dispute over whether the virtues of coca were imaginary or real. Sanz thought that a rise in price would lead to discontent among mine workers,

thereby threatening the revenues of *criollo* merchants and coca plantation owners. In their debates on the topic, both parties acknowledged that, some time earlier, coca consumption had spread south to Tucumán. According to Flores, coca use:

has now extended to Tucuman, and even veteran soldiers chew coca and use *acullico* just as Indians do (*acullican como los Yndios*); being questioned whether they experience more stamina in their bodies, they say they feel some pleasure [that is] hard to explain, that is, they say the same thing as those given cigars to smoke; even if they swear to feel strength and spirit, whoever knows the caprices and quirks of human beings will not believe it.<sup>11</sup>

In 1794, Hipólito Unanue (1755–1833), a *criollo* of the Enlightenment, wrote a well-balanced piece on coca, in which he considered the various sides of the debate. He had no doubts that its metabolic properties were real and not mere illusions of Indian consumers. Written at the sunset of the period of Galenic medicine, his suppositions about how coca works on the human body are not applicable today, though it is a useful summary of the knowledge of the 18th century.

In his text, written twelve years after the end of the Indian uprising, he comments that the insurrection had led to a revival of the old discussion about whether the ‘energy’ obtained from coca was objective or illusory. He is also one among very few authors – those responsible for the extensive literature on coca dating from the 16th century – who noticed that the alleged characteristics of its consumers would also be ascribed to the product itself, stating that, since Indians were considered criminals, coca use was considered criminal, too.<sup>12</sup> Unanue also mentions an old ban on coca traffic between Alto Perú and Tucumán. The ban had since been abolished because, thanks to the virtues of coca, mule drivers were capable of withstanding the hard, chilly journeys through the Lipez plateau.<sup>13</sup> In addition, he pays attention to features such as flavour and smell, which most observers have neglected to mention, even today: “[W]ell-weeded gardens result in a fragrant and tasty leaf; while those of plants that have grown among weeds are intolerable”.<sup>14</sup> To his thinking, there is no categorical difference between the point of view of the consumer and that of the observer.

A comparable point of view was shared by the Jesuit priest Antonio de Julián. Born in Spain, he lived in Nueva Granada (present-day Colombia). His description of the Santa Marta Province shows a warm acceptance of coca. Here we find a representation of the Indian consumers’ point of view, which was indeed unusual in the then existing literature on coca. Julián asked some “Guajiro” Indians (probably Kogui people), who were chewing coca leaves with lime, why they “were eating that grass”.

The astute Indian, putting fingers to [his] nose just as somebody taking powdered tobacco, answered: “Why white man does this way?” and he mimed taking snuff. I admit that the Indian made me blush, and I couldn’t answer; because in terms of the usages and customs of different nations, it is hard to find any disparity that is convincing.<sup>15</sup>

Julián deplors the lack of coca in Europe, where tea and coffee were so much in use. This same complaint can be found in the Lima journal *Mercurio Peruano*. There, Unanue and Pedro N. Crespo – a contributor who had written articles on tobacco and cinchona bark – emphasized the potential use of coca on long sea trips or in cold regions such as Russia or Lapland. Another *criollo* senior official from the Yungas plantations of La Paz, José de Alvizuri, who had participated in a 1783 debate and noted the difficulties of transporting a product as perishable as coca, argues that

if this article were not so vulnerable to decay, . . . it could be sent to Buenos Aires, Lima or Spain to be consumed, just as cacao, cinchona bark, or other things are, and that way [the Crown] would not lack the funds necessary to meet its costs and impositions.<sup>16</sup>

Unanue also underlines other obstacles besides the perishable nature of the Andean leaf, and deplors the fact that the Enlightenment had not yet given coca its due.

As time goes by, there is less worry than formerly, on the part of men who are aware, as regards the benefits and products from the New World. Yet this same passing of time, that has made it so evident that tobacco is not more ruinous to mankind than powder and bullets, that the use of cinchona powder is not a mortal sin, that cacao grains are not sheep droppings, that Indians are not irrational beings, that there is no degradation in human beings who leave Europe for America, still has not been able to extinguish prejudices toward coca.<sup>17</sup>

With this having been said, some alternative discourses can be traced among those with a *criollo* perspective, such as Unanue, Crespo, and Julián, who praised the virtues of coca and the potential that this product had for becoming a commodity. This enthusiasm contrasts with complete ignorance on the part of the Europeans.<sup>18</sup>

### **The European quest for stimulants: the coca leaf's awkward double**

While the first edition of the *Diccionario de la Real Academia* (1780) had an article on ‘coca’ that basically summarized the one that had appeared in the *Diccionario de Autoridades* (1729), in its following edition (1818), the article titled ‘coca’ says nothing of the Andean leaf.<sup>19</sup> Even Alexander von Humboldt in his *Voyages* (1814) only mentions coca in passing, describing several products that were consumed with lime. He mentions “the practice of stimulating the organs of taste with caustic lime”, and compares “*les feuilles du Cocca*” with tobacco, with the Venezuelan tobacco jelly called *chimo*, and with the betel nut.<sup>20</sup>

The beginning of the European quest for stimulants can be set in about 1814, when Benjamin Moseley published an astonishing text in a widely read London magazine. The article, published anonymously, was decades ahead of its time.<sup>21</sup> Praising the new steps taken in science (“The use of *alkalies* is a new subject

in medicine”), he claimed to have had an Indian powder brought to him from Peru by a British officer in 1787. Wishing to contribute to the general progress of science, Moseley told of how lime was used among Indian people with coca in South America. Quoting Spanish chroniclers and English travellers, he reported that coca made Indian people “able to travel many days with strength, without either meat or drink”. And he related this ancient information to some recent news reported by Humboldt and Aimé Bonpland regarding the Indians’ commerce of quicklime. In brief:

By this ‘Indian secret’, the natural appetite for food is by them suspended . . . they have the secret, and put it in practice for weeks together; and undergo the greatest fatigue, without any injury to their health or bodily vigour.<sup>22</sup>

Moseley wished to emphasize the importance of the mysterious lime that somebody had brought him from South America, saying that the powder should be analyzed with the quite modern electrolysis methods of Humphry Davy (who had recently, between 1806 and 1810, revolutionized chemistry by isolating previously unknown elements such as potassium and sodium). He publicly stated that he would give the powder to Davy “when he returns from his travels”:

There are thousands . . . who will pour their blessings on [Davy] if he will but discover a temporary Anti Famine, or substitute for food, . . . like a Peruvian Indian, to live and labour in health and spirits, for a month now and then, without eating . . . It would be the greatest achievement ever attained by human wisdom.<sup>23</sup>

While many naturalists were attracted by the new process of mineral analysis, including Humboldt, who was more interested in lime than in coca itself, by the beginning of the 19th century, another kind of chemical testing was opening the route to a different road. In Moseley’s days, chemistry was applying modern analysis to widely used plants such as the opium poppy. Friedrich Sertürner had in fact already isolated morphine, but his discovery was not well known until 1817.<sup>24</sup> The following three years saw a better understanding of the nature of this kind of molecule, and the term ‘alkaloid’ and the suffix ‘-ine’ were also coined. In 1818, strychnine was isolated from nux-vomica, and in 1820, quinine was isolated from cinchona. This was the beginning of phytochemistry. These events opened the way to the isolation of the coca leaf’s awkward double, the alkaloid cocaine, but that would not happen for another forty years.<sup>25</sup>

The following decades witnessed an Andean economic boom in the cinchona bark trade, the source of quinine. Then the cinchona tree was leaked from Andean forests to South Asian Dutch and British colonies between 1852 and 1867,<sup>26</sup> and a lasting Asian-European quinine industry was established there.

The quinine era established the model for the quest for the ‘secret’ of the coca plant. With the emergence of the South American republics, European travellers began providing descriptions of the coca plant and its uses. They overstated

the exploits of Indian porters, who were said to be able to walk for several days and nights without food, chewing only coca. An example of these folk tales is the account by Johann Jakob von Tschudi about a Peruvian worker: “During the whole time he was in my service, viz., five days and nights, he never tasted any food, and took only two hours’ sleep nightly”.<sup>27</sup> These stories were quite exaggerated, but were also believed and constantly repeated.

This great interest in stimulants, before they had even been transferred to Europe, should be considered within the context of a booming industrial world. The common topic from Moseley to Tschudi was society’s need for stimulants in order to cope with the exigencies of demanding work, and at the same time to preserve the iron law of wages.

Every account of the sequence of events related to the arrival of coca and its derivatives in Europe and North America mentioned Albert Niemann’s findings from 1860. Friedrich Gaedcke is also sometimes mentioned, and, in recent years, so is the work of Enrico Pizzi. Although more research is needed to clarify some grey areas, I can shed more light on this sequence of events.

Throughout the 1850s, there were nine attempts to analyze coca and discover its hidden alkaloid. In seven of these, the experimentation involved the transportation of coca to Europe, including Paolo Mantegazza’s experience, which was subjective rather than chemically asserted.

- a) Although Hugh A. Weddell did not transport coca to Europe, he began the first stage of obtaining a coca concentrate. While in the Yungas of La Paz, he made a decoction of leaves *in situ*, described the results, and postulated that coca possessed a theine-like substance (the alkaloid that is essentially caffeine, found in tea). He most likely did not get much further than Unanue.<sup>28</sup>
- b) The attempt of one Edmond Frémy, probably using a supply of leaves provided by Weddell himself.<sup>29</sup>
- c) In 1852, a German doctor named Wedel searched for coca among the pharmaceutical wholesalers of Leipzig, Hamburg, and London, with no luck. But he did find some, by chance, through a pharmacist in Kiel who had been to Peru and observed its consumption by Indians there. Wedel shared his small sample with Wackenroder, who published his ‘chemical examination’ in 1853.<sup>30</sup>
- d) At the same time, another test was being performed in London. The analyst, J. W. F. Johnston, wrote: “The plant is as yet to be obtained in too small quantities in this country to admit of a complete chemical examination of the substances which the leaves contain”.<sup>31</sup>
- e) Other experiments, such as the one performed by Maclagan and published in France, are not well known.<sup>32</sup>
- f) Gaedcke obtained about 625 grams (22 ounces) of coca, and claimed to have isolated *Erythroxylin*. He obtained his supply from the merchant Emil H. Worlée of Hamburg (the founder of a company that today is a worldwide trader of raw materials). Gaedcke’s first text, from 1854, contains a dedication to Worlée.<sup>33</sup>

- g) It is unknown how Samuel R. Percy obtained a sample of coca in the United States, but he managed to concentrate and isolate some extract. He communicated his findings in a report to the New York Academy of Medicine. This case is mentioned only in French and American sources.<sup>34</sup>
- h) There is reasonable evidence to believe that the Italian pharmacist Enrico Pizzi isolated cocaine in La Paz before June 1858.<sup>35</sup> Living in Bolivia, he had access to leaves; his difficulty was making his findings known in Europe. Tschudi relates that in South America, he obtained the material (consisting of “cubic crystals”), apparently from Pizzi, and then gave it to the German pharmacologist Friedrich Wöhler and his disciple Albert Niemann. However, according to Niemann’s account, this material was nothing more than gypsum. (The story has several grey areas. For example, on this trip, which would have been his second, Tschudi did not visit Bolivia, but rather northern Argentina and Peru. Nor does he state clearly how the substance produced by Pizzi in La Paz came into his possession.)<sup>36</sup>
- i) Paolo Mantegazza (1831–1910) published his essay on coca in 1859. His personal experiences with the coca leaf did not actually take place in Salta, but rather in Lombardy, where he had returned with a huge cargo of Bolivian leaves. Although prior arrivals of small botanical specimens were reported, this shipment may have been the first bulk arrival of coca in Europe. It occurred sometime before the shipment that supplied Albert Niemann.<sup>37</sup>
- j) In August 1859, the naturalist Karl von Scherzer arrived from South America with a supply of 30 pounds of coca leaves at the request of Wöhler.<sup>38</sup> This was the shipment that enabled the work of Niemann, who isolated cocaine as hydrochloride salts and published his results the following year.<sup>39</sup>

This sequence of events shows how coca became a sought-after item, even before the confirmed isolation of cocaine. When an effective application of cocaine in local anaesthetics was discovered in 1885, cocaine production skyrocketed. Just as cinchona had been transferred to Dutch colonies in Java to isolate quinine, the coca plant arrived there to supply a booming cocaine industry. Before this time, the isolation of cocaine had not had immediate consequences in the pharmaceutical industry.<sup>40</sup>

The last decades of the 19th century witnessed a booming industry in patent medicines, and patented medications made from coca were a part of this, flourishing soon after coca’s arrival in Europe. Most of these preparations were produced in France after the 1860s.<sup>41</sup> At the heart of them was the classic wine called Mariani. Based in Paris at Boulevard Haussmann, Angelo Mariani (1838–1914) not only developed wine from coca, but other preparations from it as well, from cigarettes to ointments. Like many patent medicine producers, he used advertising extensively, creating an impressive array of merchandising paraphernalia.<sup>42</sup> Indeed, marketing coca products contributed to the very beginnings of modern advertising. In 1886, an Atlanta company decided to transform its ‘Pemberton French Wine’ into a new drink that combined the attributes of soda-fountain syrup

with patent medicine. Thus, Coca-Cola was born, “containing the properties of the wonderful Coca plant and the famous Cola nuts”.<sup>43</sup>

At least two patent medicines made from coca came from La Paz. The first was processed by the Italian pharmacist Clemente Torretti, the successor of Pizzi. The second was called Elixir Lorini and is still remembered in La Paz as something from “our grandparents’ time”.<sup>44</sup> Colonel Percy H. Fawcett praised the high quality of a coca liquor that was produced in Cochabamba around 1913.<sup>45</sup> I have found no evidence of coca preparations developed in Argentina at this time, but Bolivian tonics such as Elixir Lorini could not have gone unnoticed there.

The half-century before the First World War was a period in which there was a second wave of various ‘stimulants’, ranging from coca patent medicines to morphine. 1914 marked the end of this era. That year also saw the passing into law in the U.S. of the Harrison Narcotics Tax Act, which eventually effectively banned “coca leaves and opium”. The Act had been preceded by the practice of labelling medicines through the 1906 U.S. Pure Food and Drug Act. A clear distinction was also established between the physician who prescribes a medicine and the pharmacist who sells it.<sup>46</sup> After the First World War, the League of Nations initiated a kind of domino effect, establishing a worldwide international system of law that more or less imitated the framework of drug policies that had already been established in the United States. In 1903, Coca-Cola had become a caffeine-based beverage, but still contained flavourings extracted from real coca, a feature that led to a complex, and sometimes disputed, legal situation.<sup>47</sup>

Although Coca-Cola was able to make the transition, almost none of the other patent medicines or other coca-based products survived. Over the course of just a few years, consumers watched as widely promoted products gradually fell under a strictly enforced total ban, unlike the ‘stimulants’ of the first wave, such as tobacco and gin.

### **Non-Indian coca consumption: open and private**

Coca consumers in the Andean region, on the other hand, were in a quite different situation. There, far from the coca plantations and removed from the coca culture of the Indians, coca-chewing had started to be practiced by ‘white’ *criollo* people.

Although little attention was paid it, coca leaf consumption among Spanish and *criollo* colonists was a well-documented, counter-hegemonic practice, as some examples will show. At the beginning of the 17th century, Garcilaso de la Vega mentioned the case of a poor Spaniard who chewed coca leaves. Without the funds to hire a labourer, the man relied on the help of coca. The author mentions the energy that coca consumption provided – as well as the man’s shame at the thought of being seen chewing coca, since he was not an Indian.

At that time, the Lima Inquisition was persecuting consumers and sellers of coca in that city.<sup>48</sup> Later, Unanue also briefly described coca consumption among *criollos*. And, by 1840, Tschudi made reference to:

Several persons of high respectability in Lima, who are in the habit of retiring daily to a private apartment for the purpose of masticating coca. They could

not do this openly, because among the refined class of Peruvians . . . [coca-chewing] is looked upon as a low and vulgar practice, befitting only to the labouring Indians.<sup>49</sup>

By this time in NWA, as in other Andean regions, coca consumption carried a major stigma in the eyes of the middle and upper classes. Paolo Mantegazza describes the situation in the city of Salta around 1857:

Coca is sold in every grocery store in the city, but is only used publicly by Indians and the lower classes. The rich who have adopted the habit hide away from the eyes of the masses.<sup>50</sup>

In the words of Victor Martin de Moussy, by 1860, “consumption of this masti-catory was left to the lower classes: the bourgeois preferring to consume it as tea”.<sup>51</sup>

So at just about the same time as coca arrived in Europe, some forms of coca use by ‘white people’ in NWA and other Andean regions did exist. But such use was marginal, went against conventional norms and traditions, and was carried out behind closed doors. Nevertheless, the influence of the European coca fad was felt by such consumers, and this had lasting consequences in NWA.

By 1920 a *porteño* observer,<sup>52</sup> a literary chronicler from Buenos Aires, would find a situation in Salta that was quite different from that of the days of Mantegazza. According to this chronicler, Bernardo González Arrili, coca consumption was openly practiced everywhere. It was common during festive occasions, at night, and at the dinner table, a fact that left him quite perplexed.

He had arrived as an advisor to Joaquín Castellanos, the new Governor of Salta, who had been instated as the result of a federal *intervención*.<sup>53</sup> González Arrili stated that while travelling by train to the north from Buenos Aires, he had noticed that, after leaving the station in the city of Tucumán, the number of consumers “increases the farther the train travels”. He begins his article by noting that the habit is not “exclusive to the so-called lower classes”, and he added:

The traveller realizes, with sadness, that coca chewing exists amongst all classes; the middle and upper classes and even amongst the foreign working class, who adopt the habits and traditions of the region with admirable ease. The traveller will then hear, with indescribable amazement, the news that there are also women who chew coca. In the city it is very normal to enter a café . . . and to see a saucer full of coca leaves at tables where people are drinking. There are some places in which if you ask for a beer they also give you coca.<sup>54</sup>

The article was published in *Nosotros*, a literary review that was then very much in the public eye, and did not go unnoticed. It was quoted and commented on in the book of one psychiatrist, for example, who was alarmed at the common presence of cocaine and morphine on the Buenos Aires social scene.<sup>55</sup>

No doubt, González Arrili’s description of coca consumption as a dirty barbarian practice caused a stir in Salta and Jujuy. In 1922, at least one writer, Juan

Carlos Dávalos (1887–1959), reacted with a short story, “La zancadilla” (“The Stumble”), as a retort to González Arrili. The main character in the story is Cocó Silveira, a *porteño* just arrived as an advisor to the new acting governor Olañeta. This relationship is an only slightly veiled allusion to the role Arrili played in the real-life government of Castellanos.<sup>56</sup> The young, well-off Silveira had been “plugged into” the new administration by his parents, who wanted to cure him of spleen and “neurasthenia”. He became infatuated with a young Indian girl, a shepherdess from the outskirts of Salta. The narrator portrays a persistent, recurrent daydream of Silveira, a sort of kitsch orientalist diorama of installing the Salta shepherdess, who he imagines dressed in a yellow kimono, in his Buenos Aires bachelor pad, decorated with cushions, rugs, incense holders, and the like, “while he initiated her into the mysterious delights of cocaine”.<sup>57</sup> It should also be mentioned that ‘cocó’ was a slang expression for ‘cocaine’.<sup>58</sup>

In a previous book, Dávalos had depicted three characters involved in coca use. While in two of these cases the use is combined with alcoholic excess, in the third story, *Un viaje raro (A Strange Trip)*, Dávalos has the main character meditating calmly over shots of gin and *acullicos*.<sup>59</sup>

In synthesis, Dávalos placed the exotic, *porteño* use of cocaine in opposition to a local and legitimate use of coca.

The new trends of international law after the First World War soon had their effects in Argentina. Coca leaves still entered the country under no particular legislation, but in August 1924, Argentina, following suggestions from the League of Nations, passed its first ‘alkaloids’ law, which penalized chemists who sold such products “without a medical prescription”, in order to combat cocaine and morphine consumption.<sup>60</sup>

One month later, Senator Luis Linares from Salta urged the enactment of further regulations, and it was established that coca must only be sold in pharmacies. In the discourse around the establishment of this regulation, Linares painted a dark picture for his peers around the country regarding coca-chewing among sugar workers, while at the same time astutely hiding the existence of this practice among the more influential sectors of society. This new law marked the beginning of a new consumption regime.<sup>61</sup> These were its salient features:

- a) The absence of a total prohibition in Argentina was a sly and tacit recognition of the rights of the new upper-class coca consumers. Senators did not wish to speak openly of these consumers, so, unlike Chile’s total ban in 1926, a new commercial system was essentially established.
- b) Until this time, there had been significant commerce in coca leaves on the part of peasants and indigenous mule drivers who plied their trade in NWA. From this date forward, however, the *modus operandi* would change significantly: between 1924 and 1976, this very profitable trade lay in the hands of a regional pharmaceutical monopoly. This pharmaceutical system would have further consequences, which I will explore ahead.

Some years later, as a result of the new 1931 convention to limit manufacturing and regulate the distribution of drugs, a measure which represented the first step

towards controlling coca leaves by international bodies, the League of Nations requested a report from the Argentine government, which the Buenos Aires authorities passed on to the six provinces of NWA.

Only the province of Jujuy responded, presenting an account in which coca was considered a 'tradition' and not a 'drug addiction'. The person in charge of the report was a young doctor from Jujuy, Carlos Alvarado (1904–1986), later a distinguished health advisor. In the 1850s, a doctor would have fallen into total discredit had he been seen chewing coca. As Mantegazza wrote in 1870:

I myself as a physician – considered, that is, high on the list in the hierarchy of public servants – have not been able to escape the tyranny of prejudice, always having to use coca in the greatest secrecy. God forbid that a patient should see the incriminating wad [*il bolo tradittore*] in my mouth! I would be forever done for in terms of public opinion.<sup>62</sup>

However, by the time Alvarado sent his report in 1931, the etiquette among physicians had changed:

After sending my report, I continued to work on the subject and discussed it with elderly and renowned doctors from Jujuy of that time. . . . Later I went to Salta to work on the subject with other distinguished doctors from that province. . . . All of them agreed with my opinions and all, or nearly all of them, also chewed coca and were never attracted to cocaine – except for doing local anaesthetics.<sup>63</sup>

This change happened as a result of a merging of the following processes, explained briefly:

- a) It can be said that a cultural situation prevailed in which members of the socially dominant class feared being confused with members of the lower classes due to their consuming of coca. That is, a new disposition of ethnic boundaries had developed.
- b) A new way of interpreting the gaucho tradition had an influence. *Gauchesca* literature had been developing since the 19th century and, by the beginning of the 20th century, the elite were ready for a new approach to this heritage, and they initiated a new tradition. In the face of a huge working class of Italian immigrants, this elite re-signified the *gaucho* figure as a counterweight to this immigrant population. The prime example of this change is the attitude of Leopoldo Lugones (1874–1938), the poet and essayist who in 1906 wrote *La guerra gaucha* (*The Gaucho War*). This chronicle glorified the fight of the gaucho militiamen of Salta, headed by General Güemes during the war for independence against the regular Spanish army of Alto Perú. Lugones was from Córdoba but lived in Buenos Aires, but Dávalos' literature shows a local NWA variant of the attitude expressed by Lugones.
- c) We must also take into account the presence of cocaine in the nightlife of the large cities like Buenos Aires, Córdoba, and Rosario. Many tangos illustrate

the vogues of the time, and most of these exemplify the decadence of the ‘easy woman’ or the young ‘Bohemian’ and show that cocaine, like alcohol or gambling, acts to accelerate their downfall. Additionally, they indicate its disruptive modernity in the face of the more traditional *criollo* past. I have found lyrics to least thirty-five tangos alluding to drugs, primarily cocaine. Nearly all of them were written between 1920 and 1930.<sup>64</sup>

- d) One of the most characteristic innovations in Argentine coca-chewing is the use of bicarbonate of soda in the chewed mixture. Instead of the traditional dark tablets of ashes in a starch excipient, Argentine *acullico* was made with bicarbonate of soda, an industrial product found in any chemist’s shop. Having said this, it is nevertheless true that traditional forms of consumption in rural parts of NWA and the western Chaco still exist today, with characteristics that are closer to those of other indigenous Andean traditions, such as the use of *llicta* instead of bicarbonate of soda.<sup>65</sup>
- e) It is important to note a major transformation of the transportation system that took place. Salta and Jujuy had been linked by train with the Bolivian border since 1908. In the decade following that year, a railway line was constructed between the Argentine border and La Paz, the headquarters of the Bolivian government and the crop collection centre for the most productive coca-producing area, the Yungas of La Paz. This line was completed in 1925 and made it possible for coca to travel from La Paz to Salta in just one or two days, as opposed to the thirty-five days it had taken previously. Never before had such good quality coca been delivered to the Salta area. Greatly desired by consumers, this product was prized not simply for its alkaloid content, but for its freshness and the preservation of its natural odour. To this day, consumers in NWA are particularly demanding with regards to these aspects. Once this railway had been finished, the Bolivian duty system had to be reformed, and in 1910 a customs office was built on the border. Many vendors bought houses there in order to do business in the new flourishing trade, and “the most enthusiastic were the coca vendors who came from Potosí and Challapata”.<sup>66</sup>
- f) In the history of food and drugs, the influence of medical professionals is obviously prominent and, as we have seen, Alvarado prepared his report after consulting several of the more prominent physicians of Salta and Jujuy. As “most of them were *coqueros*”,<sup>67</sup> their influence on the public in these regional capitals, then small cities, cannot be understated.

### **Argentine regulation, penalization, and depenalization of coca leaves**

The history of Argentine commercial regulation on coca, initiated in 1924, can be summarized as follows.

#### ***Commercial regulation***

After 1924, only registered pharmacists and druggists were able to import leaves, which were nearly always from Bolivia and rarely from Peru. From 1936–1958,

a series of bills and rulings established a commercial mode of operation in which only pharmacists from Salta, Jujuy, or Tucumán could apply to the import register.

Then, with the goal of ultimately eradicating the chewing habit, a 1958 bill proposed a schedule for the gradual reduction of such imports. Under this bill, imports would decrease at a rate of ten metric tonnes per annum, so that by 1977 they would cease entirely.

In 1961, as a UN member, Argentina signed the UN Office on Drugs and Crime (UNODC) Single Convention on Narcotic Drugs.<sup>68</sup> With this measure, Argentina committed itself to closing the gap between the actual situation, in which coca flowed as usual, and its total eradication. Nevertheless, until 1976, Bolivian exports to Argentina were stable and even showed an upward trend.

### ***Penalization***

After the 1976 military coup, the Argentine federal government enforced a strict ban on coca leaves. This measure met with strong resistance from the upper and middle classes of NWA. There was also communication within the military government between ministers worried about the effects of the prohibition, and with good reason, because profits from the informal market raised the specter of ‘corruption’ within the security forces, as well as disrespect for the principle of obedience. By this time, an informal market had already been established in which, on several occasions, coca prices doubled overnight. With these new prices, coca was suddenly beyond the reach of the peasant farmers of Jujuy and Salta, except for those who lived close to the border, while the middle and upper classes could continue to pay, and their habits of consumption did not change.

### ***Depenalization of consumption***

In 1986, after more than two years of constitutional democracy, a congressional discussion over a new national law on narcotics began, and from the very beginning, the question of the legal status of the coca leaf was part of it. In general, members of Congress who were in favour of its legality stressed the ancestral nature of coca consumption, its benefits in extreme labour conditions, and its digestive qualities. Implicit in this latter argument – something that may not be obvious for those unfamiliar with the region – was the distinction between traditional consumption by indigenous rural workers and the recreational vogue among the urban middle classes, who chewed coca at the dinner table after lavish weekend meals.

These discussions were resumed in around 1988–1989, when the national and international context demanded the enactment of a new law, and the more active members of Congress were determined to ban coca. At this point, a few deputies from NWA (both Radical and Peronist) vigorously challenged the legitimacy of a measure designed to impose a reform of the traditions of the people of that region. In my opinion, speaking out this way, from the point of view of the consumer, was a decisive step. Deputy Enrique Paz from Jujuy was pictured in the Buenos Aires press chewing coca while reiterating the same arguments that had been made in

the Chamber. On a different occasion, Deputy Juan C. Castiella from Salta also put himself in the position of the consumer, something he had not done explicitly in his previous statements.

I wonder how to explain to that northerner who has seen his father and grandfather chewing coca that this practice is now considered a crime. . . . I wish to declare here publicly that this deputy has been chewing coca since he was twenty years old. He graduated from Law School . . . has served as national deputy on two occasions . . . has three beautiful children, is 47 years old, is in great health, and if any scientist from Buenos Aires is capable of detecting any sign of idiocy, this deputy would be grateful that it be pointed out [applause, various deputies surround and congratulate the speaker].<sup>69</sup>

The drug law was ultimately passed in September 1989 and stipulated that the “possession and consumption of coca leaves . . . will not be considered possession or consumption of narcotic drugs”.<sup>70</sup>

If these deputies had not spoken out in support of the use of coca – and therefore, if it had not been for the fact that the habit had taken root in Argentina’s upper classes – then the age-old peasant tradition of consuming coca leaves would have been condemned by the law. The import of leaves still remains in a legal vacuum, however, and it is only through a well-established system of informal commerce that Argentina is supplied.

### *A regime of consumption*

In conclusion, the confluence of various factors that had brought about, by 1920, a transformation in the meaning and use of coca leaves in NWA can be considered the result of the establishment of what was essentially a social regime of consumption, and this regime was based on the interplay of images, social structures, and materiality.

We have seen material factors, such as how a new *acullico* was made with a novel ingredient – bicarbonate of soda – and how the introduction of a new railway system made a quality of coca available that had never previously been seen in the area.

With respect to the interrelationships of images, ideologies, and identities, we must first take into account the situation in which there existed the collective identities of the elite and the middle class in NWA. These were capable of influencing a city as Europeanized as Buenos Aires, but they were also able to mark some cultural boundaries, both in terms of immigrants and of Buenos Aires. Coca leaves established a bridge to cocaine use – in the tango scene of Buenos Aires, for example, but further afield as well, in places like Paris – but was also strongly connected to local tradition. Indeed, it was also the vehicle for a much lighter and safer form of stimulation than cocaine. Another link established by coca consumption was that between the elite and the urban working classes and, even more strongly, the indigenous peasantry, as we have seen in the popular *gauchesca* literature of the

early 20th century. These new cultural norms for coca-chewing renewed attachments to the local homeland. Occurring within a set of different mirrors, such identity transformations have to do with interpretation, and they are flexible.

Structures such as legal and economic systems do not allow such flexibility. The law enacted in 1924, like that of 1989, synthesized a juncture of national and international factors and of economic, judicial, and medical systems. However, in both cases, the local elite of NWA managed to make a distinctive mark.

## Notes

- 1 There are two species of coca (genus *Erythroxylum*), *E. coca* and *E. novogranatensis*, and each of these in turn has two varieties. (Different cultivars exist as well, such as the Chapare and Yungas cultivars of Bolivian *E. coca*.) The alkaloids contained in the four varieties have been used in Andean and Amazonian societies for a long time: recent archaeological research in northern Peru and along the coast of Ecuador (Nanchoc, Las Vegas) has shown that use of coca goes back at least 7,000 years. In this chapter, I refer only to *E. coca*, which is clearly the more widespread species today.
- 2 To show how tobacco was adopted by Europeans, Ortiz proposes substituting the biased term ‘acculturation’ for ‘transculturation’. In Latin America, the latter term and Ortiz’s approach have become much more popular among literary critiques than they have in the socio-anthropological scientific community, in spite of the fact that Malinowski wrote a warm foreword approving Ortiz’s proposals. See Fernando Ortiz, *Contrapunteo cubano del tabaco y el azúcar* (Caracas: Biblioteca Ayacucho, 1978).
- 3 During Alonso de Ojeda’s expedition, when the party was on an island off the coast of Venezuela, the Indians’ consumption of leaves with white powder was recorded.
- 4 Any act of worship using coca or other traditional elements, such as *Spondylus* shells, could be punished with 50–100 lashes of a whip (Constitución 26°, First Episcopal Council of Lima, 1551–52, in Rubén S. J. Vargas Ugarte, *Concilios limenses (1551–1772)* [Lima: Tipografía Peruana, 1951], 26).
- 5 A good anthology of 16th- and 17th-century Spanish chronicles on coca is that of Masuda (Shozo Masuda, “Nueva técnica de investigación etnográfica andina”, in *Contribuciones a los estudios de los Andes Centrales*, edited by Shozo Masuda [Tokyo: Tokyo University Press, 1984]).
- 6 Perhaps ‘stimulants’ is a too broad a term. The range of goods covered by the German word *Genußmittel* (literally, ‘means of pleasure’) encompasses spices, alcohol, and alkaloid vegetable products, and probably more accurately reflects historical developments.
- 7 Jorge Juan and Antonio de Ulloa, *Relacion historica del viage a la America Meridional hecho de orden de S. Magestad para medir algunos grados de meridiano terrestre y venir por ellos en conocimiento de la verdadera figura y magnitud de la tierra, con otras observaciones astronomicas y phisicas* (Madrid: Antonio Marin, 1748), 468–470.
- 8 Jean-Baptiste le Rond D’Alembert, Denis Diderot et al. *Encyclopédie, ou Dictionnaire raisonné des sciences, des arts et des métiers, par une société de gens de lettres* (Paris: Briasson, 1751–1754); Louis de Jaucourt, “Cocoa,” in *ibid.*, vol. 3 (1753), 551.
- 9 Irwin Sherman, *Magic Bullets to Conquer Malaria* (Washington, DC: A.S.M. Press, 2011), 26–27.
- 10 Timothy Plowman, “The Identification of Coca (*Erythroxylum* species): 1860–1910”, *Botanical Journal of the Linnaean Society* 84 (1982): 329–331. The current botanical denomination is ‘*Erythroxylum coca* Lam. 1786’. The name used since Lamarck and Linnaeus, common until recently among botanists, was *Erythroxylon*, which is still used in official United Nations documents on drug enforcement (“Single Convention

- on Narcotic Drugs, 1961”, UNODC 1961). The *Erythroxylum* denomination has prevailed since 1976, when Plowman established its historic precedence (having been published by Browne in 1756, prior to Linnaeus).
- 11 Argentina’s Archivo General de la Nación (AGN); AGN, Just.; Leg. 13–300: 3v.
  - 12 He wrote: “*delinqüente la coca porque delinqüente el indio.*” See José Hipólito Unanue, “Disertación. Sobre el aspecto, cultivo, comercio y virtudes de la famosaplanta del Perú nombrada Coca”, *Mercurio Peruano* 372–378 (July–August 1794): 232–235.
  - 13 Ibid.
  - 14 Unanue, “Disertación”, 220.
  - 15 Antonio de Julián, *La perla de la America. Provincia de Santa Marta* (Madrid: A. de Sancha, 1787), 26.
  - 16 AGN, Bib. Nac.; Leg. 190–1930: 8–8v.
  - 17 Unanue, “Disertación,” 232.
  - 18 So Karch’s general statement that “the Spanish never fully appreciated the export value of coca” is in a certain sense qualifiable (Steven Karch, *A Brief History of Cocaine* [Boca Raton: CRC Press, 2006], 25).
  - 19 Only ‘coca de Levante’, which is a Philippine plant used as fish poison, is described in the article.
  - 20 Alexander von Humboldt, *Personal Narrative of Travels to the Equinoctial Regions of the New Continent during the Years 1799–1804* (London: Longman et al. 1814), vol. 1, 466–467.
  - 21 Benjamin Moseley, “Substitute for Food Among Peruvian Indians”, *The Gentleman’s Magazine & Historical Chronicle* LXXXIV (September 1814): 220–221. I was long intrigued by the identity of the text’s author, who used an alias. His identity has now been established by the University of Virginia Bibliographical Society (<http://bsuva-pubs.org/bsuva/gm2/index.html>). Moseley practiced medicine in Jamaica and wrote a treatise on sugar in 1800.
  - 22 Moseley, “Substitute for Food”, 221.
  - 23 Davy had been on the continent on his Grand Tour since October 1813 and would remain there until early 1815. See Jan Golinski, *The Experimental Self: Humphry Davy and the Making of a Man of Science* (Chicago: University of Chicago Press, 2016).
  - 24 Sertürner had isolated morphine, which he called ‘morpheum’, by 1804. However, diffusion of the news in articles published in 1805 and 1806 was hindered due to the Napoleonic Wars. See Rudolf Schmitz, “Friedrich Wilhelm Sertürner and the Discovery of Morphine”, *Pharmacy in History* 27, no. 2 (1985): 61–74.
  - 25 Schmitz, “Friedrich Wilhelm Sertürner”; Sherman, *Magic Bullets*, 27–28.
  - 26 Sherman, *Magic Bullets*, Chapter 2.
  - 27 Johann Jakob von Tschudi, *Travels in Peru, During the Years 1838–1842, on the Coast, in the Sierra, Across the Cordilleras and the Andes, into the Primeval Forests* (London: Bogue, 1847), 453. It is not my purpose here to show the logical and ethnographical inconsistencies of this account.
  - 28 Hugh A. Weddell, *Voyage dans le Nord de la Bolivie et les régions voisines du Pérou, ou, Visite au district aurifère de Tipuani* (Paris: Bertrand, 1853), 527–530. Unanue’s analysis has been mentioned (Unanue, “Disertación”).
  - 29 Weddell, *Voyage*, 530.
  - 30 Heinrich Wackenroder, “Chemische Prüfung der Coca-Blätter”, *Archiv der Pharmacie* LXXV (1853): 25.
  - 31 J. W. F. Johnston, “On the Properties and Composition of the Coca Leaf”, *Chemical Gazette* XI (1853): 438.
  - 32 Commented in W. Golden Mortimer, *Peru History of Coca. ‘The Divine Plant’ of the Incas* (New York: Vail & Company, 1901), 315.
  - 33 F. Gaedcke, *Ueber das erythroxylin dargestellt aus den Blättern des in Süd- Amerika kultivirten Strauches Erythroxylon Coca Lam* (Berlin: W. Moeser & Kuhn, 1854), 9. The article, published the following year, contains the misprint “2 ounces”, an amount

- that could in no way have yielded 3 grams of alkaloids (F. Gaedcke, “Ueber das Erythroxylin, dargestellt aus den Blättern des in Südamerika cultivirten Strauches Erythroxyylon Coca Lam”, *Archiv der Pharmazie* CCXXXII, B. 2 [1855]: 149).
- 34 James E. Pilcher, “Cocaine as an Anaesthetic; Its Status at the Close of the First Year of Its Use”, *Annals of Surgery* 3 (January–June 1886): 51–66; Angelo Mariani, *La coca et ses applications thérapeutiques* (Paris: Legrosnier & Babe, 1895).
  - 35 Pizzi published his findings in the Bolivian publication *Gaceta Oficial* (La Paz) under the title ‘Cocaína: nueva base orgánico vegetal’ (‘Cocaine: A New, Organic, Vegetable Base’) on June 30, 1858 (Javier Mendoza Pizarro, “La verdadera historia del descubrimiento de la cocaine”, *Unitas* 11 (September 1993).
  - 36 Albert Niemann, “Ueber eine Mittheilung neue organische Base in den Cocablättern”, *Archiv der Pharmacie* CLIII, no. 2, pt. 1 (1860): 150. In 1858, Tschudi travelled from NWA to Lima by way of Atacama, Arica, and Peruvian Titicaca. He does not mention having passed through La Paz, where Pizzi lived (Johann Jakob von Tschudi, “Kurze Mittheilungen über meine jüngstvollendete Reise durch Süd-Amerika”, *Sitzungsberichte der kaiserliche Akademie der Wissenschaften, Mathematisch-Naturwissenschaftliche Classe* 34, no. 5 [1859]: 359–360).
  - 37 Antonio Aimi, “Mantegazza e la coca. Una ricerca di rivalutare”, in *Paolo Mantegazza: medico, antropologo, viaggiatore*, edited by Cosimo Chiarelli and Walter Pasini (Florence: Florence University Press, 2002), 161–174.
  - 38 “Although the wonderful stimulant properties of the coca had for more than half a century been known to European travellers, the leaves of the plant . . . have hitherto only reached Europe in very small quantities, having in fact been carried home simply as curiosities” (Karl Scherzer, *Narrative of the Circumnavigation of the Globe by the Austrian Frigate Novara. Undertaken by Order of the Imperial Government, in the Years 1857, 1858 & 1859*, vol. III [London: Saunders, 1863], 402–403). He also supplied Wöhler with another 30-pound package, sent from Lima by two German merchants.
  - 39 Niemann, “Ueber eine Mittheilung neue.”
  - 40 Karch, *A Brief History of Cocaine*, Chapters 8, 9.
  - 41 The French Bibliothèque Nationale houses at least thirty-seven pamphlets and books on coca, published from 1861–1914 (six texts date from 1861–1866, seven from 1866–1870, and another six from 1901–1905). Most of these are pharmacists’ advertisements.
  - 42 I wish to thank the collector Chass Vermeulen for sharing an unpublished video that shows hundreds of pieces of merchandise made from coca. These are mostly Mariani’s, but there are others from different late-19th-century French, American, and Italian producers (Chass Vermeulen Windsant, *Coca Mariani et la Belle Époque*, DVD, 49 [Amsterdam, 2012]).
  - 43 Thus read the first Coca-Cola advertisement; *Atlanta Journal*, May 29, 1886.
  - 44 Mendoza Pizarro, “La verdadera historia del descubrimiento de la cocaine.”
  - 45 P. H. Fawcett, *Exploration Fawcett* (New York: Overland, 2010 [1953]), Chapter XV.
  - 46 David Musto, “Patterns in US Drug Abuse and Response”, in *Drug Policy in the Americas*, edited by P. H. Smith (Boulder: Westview, 1992), 29–44.
  - 47 Gootenberg synthesizes how Coca-Cola faced this legal predicament. See Paul Gootenberg, *Andean Cocaine: The Making of a Global Drug* (Chapel Hill: University of North Carolina Press, 2008), Chapter 5.
  - 48 Examples of this range from the 16th to the 18th centuries and can be found in Ricardo Abduca and Pien Metaal, *Working Towards a Legal Coca Market: The Case of Coca Leaf Chewing in Argentina* (Amsterdam: TNI, 2013), 2–3.
  - 49 Tschudi, *Travels in Peru*, 450.
  - 50 Paolo Mantegazza, *Rio de la Plata e Tenerife. Viaggi e studi*, 2nd edition (Milan: Brigola, 1870), 372.
  - 51 V. Martin de Moussy, *Description géographique et statistique de la Confédération Argentine* (Paris: Didot Frères, 1864), 145.
  - 52 The term *porteño* refers to people from Buenos Aires (the port city).

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- 53 The federal government had the constitutional power to depose an unruly governor and put in place an *interventor*, or acting governor.
- 54 Bernardo González Arrili, “Cómo degenera la raza. La coca”, *Nosotros* XIV, no. 139 (December 1920).
- 55 Gregorio Bermann, *Toxicomanías* (Buenos Aires: El Ateneo, 1926), 49–50.
- 56 The fictional name Olañeta is a play on words of the last name of the real-life Governor Castellanos; it is also the name of the last Spanish general in the war of independence in Alto Perú.
- 57 Juan Carlos Dávalos, *El vientoblanco* (Buenos Aires: Cooperativa Buenos Aires, 1922). The shepherdess reacts to Silveira’s harassment by adeptly tripping him and causing him to stumble in the mud.
- 58 However, ‘Cocó’ was not an uncommon male or female nickname, and was not necessarily related to cocaine.
- 59 These three stories appear in Juan Carlos Dávalos, *Salta* (Buenos Aires: Cooperativa Buenos Aires, 1918).
- 60 Argentina, *Cámara de Senadores, Diario de Sesiones* (Buenos Aires: Congreso de la Nación, 1924).
- 61 *Ibid.*
- 62 Mantegazza, *Rio de la Plata e Tenerife*, 372.
- 63 Carlos Alvarado, “Prohibir la coca es ‘ingrato, injusto y antisocial’ afirma el Doctor Carlos Alvarado”, *El Tribuno*, April 4, 1977.
- 64 Some quotations of these lyrics can be found in Abduca and Metaal, *Working Towards a Legal Coca Market*, 3.
- 65 Another short story, by Fausto Burgos, seems to portray the opposition of bicarbonate of soda and *licita* (Fausto Burgos, “Valle de Lerma. Paisajes y figuras de Salta” [San Rafael de Mendoza: Butti, 1930]).
- 66 Anonymous, *La Aduana Nacional del Sud y el nuevo pueblo de Villazón* (Villazón: Imprenta La Verdad, 1923). Both places were important locales for the collection of coca.
- 67 Alvarado, “Prohibir la coca”; Abduca and Metaal, *Working Towards a Legal Coca Market*.
- 68 For more historical and legal details, see Abduca and Metaal, *Working Towards a Legal Coca Market*.
- 69 Argentina, *Cámara de Diputados. Diario de Sesiones* (Buenos Aires, Congreso de la Nación, 1989), 65th Session, 7830–7833.
- 70 Argentina, Régimen Penal de Estupefacientes (Ley 23.737), 1989. [www.saij.gov.ar/](http://www.saij.gov.ar/).

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