Chapter 1
Pre-Hague History of Opiates Control

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Abstract Before the implementation of an international policy regime with the aim of restricting the trade in opiates beginning in 1912, the free availability of opiates in domestic and international trade was the norm. Opiates were not unregulated, however. Another set of policies ruled the day, formed by other preconceptions of the dangers of drugs and by a high degree of consciousness of the limits of state power. Examining both these preconceptions and limits from a comparative perspective, this chapter describes how a discourse featuring opium as a poison accompanied regulations that took great care not to exacerbate the effects of a dual market in opium but rather to regulate "on the cheap." Assessed both by its own set of goals in a historical context much different from ours and anachronistically in light of latter-day prohibition regulations, this chapter suggests that maybe the prior approach of regulating opium as a poison should not be deemed a failure.

Introduction

The signing of the Hague Convention on Opium in 1912 was the first step on the road to a global narcotics policy of prohibition. Behind this unprecedented effort to coordinate trade policy internationally was a strong new political alliance concerning drug use, combining otherwise rather different discourses—military needs, medicalization of social problems, and moral idealism—into a strong medico-moral-military discourse that would come to dominate drug policy during the twentieth century. Beginning in The Hague, a new problem with opium came to the fore—the very availability of drugs.

As this chapter shows, the availability of opium until this time had not been seen primarily as a problem but rather as a precondition for public health. The Hague Convention was a momentous step in a new regulatory direction. But it was neither

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the first effort to regulate opium internationally nor a regulation of a previously nationally unregulated or free opium market during the nineteenth century.[1] The opium problem was already being regulated, nationally and through international convention, but the older regulation addressed a different problem with opium. This chapter examines what those alternative problems were and how they were regulated.

There are two lines of questioning to follow with these regulations: In what ways did this former regulatory regime tie into and precondition the later prohibitionist regime? How can these regulations be assessed in terms of their stated goals and results? This history of the nineteenth century will describe not only a different kind of regulation, but will also present a very different image of opium itself.

Using, Abusing, Amusing Opium

A Historical Background of the Culture and Trade in Opium Before 1912

It is not surprising that opium regulations predate The Hague, not least because opium itself has a very long history. The opium poppy, *Papaver somniferum*, from which the alkaloid-containing juice is collected to produce raw opium, has been used for 5000 years.[2] It was regulated through cultural and informal practices long before the modern nation-state began to cast its judicial gaze upon the plant's many profound effects.[3]

During early modern times, opium was part of a worldwide culture of popular medicine and a culture of smoking in East Asia. This culture of smoking was as sophisticated as that of wine in Europe: color, taste, consistence, and potency were elements of the pricing and appreciation of the drug among consumers in many classes (Haugne 2009, p. 42). It was this mode of use, aimed at intoxicating effects, that was the target of the first attempts at prohibition in 1729 in China, and again in the Shanghai conference of 1909, the precursor to the Hague Convention of 1912.

[1] The fact that the International Opium Convention of 1912 was the first binding international regulation on the narcotics trade to focus on the problematization of the recreational effects of narcotics is often conflated with the notion that this problem is the foremost problem with opium and thus the only one to be internationally regulated. An example of this understanding of the Hague Convention can be found in Melissa Bull's very comprehensive and clear history of opium regulation as a narcotic. "The Hague Opium Convention of 1912 was the first international convention in which an attempt was made to regulate opium and related substances" (Bull 2008, p. 64).

[2] The early history of opium is described in countless books on the history of drugs, combining various ancient sources to paint a quite colorful picture, as in Davenport-Hines 2001, pp. 7–14. Archeological research placing the earliest human use of opium in the Alps during the late Paleolithic is explored in Gerritsen 2000, pp. 41–48.

[3] These informal types of regulation are mostly overlooked in this chapter in favor of discussing legal opium regulations before 1912.

During "the long nineteenth century," prohibition to combat intoxication was clearly an issue subject to fiscal, not moral, consideration by the states.[4] The interest of the most powerful states of the day lay rather in the *furthering* of trade in intoxicants, since their fast-growing bureaucracies were more or less drug-dependent. In Europe, this meant taxing alcohol;[5] in Asia, it meant taxing the opium trade.[6]

Opium was not more freely traded in Asia than in Europe during this time, but only in Asia did its use as an intoxicant come to the fore.[7] Generally, this whole century can be characterized by free availability, low prices, and a manifold of popular uses for psychoactive drugs, first among them the opiates.

The popular types of opiates in Europe during the era before 1912 can be roughly placed in two broad categories: first, tinctures and pills where opium was the main but often not the only ingredient and, second, pure alkaloids, often in a chloral solution to be administered by injection (from 1853 on). The first category appealed to users of lesser means, lacking access to (or prescriptions from) doctors; the latter appealed to users in the middle class, frequently women who were prescribed morphine for various ailments historically considered specific to women. In both types of use, the line between palliative therapeutic effect and pleasure was thin or irrel-

[4] "The long nineteenth century" is the focus in this chapter, spanning the years from 1789 to 1914. The phrase was coined by Eric Hobsbawm in his three-volume epic about this period, starting with *The Age of Revolution: Europe 1789–1848*, New York, 1962. Since this framing better captures the homogeneities of an era than the numerological chronology of centuries, it has been widely adopted. The same is very true for the history of drug regulation: the Hague Convention of 1912 is a better date to signify the beginning of global drug prohibition than the year 1900.

[5] Gerritsen shows how a third of the fiscal base in Great Britain, the United States, and the Netherlands was alcohol tax revenue until the Great War: "… excise on alcohol accounted for a large proportion of total state revenue – varying from 25% to little over 40% – throughout the nineteenth century" (Gerritsen 2000, p. 244).

The same proportion of the fiscal base is derived from alcohol taxation in Sweden, at least since the last quarter of the nineteenth century (Gårestad 1987, chapter 3).

Other drug taxation was of less but not insignificant value: "Colonial empires were built on the foundation of drug trades. So were many domestic bureaucracies and armies. Tariffs on tea, sugar, and tobacco accounted for a significant part of the revenue of numerous seventeenth- and eighteenth-century states" (Pommeranz and Topik 1999, p. 78).

[6] The importance of the opium trade for the European empires in Asia is most poignantly captured thus: "Opium came to be an essential element, indeed the cash cow, in the finances of every Asian state structure during the nineteenth century and even during the first part of the twentieth" (Trocki 1999, p. 9).

[7] It is beyond the scope of this chapter to explain this segmentation of the global drug market during the early modern era, and this chapter only discusses regulatory developments in Europe and the United States. Suffice it to say that many factors probably were at play (and all are thoroughly discussed in much of the referenced literature for this chapter): the unique combination of smoking opium along with tobacco that developed in Southeast Asia in the seventeenth century; the strong culture of alcohol in the West acting as a competing, much cheaper intoxicant; the closeness of China and India to the best opium production areas (besides Turkey, these were Persia, India, and China itself); and finally, the very structure of trade relations in the emerging world system, making exporting opium to China a prime imperative for European traders in Asia and the East India Company in particular.

evant. What was pleasurable with opium was also part of what was deemed the valuable medicinal effect. What looks like a fast-growing market for medicinal opiates during this long century must thus be understood to contain a great deal of recreational use as well.

Recreational or not, the market did expand.[8] In Britain, the decades before 1870 have been described as the era of the "Great Victorian Drug Bazaar" (Parssinen 1983, pp. 1–58). During this expansion, a more problematic view of opium was formed.

As these problems became a focus of public debate, doctors and pharmacists articulated the regulatory answers around their own agenda of professionalization. Beginning in 1870, an internationally quite coherent regulatory regime of opium was in place throughout Europe, ending the most bazaar-like part of the long nineteenth century. How pharmacists came to insert themselves in the early problematizing discourse is the first step in understanding opium regulation before 1912, so this is the first subject of inquiry in this chapter.

Opium Regulated as a Poison

Of the two categories of use sketched above, it was the diverse and growing use of opium tinctures and pills in the lower classes that was seen as a problem to be regulated. Injection of and addiction to morphine did not become a problem of great concern for the judiciary until more marginal groups in society took up this type of use around the First World War.[9] Several different problems converged with the popular use of opium in tinctures and pills.

In industrializing Britain, mothers in factory towns had to work outside the home, leaving their smallest children with nannies. Their use of opium "pacifiers" was the primary concern in the early public health campaigns, even though this use

[8] The rise in domestic opium consumption has been calculated from Britain's parliamentary papers as doubling in absolute numbers between the 1820s and the 1840s and increasing by 50% again in the two decades thereafter (Berridge and Griffith 1999, table 2, p. 294).

For the United States, David Courtwright estimates that imports rose especially quickly beginning in the 1840s (though the statistical records are somewhat patchy). In a country with a fast-growing population, the per capita import may have tripled in less than 20 years. The rise continued during the last quarter century, for both smokable opium and medicinal opiates (Courtwright 2001, p. 15–34).

The British export of opium to China took off during the same period, beginning in the mid-1820s and growing until 1890 (Trocki 1999, table 5.1, p. 93, and table 6.1, p. 111).

When one notes the gradual stagnation of the British opium trade to China in the late 1800s, it is important to note the very strong Chinese production, supplying about 80% of the domestic market at that time (Newman 1995, pp. 765–794).

[9] Until then, it was thought to be best handled through medical self-regulation, as was the case with all the new pathologies of addiction, from the first medical diagnosis of alcoholism by Swedish physician Magnus Huss in the 1850s through the discovery of morphinism by German doctor Levinstein in the 1870s and beyond.

and the accompanying fatal poisonings and stunted growth among the children were no more concentrated among these nannies than among the stay-at-home mothers of the more well-to-do (Berridge and Griffith 1999, pp. 97–105).

The recreational use of laudanum and opium pills to supplement alcohol in the search for inebriation on weekends also frequently had fatal consequences, both drugs being respiratory depressants with clear poly-pharmaceutical effects. This same danger was present in cases of self-medication with alcohol-based tinctures of opiates. Suicides and the occasional murders were also part of the picture that emerged in the first half of the nineteenth century.

The canvas for this picture of opium as a problem was the new state-sponsored publication of national statistics. Through this modern means of conjuring up the population of a state as a national body, a new regulatory regime formed all over Europe. Opium as a poison played a decisive part in this system.[10]

One regulatory solution to these problems was restricting the sale of all opiates to people with a doctor's prescription (today's accepted solution). This regulation benefitted the expanding professionalization of physicians and was one that they favored. But, in the totality of regulations implemented in several European countries, this form of regulation did not win the day.[11] It was often seen as too intrusive, and, by increasing prices, it made opiates unaffordable for ordinary users. Instead, another part of the picture gleaned from health statistics became central to regulatory solutions, and a profession in a sometimes bitter struggle with medical doctors became its champion. The prioritized problem: the opaque and inconsistent strength of doses of opium in the market. The solution: a regulatory mishmash centered mostly on the well-educated, moral, and professional pharmacist. The goal: to keep opium available to the people.

The Discourse of Opium as a Poison

Through a narrative including phrases such as *impurities, mistakes, incoherent recipes, non-professional*, and *sloppy producers and merchants*, a discourse formed that made the availability of opium in pharmacies a precondition of its safety, not the core of its problem. I call this understanding of opium propagated by pharmacists during the late 1800s the "discourse of poison" (Berg 2016).

This discourse aimed its attack at the state of the market for opiates as a whole, keeping any critique of the consumers peripheral.

The sale of opiates during the bazaar years was conducted by pharmacists and all kinds of vendors without any certified knowledge. In Britain, the sellers numbered "… between 16,000 and 26,000, although even this number probably did not include

[10] "Opium statistics were used as public health propaganda" (Berridge and Griffith 1999, p. 78).

[11] In the discussion below, I present an overview of the regulations, addressing the differences between countries in the parts of this chapter examining the effects of regulations and in the discussion.

small 'general' stores dealing in all manner of goods as well as opiates" (Berridge and Griffith 1999, p. 25). The situation seems to have been similar, although smaller, in the United States and the Netherlands.[12]

Opiate sales, whether at pharmacies or at the grocer's, didn't feature standardized containers with consistent labeling. Instead, in Britain and Sweden, customers brought bottles and boxes with them as containers for their purchased opium, increasing the risk of dosing errors at home.[13] Nor were the recipes for the different opium tinctures consistent, making the habitual dosage for one tincture inappropriate for the wares of a different producer.

Furthermore, the alkaloid content of opium sold in this rather unregulated market could vary quite a lot, for more than one reason. At any point in the long commodity chain, the drug could be adulterated to increase profit margins by weight, or the producer of the tincture could fail to probe and standardize the alkaloid content due to economic incentives or lack of know-how.[14]

All these problems in the opiate market were intricately presented in the discourse of opium as a poison to encourage regulations that would steer the entire trade to the pharmacies.

Through the centrality of acute poisoning in the discourse, "poison" was articulated as the chief semiotic element in any discourse on the opium problem. This, in turn, made the knowledge of poison—of *pharmakon*—essential to regulating, managing, and selling opium.[15] This knowledge is, by birthright or just by etymology, a prerogative of the pharmacist. Thus, by centering the discourse on poison, an autonomous field of expertise was articulated for the pharmacists.

In this discourse, the dangers of having opium on the market didn't lie in its availability, but in its handling by inexpert traders. These traders were primarily responsible for adulteration and the frequent variations in the drug. Only privileges for pharmacists, enabling them to provide safe, clean doses in as accessible a way as possible, could solve this problem.

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[12] "All in all, the consumption of opiates, in both Britain and the United States, was a conspicuous phenomenon in the first half of the nineteenth century. And the situation in the Netherlands is unlikely to have been very different. This widespread use of opiates was not accompanied by any form of statutory regulation" (Gerritsen 2000, p. 123).

[13] This "… method of sale was almost universal" (Berridge and Griffith 1999, p. 31) and was also motivated by the extra cost to the customer of special pharmacy glass bottles (Berg 2016, chapter 5).

[14] "There was indeed no guarantee that the shopkeeper would have any knowledge of poisons at all, even though some obviously learnt by experience" (Berridge and Griffith 1999, p. 27).

[15] *Pharmakon* in ancient Greek meant drug, poison, or medicine. (It is, of course, the etymological root of the word "pharmacist.") This varied meaning of the word for medicinal drugs is often only mentioned as a curiosity in the mainstream literature on pharmacists. For example, compare the description by the pharmacy historians Kremers and Urdang in their standard *History of Pharmacy* (1951, p. 19) to the elaborate deconstruction of the term by the non-pharmacist Derrida in his "La Pharmacie de Platon" in *La Dissémination* (1972, pp. 69–198). But it is meaningful: the pharmacies were general stores for poisons until the twentieth century, selling not only medicines but also agricultural pesticides and herbicides and poisonous ingredients for industrial use.

Unlike many doctors, the pharmacists emphasized the customer's own *sensus communis* as a valid and adequate form of knowledge about opium. The problem was not the customer's unawareness but the market failures making it difficult for them to learn about safe use.

In this discourse, the customer's knowledge included the uses for the drug, but not the formula of the recipe, which was exclusive to the pharmacists. The proposal to mandate a written recipe from a physician when buying opiates was nevertheless felt to be unnecessary: the knowledge of the recipe was primarily pharmaceutical. As long as the recipe was prepared by someone with great pharmaceutical knowledge, no doctor had to intervene as a costly middleman. This part of the discourse did not always carry through all the way. Through prescriptions, doctors generally did gain a monopoly on the more powerful opiates like chloral solutions of pure morphine. But the regulations put in place in the middle of the nineteenth century largely followed the direction set by the discourse of poison, making the pharmacy central to control and safety until the Hague Convention of 1912.

The Sum of Its Parts

During the period of poison regulations, national regimens were substituted for the varied earlier regulations by municipalities, cities, and regions. This happened at rather different times depending on the nation-state. Also, the types of poison and the pharmacy regulations enacted on the national level varied quite a bit between countries. These differences are addressed below, but first I outline a coherent, Europe-wide, or broader regime of poison regulations, dating from about 1850 to 1912.

The constituent parts of the regime were (1) regulations giving physicians and pharmacists the exclusive right to handle various opiates as poisonous medicines. These professions in turn became subject to strict rules on how to (2) store, (3) label, (4) prepare, and (5) register the sale of these poisons as medicines.

It is fascinating that the sale and handling of poisons remained very lightly regulated by the state until the middle of the nineteenth century. The story of stronger poison regulations after this time is revealing. Opium, in essence, became regulated the way arsenic was, not the other way around. This tells the tale of a quickly industrializing world; it is with the new abilities to produce and transport large quantities of chemicals that the need and the capacity for national poison regulation arose.[16]

[16] Explaining *why* opium regulations change is not the aim of this chapter. Having said that, there is a case to be made that the process of industrialization contains much of the story of how opium became regulated as a poison freely available at the pharmacy—and how the pharmacy lost this role. As the local pharmacist stopped producing drugs and was demoted to a mere distributor of industrial pharmaceuticals around the turn of the twentieth century, this destabilized the underpinnings of the pharmacists' discourse of opium as a poison, at the same time that the new discourse of opium as a narcotic, with prohibitionist regulations as a solution, was getting stronger. Destabilization of one discourse allows another to expand, to explain new problems, and to exert power.

Giving the pharmacies a monopoly on the sale of arsenic created a central location in this newly mobile world where they could control the substance and regulate the different aspects of its use. This, in turn, strengthened the impetus to concentrate more of the commodity chain with the pharmacist, creating valuable agglomeration effects. By centralizing the handling of poison in pharmacies, the state gained a valuable point of departure for all kinds of demands on the regulations written for many types of poison. Most of the different regulations that were initially directed against arsenic were gradually pressed into service to regulate opiates. First among these were the stricter laws on storing and labeling opium.

As described above, accidental poisonings were presented as the main problem to be regulated. The first objective for the regulating authorities was often to keep opiates apart from other substances, in stores as well as in homes. Special cabinets in which the opiates could be stored under lock and key were thus required, guaranteed safe by the pharmacist's special ability to identify, isolate, and purify each poison.

Opiates were placed in those cabinets along with all the other poisons, making the accidental substitution of opium for arsenic a new danger. Regulations demanding specific labeling of all containers of poisons thus complemented the rules on separate storage for poisons as such. This special labeling, on the containers in which opiates were sold as well as on those in which they were stored in the pharmacist's cabinet, was not only used to designate the name of the substance but soon also to distinguish different classes of poisons. The more poisonous drugs regulated under Schedule 1, for example, could have a distinctive label corresponding to a specific shelf in the cabinet.[17] The system could become quite elaborate as pharmaceutical knowledge of different poisons became more detailed, making possible ever more distinct regulations.[18]

A quite different sort of opium regulation was the gradual homogenization of the formulas for preparing the opium tinctures and pills sold in the pharmacies. As mentioned above, different producers of remedies containing opium could use the same names for tinctures with quite different opium contents, and the opium being used could have widely varying alkaloid contents because of adulteration or natural variations in the drug.

Ever since medieval times, physicians have written collections of recipes, sometimes including detailed descriptions of the drugs and their properties, called pharmacopoeias. The professional evolution of pharmacists involved using these books

[17] This system of a regulatory taxonomy of poisons based on their different degrees of toxicity was certainly flexible. Authorities could easily accommodate new scientific developments or changes in the socioeconomic context for using different poisons, simply by reclassifying it in a new schedule instead of creating specific new regulations. The classification of drugs under different schedules could easily be transferred to other regulatory frameworks for drugs, such as the perceived dangers of addiction or the anti-social properties of different drugs. Indeed, this seems to be what happened.

[18] In Sweden, the different regulatory classes of poisons were labeled with different colors (in addition to using the alchemical sign for mercury to designate toxicity alone), making a poison cabinet very similar to a poisonous snake in its striking coloration.

to make their opiates safe from adulteration and naturally occurring variations of alkaloids, by homogenizing the ingredients and guaranteeing consistency from one batch to the next.

The formulas the pharmacists used were collected in different pharmacopoeias. These books could be very old, though not as old as some of the recipes in them, which could be ancient. The books could come from all over Europe, or they could be of peculiar local origin. The ingredients in a similarly named remedy could vary, as could the doses of opium. As national markets were forged by steel, steam, and nationally standardized time, this became a problem in the discourse of opium as a poison: as remedies were sold in more distant locations and as consumers traveled, accidental poisonings due to confusion about dosage became a possibility; the consumer's knowledgeable use became more difficult. This threatened the articulation of free availability of opiates through the pharmacy. After regulations on labeling and storing poison, the next regulatory route was usually the harmonization of the formulas for opiates in national pharmacopoeias, turning them into legislative regulations as well as textbooks and collections of recipes specifying the doses for poisons such as opium in each tincture.

As the medical profession laboriously constructed national pharmacopoeias to address the new reality of the national market, an international market developed. In 1870, the integration of global markets became frantic, as if the booming international cocaine trade at this time not only epitomized the era but also drove it (Spillane 2000; Pommeranz and Topik 1999). Developing alongside the new industries of steel and motors (electrical and combustion engines), this second industrial revolution was primarily the result of the new chemical-pharmaceutical industry. To apply the discourse of poison to the new wares coming out of Merck in Darmstadt and Bayer in Barmen, an international agreement had to be made to harmonize the different national pharmacopoeias.

The first international pharmaceutical congress was held in Brunswick in 1865 to discuss these emerging trends, among other things (Kremers and Urdang 1951, pp. 170–172). Despite its early beginning and nine subsequent congresses, the pharmacists reached no agreement on this before the national governments sent their medical authorities to Brussels in 1902 and agreed to create the first international standards for poison regulation, which were signed in Paris in 1906. The control of opiates as poison was a major driver of the standards.[19] This control of the knowledge of the recipe thus slipped from the hands of the nationally self-regulating pharmacists to the nations, acting on a global stage. The twentieth century had indeed commenced.

[19] In an authoritative study of the emergence of the international system of control of chemicals in general, a "Chronological list of events selected from the text because of their special importance for the development of chemicals control" introduces the text. Opiates were the subject of *four* of the first five (Lönngren 1992, pp. 3–16). This centrality of opiates is not discussed in the text as such, just as the opiates and their ambiguous role as poisonous and pleasurable non-medical commodities are mostly disregarded in the literature on the history of pharmacy. As already mentioned, the international regulation of opiates as poisons before the Hague Convention is also not addressed in the general history of drugs.

The last part of the regulatory framework to be implemented was usually the registry of sales in dedicated accounting books. In these registers, a radically different type of knowledge of poison was required. These books contained the names of the customers, the amounts purchased, the location, and sometimes the intended use for the substance.

Tracking and regulating the name/quantity/location/intent was aimed at controlling not the quality of the poison at the point of sale but its quantitative circulation through society. Neither pharmacists nor physicians had any advantage in this type of regulation: knowing these things was the specialty of other professions, such as accountants, police officers, and customs officials.

This type of registry-regulation first brought prohibitionist regulations into the picture: the Hague Convention on Opium of 1912 started a new era in the history of drugs by regulating the flow of trade internationally and by registering name/quantity/location/intent. If the problem with opium is articulated not as a problem of lethal poisoning but as issues related to the quantities used (habitual use seen as a problem of addiction, rising use and imports seen as an epidemic that is an external threat to the body politic), then regulations that focus on the drug's availability become prioritized. This sort of regulation was adopted from the last addendum to the regulations of opium as a poison, the registry-regulation first implemented to control arsenic.

Measuring Effects, Comparing Differences

In what way do the failings of the opium regulations prior to 1912 influence later developments? Can the regulation of opium as a poison be said to have been effective in any certain way? In short, how do we measure the regulations that—along with the *belle époque*—were left behind as the world marched off to war?

As mentioned, the system of poison regulations is a construct made from very different parts. The type and the pace of regulations varied among countries. A first way to approach our questions is by picking apart this all-too-neat construct. The v below (Table 1.1) contains rough estimates of these differences, along with some other qualitative measures for each country. One pattern is discernible when it comes to the regulation of poisons: France, Sweden, and the Netherlands form one group and the Anglo-Saxon countries form the other.

The former group introduced stronger and earlier national poison regulations, beginning in the late seventeenth century, having established a monopoly on the trade in poisons for the pharmacies in the first half of the nineteenth century, including all or most of the opiates.[20]

[20]The first regulations on the trade in opium as a poison were enacted in France in 1680. In 1845, pharmacies were given a monopoly on the retail sale of opiates, and they and the wholesalers who served them were subject to most of the poison regulations mentioned above, as well as the extra regulation of only being allowed to sell opiates to individuals with a written prescription. The

Table 1.1 Regulatory aspects 1850–1900

	USA	Great Britain	The Netherlands	France	Sweden
Strong regulations of opium as a poison and as a monopoly for the pharmacy[a]	No	No	Yes	Yes	Yes
Strong problematization of acute poisonings	No	Quite	Yes[b]	Yes	Quite
High opiate consumption per capita	Yes	Yes	Yes[b]	No	No
Strong problematization of recreational use	Yes	Quite	No	Yes	No
Clear signs of dual markets	Yes	Yes	Yes[b]	Yes	No

[a]Including labeling, storage, preparation, and accounting, as described above
[b]Uncertain estimation

In the United Kingdom, similar pharmaceutical and poison regulations were indeed implemented from 1851 to 1868, but due to the placement of opiates in Schedule 2 until their rescheduling in 1908, only the labeling rules affected their sale (Berridge and Griffith 1999, p. 116, p. 120; Padwa 2012, p. 92). In the United States, no federal legislation was enacted to regulate the sale of opiates as poison until the 1906 Pure Food and Drug Act.[21] It seems we have a tale of two types of opium regulations.

Prohibition Unexplained

This division of poison regulations into two groups has only limited explanatory power with respect to eventual prohibition. These groupings of poison regulations do not hold firm, nor can much be inferred from the types of poison regulations to explain the later adherence to the new narcotics policy in the Hague Convention.

French regulations were clearly the most stringent (Retaillaud-Bajac 2009, p. 30; Padwa 2012, pp. 109–110).

The Dutch regulations also were enacted early, but in a reverse order from those in other countries. In 1818, stringent poison regulations on storage, labeling, and accounting were implemented in pharmacies, but it was not until 1865 that the pharmacies were also given a monopoly on the trade in opiates (Gerritsen 2000, pp. 130–131).

In Sweden, pharmacies were given their monopoly on the opium trade in 1688 and on poisons in general in 1756 (in the major cities) and 1786 (nationally). The regulation of poisons was strengthened in 1876 to include all the parts mentioned above, but some popular opium tinctures were omitted, leaving opiates strictly regulated as pharmaceuticals but not strongly regulated as poisons (Berg 2016, chapter 2).

[21] The US case is, as always, complicated by the fact that the federal government, especially at that time, did not interfere much in state politics, and some states imposed more stringent regulations on opium as a poison as early as 1895 (Courtwright 2001, pp. 52–53; Gerritsen 2000, pp. 134–135).

Both France and Sweden had old and rather strong poison regulations with a centrality initially given to their respective pharmacies; France and Sweden had significantly lower use per capita than the United Kingdom.[22] But France problematized the dual market connected to addiction and took up prohibitionist policies early on, framed in what Howard Padwa calls an "anti-narcotic nationalism" (Padwa 2012, chapter 2). Sweden didn't have any significant opium problem (no disruptive dual market, no addiction, no acute poisonings strongly problematized) and rather unwillingly signed the Hague Convention in 1923.

Both the United Kingdom and the United States had high levels of use per capita, lax poison regulations, and a big patent medicine market. But unlike France and the United States, there was not as strong a problematization of recreational opiate use in the United Kingdom, and the country resisted the prohibitionist agenda internationally.[23] The United States, of course, was famously the victim of the "American disease" of heroin addiction, and the United States was comparable to France in its problematization of recreational opiate use and has been the driving force behind prohibitionist regulations internationally from 1909 into the twenty-first century.[24]

The types of poison regulations in place do not seem to have strongly influenced how prohibitionist regulations were adopted. Clearly, other historically specific factors are more important: the First World War; country-specific conceptions of class, race, and empire; geopolitical interests; and shifts in power are arguably more central.[25] It seems that the varying efficacy of different domestic regulations in tackling the fatal dangers of opiates was clearly of secondary importance in the formative process leading to the international prohibitionist regime at large.[26]

This does not exclude, however, other interesting questions about the effects of poison-control regulations and how they handled the potential emergence of a dual market.

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[22] Padwa estimated from import figures that consumption of opium was 4.3 times higher in the United Kingdom than in France at the beginning of the century (Padwa 2012, p. 67). Judging from the same type of source, Swedish opium use at the same time was smaller still, 10 or 15 times less than British use (Compare Berridge and Griffith 1999, figure 3, p. 35 to Berg 2016, chart 2, p. 82.).

[23] The United Kingdom had a quick "in-and-out" domestic prohibitionist regime during and just after the war, after which the famously liberal regime of the Rolleston era took center stage.

[24] "American disease" is the term coined by Musto to capture the specifically American drug problem taking hold around the turn of the twentieth century (Musto 1973).

[25] The argument for these factors being most central to the formation of the new prohibitionist regime is also well presented in Jay 2000 and Trebach 1982.

[26] Actual fatalities from popular use of pharmaceutical opiates didn't in the least inspire the new prohibitionst regime, and thus, neither did they motivate the regulations aimed at this problem. More surprisingly, perhaps, neither did addiction to morphine or heroin at first; opium smoking did. David Courtwright makes this point in his account of the US initiatives around 1909. The problematizing focus was firmly set on opium smoking, not the then-nascent heroin addiction in some minority groups. But, as he shows, the ban on smoking opium drove the less empowered addicts to take up the needle and the "white stuff" so pejoritatively named by the smokers, thereby creating the conditions for the Harrison Act of 1914 (Courtwright 2001, pp. 82–83, p. 111).

Regulating on the Cheap

As noted above, until the First World War, states relied to a significant degree on taxing drugs, thus reducing their willingness to prohibit drug use. That should be kept in mind when evaluating opium regulation during this era. But more than that, nineteenth-century states generally lacked the power to enforce strict regulations of economic life at the local level. Regulations had to be very cost effective or they would produce nothing but hot air and a thriving dual market.

For the authorities regulating opium during this time, the threat of smuggling and the emergence of a dual market were a constant consideration and indeed a demonstrable outcome of harsh legislation.[27] With states facing the problem of a deadly poison at large, on the one hand, and the impotence of prohibitive measures, on the other hand, the situation could easily have been viewed as hopelessly stuck. This is part of the scenario to consider when evaluating the effects of poison regulations. The cost-sensitivity of regulations during this time, however, didn't mean that there was no room to maneuver at all. Some regulations were evidently both cheap and effective.

Addiction Without Regulation: Cheap or Cheat?

Regulating opium as a poison, leaving it available for common use, certainly made habitual use or outright addiction a possibility for consumers. Strong poison regulations with sales restricted to individuals with a written prescription, such as those in France, did not hinder the emergence of this type of use.[28]

The two most evident cases of persistent and wide-reaching addiction were opium eating in the Fens in England, and morphinism in the United States among former Civil War soldiers and among southern, rural, white women. For these groups, continuation of their habits was not hindered by regulations and, indeed, continue they did. But no narcotics epidemic spread from them to society at large. Their habitual use declined not as a result of prohibitive regulations but due to more stringent medical and pharmaceutical practices within the system that kept the opium available at the pharmacy regulated as a poison. Habitual use gradually

[27] This can be seen most clearly in the figures for opium imports to the United States presented by David Courtwright. The correlation between higher customs duties and declared imports is very strong, and Courtwright has to separate his series into distinct periods with the same customs duties in order to discuss other trends in the material (Courtwright 2001, chapter 1). In France, the rigid regulations on opium as a poison were very loosely adhered to, and opium from smuggled sources was readily available around 1900 (Padwa 2012). Interestingly, it was chiefly the threat of a rampant dual market in smuggled opiates that kept the regulations loose in the United Kingdom, and since the prices of opiates in the pharmacies were close to the market price, no strong evidence of smuggling was reported thereafter (Berridge and Griffith 1999, pp. 116–120). Sweden had regulated prices for opiates, but they were regulated mostly to keep the drug as available as possible, hindering the pharmacists from profiteering from their monopoly (Berg 2016, chapter 2).

[28] This is reported in qualitative sources throughout Padwa 2012.

diminished as high-use birth cohorts aged and died.[29] Demand was channeled through legal routes, and not much criminal activity can be said to have resulted from those addictions. It seems like cheating, but regulating opium as a poison really did seem to thwart most addiction-related crime.

Cheap Labels Versus Profitable Patents

There are some intriguing signs that the mandatory labeling of opiates as poison seems to have had the intended effect of making opiate use safer. After this single regulation was introduced in the United Kingdom, fatalities were reduced by 20–25% (Berridge and Griffith 1999, pp. 120–121). Use of opiates also seems to have been lower overall in countries with earlier and stronger poison-labeling regulations.

Throughout the period when opium was regulated as a poison, there was a competing market in opiates. Sales of tinctures containing opiates remained free to non-pharmacists in most countries if the tincture had a patent, but nowhere more so than in the United States and the United Kingdom. This strange loophole in the poison regime created a spiraling gray market for opiates outside of the pharmacies, a dual market as far as the poison regulations were concerned, since patent medicines could be sold more cheaply than tinctures from the pharmacy.

Labeling was inexpensive for the pharmacists, and it cannot have increased consumer prices by much. Therefore, it probably was not the main reason for the legal or semi-legal gray market in opiates created by the patent medicines. Other aspects of the system may have been more important. Maintaining a laboratory for testing and preparing drugs to meet regulatory standards was a big capital outlay for any pharmacist. The time-consuming work in the same laboratory to prepare individual or small batches of doses was likewise a cost of production very difficult to get around without skimping on some regulatory requirement.

Expensive equipment and time-consuming work were essential to secure the monopoly on poisons and gain the trust of customers. But the patent medicine makers could gain the same trust without the costly overhead of the poison regulations. By selling patented medicines, they were exempt from the pharmacies' monopoly; by using massive advertising, they could win the trust of consumers more cheaply and much faster than a pharmacist could by selling carefully prepared opiates from the laboratory. Labeling poison was cheap and effective for the regulator; labeling patent medicine with appealing trademarks was more profitable for the seller.

Mandating the labeling of poison simply added to popular knowledge about opiates without reducing their availability, and consumers seem to have used this knowledge to handle opiates from the pharmacy more carefully and to

[29] See Berridge and Griffith 1999 and Courtwright 2001 for a history of this habitual use or addiction.

choose not to use those peddled as panaceas by the patent medicine industry. When labeling requirements were finally introduced in the United States in 1906, the market in patent medicines containing narcotics experienced a sharp decline, "by about a third."[30]

Assessing Death

Since the central problem with opiates for which the regulations were implemented during this era was fatal poisoning, it is arguably through assessing the number of fatalities that the fairest measurement of their effectiveness can be made. Berridge calculates that from the Pharmacy Act of 1868 until 1914, the rate of fatal poisonings by narcotics in the United Kingdom was stable around or just above five yearly deaths per million people; in Sweden there were hardly any reported deaths at all (Berridge and Griffith 1999, p. 295, table 3).

It seems safe to say, very generally and lacking much in the way of data, that among all other differing factors between the countries, the different histories of poison regulations in the United Kingdom and Sweden probably account for some of the discrepancies in the fatality rates. Viewed in this synchronistic light, the British figure of five dead per million seems high and could probably have been lowered with earlier and stronger poison regulations like the ones in Sweden at the time.

Fatal Anachronisms?

There is another way to measure the effectiveness of the regulation of opium as a poison, though, one that startlingly leads to a reassessment of the British figures. Acknowledging all the risks of anachronistic comparisons, a look at contemporary statistics still gives food for thought. The European average today of fatal poisonings from narcotics is 16 per million.[31] That is strange.

Europe today is much, much richer than during *La Belle Époque*, not to mention during the preceding era of the Victorian drug bazaar. There was no social safety

[30] "… [T]he Act required the listing of narcotics, including cannabis, on the labels of patent medicines shipped in interstate commerce. Within a few years of the inclusion of this simple device, it was estimated that patent medicines containing such drugs dropped in sale by about a third" (Musto 1973, p. 22).

[31] Opiates are behind most of the fatalities from "narcotics" in Berridges' statistics as well as in those for contemporary Europe. Countries with very good health-care systems, that score highly in other measures of public health but that today keep regulating narcotics prohibitively, such as Sweden and Norway, have tragically much higher fatality rates—70 per million—than the European average and, obviously, than in the United Kingdom during the era of regulating narcotics as poisons (EMCDDA 2015, p. 57).

net, no welfare state, no Naloxone, no Methadone, nor much in the way of medical specialists on drug dependence. This ought to have been a time ripe for dying from opium use: the drug was very freely available; in countries such as Sweden and the United Kingdom, its popular use was combined with an alcohol culture of heavy drinking; since both alcohol and opiates are respiratory depressants, combined use increases danger.

Viewed in this anachronistic light, the regulation of opium as a poison even in the United Kingdom must be considered to have been comparatively effective in achieving its main purpose, to save people from dying of an overdose. Effective—and cheap.

Epilogue: The Death of a Discourse

With the twentieth century, a new discourse on opium gained prominence, instituting a new regulatory regime. As this paradigm grew stronger, the discourse of opium as a poison diminished in importance, and even though its regulatory framework remained in place, it was subsumed under the new statutory laws on narcotics. Considerations that had been central to the discourse and the regulatory framework surrounding opium as a poison—a high sensitivity to cost and adverse dual market effects, fatal poisoning as the most severe problem with opium use, reducing the temptation of opium through control of labeling and advertising—became secondary, negligible, or even counterproductive policy goals when availability itself was declared public enemy number one. Later chapters in this book will illuminate how this shift in regulatory focus affected these older, cheaper problems with opium as a poison.

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