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OPIATE ADDICTION IN AMERICA, 1800-1940

by

David Courtwright

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

DOCTOR OF PHILOSOPHY

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Houston, Texas
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ABSTRACT

OPIATE ADDICTION IN AMERICA, 1800-1940

David Courtwright

During the nineteenth century opiate addiction prevailed among middle-aged, middle- and upper-class women. By 1940, however, the typical opiate addict was a young, lower-class male, often with a delinquent or criminal background. The central task of this dissertation is to explain how that transformation came about.

Many authors who have commented on this trend have emphasized the role of the law. Because addicts were effectively denied legal access to opiates, the argument goes, they were forced to buy black market drugs; the near-prohibitive expense of these drugs in turn forced them to engage in criminal activity. While there is some truth in this view, it does not wholly account for changing characteristics of the addict population.

More important was a growing reluctance on the part of the medical profession to prescribe opiates. In the nineteenth century most addiction was iatrogenic; doctors liberally dispensed opium and morphine to their patients, many of whom were women. There was also in the latter nineteenth century a pattern of non-therapeutic addiction, mainly opium smoking among Chinese and members of the
white underworld. Later, during 1910-1935, heroin supplanted smoking opium as the underworld opiate of choice. At the same time the number of iatrogenic opium and morphine addicts was declining, thanks to new and more efficacious therapies available to the medical profession. The net result was that opiate addiction, while declining relative to population, began to assume a new form: it ceased to be concentrated in middle- and upper-class white females and began to appear more frequently in lower-class males, often neophyte members of the underworld. By 1914 the signs of this trend were unmistakable. This is not to deny that the emerging anti-maintenance policy accelerated the trend toward criminalization, but rather to insist that the transformation of the addict population was well underway before the basic narcotic statutes were enacted.

A key part of the argument hinges on the timing of the overall decline in the rate of opiate addiction. The generally accepted account, based on less than disinterested government sources, is that the rate of addiction increased right up to the time the restrictive legislation was passed and thereafter declined. Chapter 1 is devoted to proving that the decline actually began much earlier, around the turn of the century. Chapters 2-4 explore the reasons for that decline, and how different addict groups were affected. For the sake of simplified analysis, opiate
addicts are divided into 3 major groups: those who used opium or morphine, those who used smoking opium, and those who used heroin. Finally, in Chapter 5, the analysis of the rise and fall of medical opium and morphine addiction (Chapter 2) is combined with the discussions of smoking opium and heroin (Chapters 3 and 4) to explain why opiate addiction underwent such a marked transformation in the early twentieth century.
ACKNOWLEDGEMENTS

I am indebted to Professors Harold M. Hyman, Allen J. Matusow, William C. Martin, Albert Van Helden, Chester R. Burns, Martin J. Wiener, and Richard J. Smith for their continuing advice, criticism, and support, and to my wife, Shelby Miller, for her patient proofreading of the manuscript. Special thanks are also due to the staffs of the Fondren Library and the Moody Medical Library. Financial support was provided by Rice University, the Institute for the Medical Humanities of the University of Texas Medical Branch at Galveston, and the University of Texas School of Public Health.
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5. **THE TRANSFORMATION OF THE AMERICAN OPIATE ADDICT**

**BIBLIOGRAPHY**
INTRODUCTION

The study of opiate addiction in America today is virtually a minor industry. Untold millions of dollars and thousands of man-hours are expended annually in counting, categorizing and analyzing addicts and their behavior. Yet, in spite of the enormous interest in the subject, very little work has been done on the historical origins of opiate addiction. It has been over 50 years since Charles E. Terry and Mildred Pellen's *The Opium Problem* (1928), a critical anthology considered by many to be the standard work on the subject, appeared. David F. Musto has recently published a fine study, *The American Disease* (1973), but that book is restricted to political and legal aspects of twentieth century narcotic control. I have undertaken this dissertation, then, because I see a real and unfulfilled need for an in-depth study of the origins and development of this important social problem.

The central task of this study is to explain the momentous transformation opiate addiction has undergone. How did the typical nineteenth century addict, usually a middle-aged woman of middle-or upper-class extraction, become the impoverished hustling male junkie of today? A
number of leading authors, including Terry, Alfred R. Lindesmith, Rufus King, Morris Ploscowe, Edwin M. Schur, William Butler Eldridge, and Edward M. Brecher, have answered this question by pointing out, with varying degrees of emphasis, the abrupt change in the legal status of the addict. During the nineteenth century opiate addiction, although socially stigmatized, was perfectly legal. But beginning in 1909, with the enactment of the Smoking Opium Exclusion Act, a series of laws was passed which made legal access to opiates increasingly difficult. The key statute was the Harrison Narcotic Act, passed late in 1914. Not a prohibition statute per se, the Harrison Act merely required that those who dealt in narcotics register with the Treasury Department, pay a nominal tax, and keep records of the narcotic drugs they dispensed. But the law contained a number of strategic ambiguities. The most crucial of these involved section 8, which allowed a non-registered person to possess narcotics provided they had been "prescribed in good faith by a physician ... registered under this Act." The question arose: Was a physician who prescribed narcotics for an addict to support his habit ("maintenance") acting in good faith under the meaning of the law? The Treasury Department, with the sometime compliance of the Federal Courts, answered in the negative. Physicians suspected of maintaining addicts were prosecuted or harassed; most of the ad hoc municipal clinics
which had sprung up to supply the addicts were by 1920
closed. As the legitimate supply dried up, the addict was
forced to turn to the burgeoning black market; but since
black market prices were exhorbitant, he was also forced to
turn to petty crime to raise the necessary cash. The cri-
minal behavior associated with addicts is thus basically
a concomitant of the anti-maintenance policy that evolved
after 1914. Not surprisingly, the authors who have offered
this explanation have been uniformly critical of that
policy; the transformation of the American addict into street
criminal is seen as an unnecessary tragedy.

While I believe that there are elements of truth in
this view, I am unconvinced that the anti-maintenance inter-
pretation of the Harrison Act was primarily responsible for
the transformation of the American addict. They key events
occurred not in 1914-1924, but in 1895-1914, and involved
not the legal, but the medical profession. Greatly simplified,
my argument is that opiate addiction increased throughout
the nineteenth century, peaked in the 1890's, and thereafter
began a sustained decline. The major reason for the rise,
as well as the decline, of the rate of opiate addiction was
the prevailing medical practice of the day. Prior to 1900
most addiction was iatrogenic, that is therapeutically
induced; doctors liberally dispensed opium and morphine to
their patients, many of whom subsequently became addicted.
There was also in the latter nineteenth century a pattern
of non-therapeutic addiction, mainly opium smoking among Chinese and members of the white underworld. Later, in the early twentieth century, heroin supplanted smoking opium as the underworld drug of choice. At the same time the number of iatrogenic opium and morphine addicts was declining, thanks to new and more efficacious therapies available to the medical profession. The net result was that opiate addiction, while declining relative to population, began to assume a new form: it ceased to be concentrated in upper- and middle-class white females and began to appear more frequently in lower-class urban males, often neophyte members of the underworld. By 1914 the signs of this trend were unmistakable. This is not to deny that the emerging anti-maintenance policy accelerated the trend toward criminalization, but rather to insist that the transformation of the addict population was well underway before the basic narcotic statutes were enacted.

A key part of my argument hinges on the timing of the overall decline in the rate of opiate addiction. The generally accepted account, based on less than disinterested government sources, holds that the rate of addiction increased right up to the time the restrictive legislation was passed and thereafter declined. I will argue in Chapter 1 that the decline actually began much earlier, around the turn of the century. Chapters 2-4 will explore the reasons for that decline, and how different addict
groups were affected. For the sake of simplified analysis, I will divide opiate addicts into 3 major groups: those who used opium or morphine, those who used smoking opium, and those who used heroin. Finally, in Chapter 5, I will combine the analysis of the rise and fall of medical opium and morphine addiction (Chapter 2) with the separate discussions of smoking opium and heroin (Chapters 3 and 4) to explain why opiate addiction underwent such a marked transformation in the early twentieth century.
CHAPTER 1
THE PREVALENCE AND TREND OF OPIATE ADDICTION

Determining the prevalence and trend of opiate addiction involves two tasks, one constructive, the other destructive. The constructive task consists of reviewing several categories of statistical evidence, including surveys of physicians and pharmacists, records of maintenance programs, military medical examinations, and opiate import statistics. Although each type of data has its limitations, which I will note as I go along, it is nevertheless possible to reach certain general conclusions: the rate of opiate addiction in America increased throughout the nineteenth century, from not more than .725 addicts per thousand persons prior to 1842 to a maximum of 4.59 per thousand in the 1890s, and thereafter began a sustained decline. In round figures there were never more than 311,000 opiate addicts in America prior to 1914.

The destructive task consists of discrediting key government reports which alleged that, as late as 1910, the rate of addiction was still increasing and that by 1919 there were a million or more drug addicts. These reports, which contradict my principal conclusions, can be refuted
by showing how and why their authors manipulated or even fabricated data in order to sway public opinion and achieve political ends.

**Surveys**

Surveys of physicians and pharmacists, the first type of evidence, vary in format. Some investigators confined themselves to asking whether or not the habit was increasing in the respondent's locale. These are of little use in reconstructing a rate, and will not be considered here. The first survey which attempted to pinpoint the number of addicts was 0. Marshall's in Michigan in 1877. Marshall asked 200 physicians scattered throughout the state how many opium and morphine eaters resided in their locales; he received 96 replies reporting a total of 1,313 addicts. The 1874 population of the 96 cities, villages, and townships for which replies were received was 225,663, yielding a rate of approximately 5.8 addicts per thousand persons. To this ratio a qualifier should be appended. Because of "the supposed impossibility of getting reliable information of the number [of addicts] in the larger cities," no questionnaires were sent to physicians in Detroit, Grand Rapids, or East Saginaw. Thus the survey has a rural bias. The effect of this bias was probably not too great, however, because, as will be shown in the next chapter, opium and
morphine addicts were fairly well distributed with respect to urban and rural areas.

In contrast to Marshall, who polled physicians, later investigators tended to direct their inquiries to pharmacists. In 1880 Charles W. Earle inquired at 50 drug stores scattered about Chicago and discovered 235 addict customers, or 4.7 per store.\(^4\) In 1885 J. M. Hull sent 1,500 questionnaires to Iowa druggists. He received only 123 replies, most from small towns; 235 opiate users were reported, an average of 1.9 per store.\(^5\) Finally, in 1902 a special committee of the American Pharmaceutical Association sent questionnaires to pharmacists in New York and Brooklyn, Philadelphia, Baltimore, and several unnamed towns in Pennsylvania and New Jersey. The average number of addicts reported by those surveyed was 4.0.\(^6\)

Conversion of these per store averages into a rate requires the ratio of drug stores to population. If, for example, one knows that there are 5 addicts per store, and 1 store for every 2,000 persons, then one can infer there are 2.5 addicts per thousand persons (exclusive of opium smokers, who procured their drug elsewhere). Unfortunately, the ratio of drug stores to population is not easy to compute. The best estimate of Glenn Sonnedecker, a leading historian of pharmacy, is that there was about 1 drug store for every 1,850 to 2,250 persons during the years 1880-1930.\(^7\) Table 1 lists the range of addiction rates which Sonnedecker's ratio yields.
<table>
<thead>
<tr>
<th>Year</th>
<th>Place</th>
<th>Avg. Number of Addicts per Store</th>
<th>Addicts per Thousand Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>1880</td>
<td>Chicago</td>
<td>4.7</td>
<td>2.09 to 2.54</td>
</tr>
<tr>
<td>1885</td>
<td>Iowa Towns</td>
<td>1.9</td>
<td>0.84 to 1.03</td>
</tr>
<tr>
<td>1902</td>
<td>A.Ph.A. Survey of Eastern Cities and Towns</td>
<td>4.0(^c)</td>
<td>1.78 to 2.16</td>
</tr>
</tbody>
</table>

\(^a\) Assuming 1 pharmacist-respondent per store.

\(^b\) Assuming 1 drugstore for every 1,850 to 2,250 persons.

\(^c\) All drug habits.
How much of the disparity among the three surveys is genuine, and how much due to different methods, is hard to determine. It is probably not coincidental that Earle's Chicago study, which produced the highest rate, was also the most thorough; the Iowa and American Pharmaceutical Association surveys were both characterized by a low percentage of questionnaires returned. Because it was considered professionally declassé to cater to addicts, one suspects that those with the greatest number of addict customers were the least likely to reply, or that those who replied may have revised their totals downward. In either case the result was underreporting. And yet, paradoxically, some overreporting is also likely to have occurred, for several druggists in the same city may have reported the same customer. It is possible, but unlikely, that the over- and underreporting factors exactly cancelled one another. Add to these problems the imprecision of the drug store to population ratio, and it becomes apparent that not too much confidence should be placed in the exactitude of these pharmacist surveys.

**Maintenance Programs**

Somewhat more reliable are the records of the maintenance programs, the second category of evidence bearing on extent. These programs were established in various
places during the decade 1913-1923, usually in response to the deteriorating legal position of the addict. The most important impetus came on March 3, 1919, when the Supreme Court held, 5 to 4, that a physician might not provide morphine for the sole purpose of maintaining an addict's habit. Several cities then established narcotic dispensaries to provide addicts with an alternative legal source of supply. These hastily organized "clinics," as they came to be known, might have become the nucleus of a national maintenance program, were it not for the adamant opposition of the Narcotic Division of the Prohibition Unit of the Bureau of Internal Revenue. For reasons that are still not entirely clear, the Narcotic Division, under the direction of Levi Nutt, initiated a policy of harassment calculated to quickly close the clinics.

It is unlikely that, in those cities which established clinics, every addict made use of the facility. Many wealthy and socially prominent addicts, for whom anonymity was more precious than cheap drugs, undoubtedly sought to secure their supplies elsewhere. But for the majority of lower- and middle-class addicts, unable to locate a pliant "dope doctor" or unwilling to pay the black market price, there was no alternative to registration at the clinic.

In 1924 Public Health Service officials Lawrence Kolb and A. G. DuMez, using Bureau of Internal Revenue reports,
tabulated the number of addicts attending clinics in 34 cities in 12 states. Their findings are displayed in Table 2. Most of the clinics listed were opened in 1919 and closed by 1921. "In compiling the ... figures from the reports," the authors state, "the highest number of addicts recorded at any one time or in a certain year are given ... No reduction whatever was made in the total for transients, although the reports show that many of the clinics treated addicts from distant as well as near-by places."  

The average rate for these 34 cities was .99 per thousand. Applying this figure to the country as a whole, there would have been 104,933 addicts in 1920. Of the individual cities listed, one in particular stands out: Shreveport's rate of 9.55 addicts per thousand was nearly 9.7 times as great as the 34 city average. Kolb and DuMez attribute this to the relative longevity of Dr. Willis P. Butler's Shreveport clinic, which was not closed until 1923. As clinics in Houston, New Orleans, and other Southern cities were closed, hundreds of addicts made their way to Shreveport, where morphine could still be purchased for 6 cents a grain.

In addition to the clinics listed in Table 2, several other maintenance programs produced statistics of interest. In August, 1912, Jacksonville, Florida, passed an ordinance
<table>
<thead>
<tr>
<th>Place</th>
<th>Population</th>
<th>Reported Addicts</th>
<th>Addicts per Thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>California:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Los Angeles</td>
<td>576,673</td>
<td>481b</td>
<td>.834</td>
</tr>
<tr>
<td>San Diego</td>
<td>74,683</td>
<td>179</td>
<td>2.397</td>
</tr>
<tr>
<td>Connecticut:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bridgeport</td>
<td>143,555</td>
<td>79</td>
<td>.550</td>
</tr>
<tr>
<td>Hartford</td>
<td>138,036</td>
<td>105</td>
<td>.761</td>
</tr>
<tr>
<td>Meriden</td>
<td>29,867</td>
<td>2</td>
<td>.067</td>
</tr>
<tr>
<td>New Haven</td>
<td>162,537</td>
<td>80</td>
<td>.492</td>
</tr>
<tr>
<td>Norwalk</td>
<td>27,743</td>
<td>19</td>
<td>.685</td>
</tr>
<tr>
<td>Waterbury</td>
<td>91,715</td>
<td>86</td>
<td>.938</td>
</tr>
<tr>
<td>Georgia:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Atlanta</td>
<td>200,616</td>
<td>515</td>
<td>2.567</td>
</tr>
<tr>
<td>Augusta</td>
<td>52,584</td>
<td>42</td>
<td>.799</td>
</tr>
<tr>
<td>Macon</td>
<td>52,995</td>
<td>52</td>
<td>.981</td>
</tr>
<tr>
<td>Kentucky:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paducah</td>
<td>24,735</td>
<td>35</td>
<td>1.415</td>
</tr>
<tr>
<td>Louisiana:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New Orleans</td>
<td>387,219</td>
<td>250</td>
<td>.646</td>
</tr>
<tr>
<td>Shreveport</td>
<td>43,874</td>
<td>419</td>
<td>9.550</td>
</tr>
<tr>
<td>New York:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Albany</td>
<td>113,344</td>
<td>120</td>
<td>1.059</td>
</tr>
<tr>
<td>Binghamton</td>
<td>66,800</td>
<td>32</td>
<td>.479</td>
</tr>
<tr>
<td>Buffalo</td>
<td>506,775</td>
<td>250</td>
<td>.493</td>
</tr>
<tr>
<td>Corning</td>
<td>45,820</td>
<td>22</td>
<td>1.391</td>
</tr>
<tr>
<td>Elmira</td>
<td>45,393</td>
<td>10</td>
<td>.220</td>
</tr>
<tr>
<td>Hornell</td>
<td>15,025</td>
<td>16</td>
<td>1.065</td>
</tr>
<tr>
<td>Middletown</td>
<td>18,420</td>
<td>30</td>
<td>1.628</td>
</tr>
<tr>
<td>Oneonta</td>
<td>11,582</td>
<td>37</td>
<td>3.195</td>
</tr>
<tr>
<td>Port Jervis</td>
<td>10,171</td>
<td>17</td>
<td>1.671</td>
</tr>
<tr>
<td>Rochester</td>
<td>295,750</td>
<td>160</td>
<td>.541</td>
</tr>
<tr>
<td>Saratoga Springs</td>
<td>13,181</td>
<td>12</td>
<td>.910</td>
</tr>
<tr>
<td>Syracuse</td>
<td>171,717</td>
<td>92</td>
<td>.536</td>
</tr>
<tr>
<td>Utica</td>
<td>94,156</td>
<td>25</td>
<td>.266</td>
</tr>
<tr>
<td>North Carolina:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Durham</td>
<td>21,719</td>
<td>36</td>
<td>1.658</td>
</tr>
<tr>
<td>Ohio:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Youngstown</td>
<td>132,358</td>
<td>65</td>
<td>.491</td>
</tr>
</tbody>
</table>
TABLE 2: Number of Addicts Attending Clinics, Cont.

<table>
<thead>
<tr>
<th>Place</th>
<th>Population</th>
<th>Reported Addicts</th>
<th>Addicts per Thousand</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rhode Island:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providence</td>
<td>237,595</td>
<td>175</td>
<td>.737</td>
</tr>
<tr>
<td>Tennessee:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Knoxville</td>
<td>77,818</td>
<td>184</td>
<td>2.364</td>
</tr>
<tr>
<td>Memphis</td>
<td>162,351</td>
<td>325^c</td>
<td>2.002</td>
</tr>
<tr>
<td>Texas:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Houston</td>
<td>138,276</td>
<td>122</td>
<td>.882</td>
</tr>
<tr>
<td>West Virginia:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Clarksburg</td>
<td>27,869</td>
<td>49</td>
<td>1.758</td>
</tr>
</tbody>
</table>


^bTerry and Pellens, *Opium Problem*, 37, gives a total of 564 for the Los Angeles Clinic.

^c"Drug Addicts in the South," *Survey*, 42 (1919), 147, gives a total of 456 for the Memphis Clinic.
ordering that the City Health Officer, Charles E. Terry, be sent duplicate copies of prescriptions for medicines containing more than 3 grains of morphine or its equivalent. The law also stipulated that the Health Officer might, upon acquiring "satisfactory evidence of habitual abuse," offer free prescriptions to the addict, to be filled by a local druggist. The system was thus designed to supply, as well as keep track of, addicts. Terry found, out of a population of 67,209, "541 persons using opium or some preparation thereof," a rate of 8.05 per thousand. Although he allowed that this total included some transients, Terry surmised that their presence was balanced out by those Jacksonville addicts who surreptitiously obtained their supplies. One likely reason for Jacksonville's high rate was its location deep in the South, a region which, it will be seen later, suffered an inordinately high rate of addiction.

In 1913, a year after the Jacksonville program was formulated, Tennessee passed a law forbidding the refilling of narcotic prescriptions, unless the holder of the prescription had previously registered with the state as an addict. After a year of operation, State Food and Drugs Commissioner Lucius P. Brown reported a total of 2,370 registrants. At that time, Brown estimated, Tennessee had 2.3 percent of the national population, or 2,279,714 persons. This represents a rate of 1.04 addicts per thousand. Brown seriously doubted, however, that all or even a majority of
addicts had registered; his best guess was that there were "in the neighborhood of 5,000 addicts in Tennessee."16

The problem of underreporting also confronted the Pennsylvania Bureau of Drug Control, another state agency charged with keeping track of drug addicts. By 1920 there were 3,104 registrants; by 1922 there were 9,000, or about 1.03 per thousand. But, again, officials thought this represented slightly less than half the total.17

Finally, there was the New York City clinic, unique because of its size and problems. During its brief existence from April 10, 1919, to January 16, 1920, 7,464 addicts were registered, a surprisingly low rate of 1.32 per thousand. There is good reason, however, to suspect that the true rate was higher. The New York City clinic practiced gradual reduction; that is, an attempt was made to wean the addict from his drug, whether he liked it or not. This factor, plus the brusque manner in which the clinic was run, undoubtedly led many to seek out other sources of supply.18

Military Medical Examinations

One of the concomitants of American mobilization for World War I was a wealth of data for public health researchers. Recruits were weighed, measured, tested, and checked for a variety of conditions, including drug addiction. The results of these examinations constitute the third type
of evidence bearing on the problem of extent. Of the 3,764,101 men who appeared before their local boards, 3,284 were rejected for addiction, many for addiction to heroin. This represents a rate of only .87 per thousand. Because of the difficulty of obtaining drugs in the army (at least in 1917) it is unlikely that many addict recruits escaped detection. The obvious drawback, however, is that this rate applies only to males, and only those males in the 21 to 30 age bracket, rather than to the country as a whole.

**Import Statistics**

The fourth type of evidence available for estimating the prevalence and trend of opiate addiction is opiate import statistics. Two basic premises underly the use of this data: (1) the amount (or value) of opium imported per capita is a good indicator of whether addiction is increasing or decreasing; and (2) if the average daily dose required to sustain an addict is known, it is possible to compute the maximum number of addicts a given level of imports will sustain. Both of these assumptions are possible because, due to a shortage of cheap labor, the opium poppy was not grown commercially in the United States. The amount imported theoretically represents the total supply.

There is, however, a catch. To the extent that opiates were smuggled into the country, the customs figures
understate the amount actually available. If smuggling was widespread, then virtually every one of the studies which has employed import statistics suffers from systematic bias.22 This does not mean that the import statistics cannot be profitably employed, however. On the contrary, an awareness of the likelihood of smuggling is the very key to their intelligent use. But before I can demonstrate this point I must prove my first assertion, namely, that opiate smuggling was common prior to 1914.

Smuggling is liable to occur either when a government taxes a "good" (e.g., diamonds) or proscribes a "bad" (e.g., pornography). The American opiate market has been characterized by both patterns of illicit traffic. During the years 1842-1914 duties on the various categories of opiate imports -- crude or medicinal opium, opium prepared for smoking, and morphine or its salts -- fluctuated, but were generally high. Table 3 provides a summary of these imposts. By avoiding the duty and then selling the drugs at market value, smugglers could realize substantial profits.

A 1909 case illustrates the profits to be earned from such illicit traffic. Stewards aboard the North German Lloyd liner Kronprinzessin Cecilie routinely smuggled large quantities of codeine and opium into New York. They had the cooperation of the liner's watchmen and a corrupt Customs Inspector. Their American connection was Dr. George Van Der Schulenberg, who, in the guise of a wholesale druggist, sold
### TABLE 3: Imposts on Crude Opium, Smoking Opium, and Morphine or its Salts, August 30, 1842-June 30, 1914a

<table>
<thead>
<tr>
<th>Date</th>
<th>Crude Opium</th>
<th>Smoking Opium</th>
<th>Morphine or its Salts</th>
</tr>
</thead>
<tbody>
<tr>
<td>August 30, 1842 to July 30, 1846</td>
<td>$.75/lb.</td>
<td>not mentioned</td>
<td>not mentioned</td>
</tr>
<tr>
<td>July 30, 1846 to March 3, 1857</td>
<td>20% ad valorem</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>March 3, 1857 to March 21, 1861</td>
<td>15% ad valorem</td>
<td>&quot;</td>
<td>&quot;</td>
</tr>
<tr>
<td>March 21, 1861 to July 14, 1862</td>
<td>1.00/lb.</td>
<td>&quot;</td>
<td>$1.00/oz.</td>
</tr>
<tr>
<td>July 14, 1862 to June 30, 1864</td>
<td>2.00/lb.</td>
<td>80% ad valorem</td>
<td>2.00/oz.</td>
</tr>
<tr>
<td>June 30, 1864 to July 14, 1870</td>
<td>2.50/lb.</td>
<td>100% ad valorem</td>
<td>2.50/oz.</td>
</tr>
<tr>
<td>July 14, 1870 to March 3, 1883</td>
<td>1.00/lb.</td>
<td>$6.00/lb.</td>
<td>1.00/oz.</td>
</tr>
<tr>
<td>March 3, 1883 to October 1, 1890</td>
<td>1.00/lb.</td>
<td>10.00/lb.</td>
<td>1.00/oz.</td>
</tr>
<tr>
<td>October 1, 1890 to July 24, 1897</td>
<td>duty free</td>
<td>12.00/lb.</td>
<td>.50/oz.</td>
</tr>
<tr>
<td>July 24, 1897 to April 1, 1909</td>
<td>1.00/lb.</td>
<td>6.00/lb.</td>
<td>1.00/oz.</td>
</tr>
<tr>
<td>April 1, 1909 to August 5, 1909</td>
<td>1.00/lb.</td>
<td>banned</td>
<td>1.00/oz.</td>
</tr>
<tr>
<td>August 5, 1909 to October 3, 1913</td>
<td>1.50/lb.</td>
<td>&quot;</td>
<td>1.50/oz.</td>
</tr>
<tr>
<td>October 3, 1913 to June 30, 1914</td>
<td>3.00/lb.</td>
<td>&quot;</td>
<td>3.00/oz.</td>
</tr>
</tbody>
</table>

the drugs to pharmaceutical firms. Schulenberg's suicide on December 29, 1908, abruptly terminated this arrangement. His replacement, Alfred E. Willembricher, sold the codeine to wholesale candy makers, who used it in the manufacture of cough drops. Willembricher proved less discrete than his predecessor, however, and in February, 1909, Customs agents exposed the ring. Subsequent investigation revealed that the stewards had purchased the codeine for 440 marks per kilo, or roughly $1.00 an ounce. The duty avoided was also $1.00 an ounce. "The drug sells here for $5 an ounce after duty is paid," commented the New York Times, "which gives some idea of the profit made by the gang in its smuggling career." 23

The traffic in smoking opium was equally lucrative. Since smoking opium was associated with Chinese, gamblers, prostitutes, and other undesirables, Congress sought to discourage its use by means of a stiff impost. 24 Duties ranged as high as $12.00 a pound, equivalent to 182 percent ad valorem. The result was smuggling on a massive scale, much of it organized by the Chinese tongs. 25 U.S. Opium Commissioner Hamilton Wright stated that customs returns for the decade 1890-1899 represented only 60 percent of the total smoking opium which actually entered the country. 26 For once Wright, who was prone to exaggerate opiate abuse, may have underestimated the problem. Another investigator, E. J. Masters, observed that
during the years of heavy duties the regular traffic fell off more than half, although it is well known that during these years the local market was glutted. There is no doubt that heavy duties encouraged a vast smuggling trade, amounting in the opinion of ex-Collctor Phelps, to double the regular importations.27

The situation became so serious that in 1888 the Secretary of the Treasury, Charles S. Fairchild, urged Congress to prohibit all importation of smoking opium. He argued that an outright ban would be more effective than the existing near-prohibitive tariff. "If, however," he added, "Congress is not disposed to prohibit or restrict the importation of opium for smoking, and desires to obtain revenue therefrom, the tax should be materially reduced so that the inducement to smuggling and attendant difficulties and expense of administering the law may be lessened."28 Congress was not so disposed; 2 years later the impost on smoking opium was actually raised by $2.00 a pound.

Crude opium was also smuggled into the country, excepting those years when it was duty free.29 Wagons loaded with up to 800 pounds of the drug rumbled across the Canadian border. Another scheme involved shipments of cattle from Hong Kong. The horns of the cattle were removed, fitted with an inner thread, filled with crude opium, then screwed back into place. This system was exposed when an agent noticed that one cow's horn was askance, but not before "tremendous quantities of the drug had been smuggled in."30 Another case in New York involved 4 smugglers
selling pound packages of opium and phenacetine to local druggists. $5,000.00 worth of the drugs were confiscated when they were arrested. It is interesting to note that such seizures were not consigned to the furnace, as they are today; instead they were auctioned off to legitimate dealers. Thus virtually all smuggled drugs, intercepted or otherwise, eventually found their way to the consumer.

The ingenuity of the opiate smugglers knew no bounds. One supercargo reportedly packed $500.00 worth of opium into the false bottom of a snake cage. Upon landing in San Francisco, he sold both snake and opium for a tidy profit. Another technique involved shipping smoking opium to Victoria or Nanaimo, British Columbia, and then slipping it across the border concealed in hollowed-out planks of lumber. "Recently completed facilities for transcontinental transportation," complained Secretary Fairchild, "have enabled opium smugglers to extend their illicit traffic to our Northern border." Smuggling, it should be added, was not the only illicit source of smoking opium. Hundreds of Chinese immigrants set up scores of illegal "opium kitchens" to convert crude opium into smoking opium, in defiance of an 1890 law which declared that smoking opium could be manufactured only by native Americans who paid an excise of $10.00 a pound. Although police raided scores of these makeshift labs, others escaped detection, a situation which reminded one reporter of "whisky distillers ... in the wilds of Kentucky and Tennessee."
The consequence of all this smuggling activity is that import statistics do not necessarily reflect domestic demand, in spite of the array of studies which have so used them. Underreporting is particularly likely in periods of high duty, when the incentive to smuggle is correspondingly high. With this in mind, I will now examine the import statistics themselves.

Because of changes in reporting procedures, it is necessary to split the import data into separate periods: fiscal 1827-1842, fiscal 1843-1861, and fiscal 1866-1914. No statistics are available prior to 1827, and customs returns after 1914 are problematic, due to the substantial increase in illicit traffic engendered by the Harrison Act. I have also dropped the data for the Civil War years, on the grounds that they represent only the returns of Northern customhouses, and are therefore abnormally low.

Treasury Department records for fiscal 1827-1842 list only the annual dollar value of opium imports and exports, which are charted in Figure 1. These sums are based on a somewhat unusual definition of foreign trade. Most of the so-called imports never reached the American shore; rather, they represent cargoes of crude Turkish opium picked up by enterprising American merchants in European or Near Eastern ports for shipment to China. The Treasury Department chose to regard such consignments first as imports, then, when landed in the Orient, as exports. Thus both totals are artificially high.
FIGURE 1: Value of Opium Imports and Exports, Fiscal Years 1827-1842

\[\text{Source: J.B. Biddle, "Value of Opium Imported and Exported From 1827 to 1845," American Journal of Pharmacy, 13 (1847), 18.}\]
What is of interest however, is the average net difference between imports and exports. Turkish opium not exported, it is reasonable to assume, was either lost at sea or eventually consumed at home. Let us suppose, for the sake of establishing a maximum level of domestic consumption, that all of the consignments not landed in foreign ports were landed safely in America. The average dollar value of imports minus exports for these 16 years was $75,448.56. To express this as a quantity, some approximation of value per pound is needed. For fiscal years 1843-1853 the average value per pound of imported opium was $2.77; dividing this into $75,448.56 yields an average of 27,237.75 pounds per annum. This amount is of particular interest for, prior to August 30, 1842, there was no duty on opium. No duty means no smuggling; thus one can be reasonably sure that the estimated 27,237.75 pounds does not understate the maximum average annual consumption for fiscal 1827-1842.41

Beginning in 1843, customs returns specify the actual number of pounds entered for consumption, rather than aggregate value. Figure 2 plots pounds imported per capita over time. A glance at this graph reveals a sharp upward trend; imports rise from 1 pound or less per thousand persons in 1843-1845 to 4 or 5 pounds per thousand persons in the mid-1850s. This does not, however, necessarily mean that the rate of addiction increased fivefold during this period. Note first that imports are lowest when the duties, expressed
FIGURE 2: Pounds of Opium Imported Per Capita, Fiscal Years 1843-1861


For ad valorem duty: Same as Table 3.

Note that, for the sake of consistency, the duties for fiscal years 1843-1846 have been expressed in ad valorem form.
in Figure 2 as a solid line, are highest. The correlation between pounds imported per capita and duty is -0.59. This suggests smuggling activity in proportion to the duty, which in turn suggests that the official returns understate the amount actually consumed, especially during fiscal years 1843-1845. Hence the increase in per capita consumption is, at least in part, artificial. A second point is that smoking opium began to be imported in significant quantities in the mid-1850s, when the first wave of Chinese immigrants arrived in California. 42 (Prior to July 14, 1862, crude and smoking opium were reported together.) Per capita opium importation rates for fiscal years 1854-1861 necessarily reflect this sudden, exogenous increase in demand. 43

The third and final group of import statistics stretches from the end of the Civil War to the eve of the Harrison Narcotic Act. During this period customs returns were divided into 3 categories: pounds of crude or medicinal opium, pounds of smoking opium, and ounces of morphine or its salts. Because most of the crude opium was eventually converted to morphine, it will simplify matters to combine the first and third categories into one group, hereafter referred to as "medicinal opiates," to distinguish them from smoking opium. This can be done by re-expressing pounds of crude opium as equivalent ounces or morphine sulfate, and then adding ounces of morphine or its salts imported directly. 44 Figure 3 plots the per capita importation of medicinal opiates,
FIGURE 3: Imports of Medicinal Opiates, in Equivalent Ounces of Morphine Sulfate, Fiscal Years 1865-1914.\(^a\)

<table>
<thead>
<tr>
<th>oz./1000 persons</th>
<th>dollar duty</th>
</tr>
</thead>
<tbody>
<tr>
<td>30.0</td>
<td>3.00</td>
</tr>
<tr>
<td>27.5</td>
<td>2.00</td>
</tr>
<tr>
<td>25.0</td>
<td>1.00</td>
</tr>
</tbody>
</table>

---

\(^a\)\text{Sources: Same as Figure 2, except for imports for fiscal 1906-1914, which were taken from the Department of Commerce and Labor's annual Foreign Commerce and Navigation of the United States. These totals also include opium alkaloids and derivatives other than morphine, mentioned separately from (but taxed at the same rate as) morphine or its salts after 1906.}
expressed as ounces of morphine sulfate, over time. It appears that imports peaked in the mid-1890s, but note that these years were characterized by low or nonexistent duties on medicinal opiates, a state of affairs which would discourage smuggling and inflate customhouse returns. The correlation between per capita imports and duty (-0.62) is negative, as would be expected. Note also that the rate for fiscal year 1897 is inordinately high, and that for 1898 inordinately low. This is attributable to a large speculative importation during fiscal 1897 in anticipation of the reimposition of a $1.00/lb. tariff with a corresponding slackening of imports the following year -- a further demonstration of the sensitivity of the market to duties.

Legitimate imports of smoking opium, plotted in Figure 4, behave in much the same way. Once again the correlation between per capita imports and duty (-0.41) is negative. There is also evidence of speculative importation, notably in 1883, when a record 298,153 pounds were imported in anticipation of a $4.00 increase in the tariff. As with medicinal opiates, it is clear that the recorded level of smoking opium imports is a function of tariff policy, as well as domestic demand.

An understanding of smuggling is useful in deriving conclusions about the prevalence and trend of opiate addiction, as well as in discrediting superficial estimates based solely on customs returns. Two principles suggest
FIGURE 4: Imports of Smoking Opium, Fiscal Years 1865-1909.

Sources: Same as Figure 2.
themselves. First, in studying whether or not the use of a particular opiate was increasing, it is permissible to compare only those periods with equal duties. For example, in analyzing smoking opium returns, it is legitimate to compare fiscal 1871-1883, when the tariff was $6.00/lb., to fiscal 1898-1909, when the duty was also $6.00 lb., but not to fiscal 1891-1897, when the duty was $12.00/lb. The reason, of course, is that the incentive to smuggle in 1891-1897 was double that of 1871-1883. But when the duty for one period is the same as another, direct comparison is possible. The second principle is that estimates based on the maximum number of addicts imports can supply are best applied to years when there was little or no duty. Smuggling causes underreporting, but smuggling will not occur unless there is a duty, or an outright proscription.

Now to apply these principles. Duties on medicinal opiates were the same, $1.00/lb., during fiscal 1871-1890 and fiscal 1898-1909. Observations for these periods are enclosed within polygons in Figure 5. During 1871-1890 imports doubled, from roughly 7.5 to 15.0 ounces of morphine sulfate per thousand persons. But during the latter period, 1898-1909, imports per capita declined almost as precipitously. An analysis of smoking opium returns (Figure 6) reveals much the same pattern. In fiscal 1871-1883 the trend was sharply upward, but in fiscal 1898-1909, years characterized by the same $6.00/lb.
FIGURE 5: Imports of Medicinal Opiates When Duty was $1.00/lb. for Crude Opium and $1.00/oz. for Morphine.

oz./1000 persons

Sources: Same as Figure 3.
FIGURE 6: Imports of Smoking Opium When Duty was $6.00/lb.a

lbs./1000 persons

aSources: Same as Figure 2.
impost, per capita imports began tapering off. Taken together, Figures 5 and 6 indicate that opiate addiction was declining well before the passage of national narcotic legislation.

In addition to comparing periods of like duty, it is useful to analyze those years when there was no duty, and hence no smuggling. During fiscal 1827-1842 there was no charge on any form of opium, and during fiscal 1891-1897 no charge on crude opium and only a nominal charge on morphine or its salts. In both periods, then, the amount imported represents the total supply. It has been demonstrated that the minimum average daily dose required to sustain the nineteenth century opiate addict was the equivalent of 6 grains of morphine sulfate.\textsuperscript{46} The 27,237.75 pounds (average per annum) imported 1827-1842 would have supported, at 6 grains a day, a maximum of 10,875 addicts, or roughly .725 addicts per thousand persons.\textsuperscript{47} By way of comparison the annual average equivalent of 1,109,822 ounces of morphine sulfate imported during duty-free fiscal years 1891-1896 could have supported, exclusive of opium smokers, 221,559 addicts, or about 3.25 addicts per thousand.\textsuperscript{48} Because up to 20 percent of these medicinal imports went to non-addicts,\textsuperscript{49} because an undetermined amount of the drug was re-exported in the form of narcotic patent medicines,\textsuperscript{50} and because, as mentioned earlier, some crude opium was secretly converted to smoking opium, it can be said with certainty that there were no more than 221,559 persons addicted to medicinal
opiates at this time. Of course, this does not represent the maximum for all opiate addicts, since it does not include opium smokers. Because of the high duty, arriving at the maximum number of opium smokers for fiscal 1891-1896 is problematic, but a rough estimate can be made. Recall that the most liberal estimate made by a knowledgeable authority of the amount of smoking opium smuggled into the country when duty was high was "double the regular importations." Regular importations for fiscal 1891-1896 average 76,348 pounds; let us therefore assume that the true total was closer to 229,044 pounds (76,348 x 3). Several studies indicate that the average amount required to sustain a smoker for 1 year was no less than 2.5 pounds, a dose which yields a maximum of 91,618 opium smokers at this time. Combining these totals (221,559 + 91,618) gives a maximum of 313,177 persons addicted to all forms of opium during fiscal 1891-1896, a rate of 4.59 addicts per thousand.

To recapitulate, it is possible to use import statistics to establish the maximum number of opiate addicts at certain times. Prior to 1842 it is virtually certain that there were no more than .725 addicts per thousand Americans. But by the mid-1890s the maximum had more than sextupled to 4.59 per thousand. Thereafter the rate of opiate addiction, as reflected in opiate imports per capita, began a sustained decline. Because per capita consumption fell faster than population grew, it is safe to assume that there were never
more than 313,177 opiate addicts in America after 1900 and before 1914.

**Biased Official Estimates**

The foregoing analysis clashes sharply with the official assessment of the problem. I would especially like to call attention to Hamilton Wright's *Report on the International Opium Commission* (1910) and the Treasury Department's *Traffic in Narcotic Drugs* (1919), reports which distorted the trend and prevalence of opiate addiction, respectively. Both studies made a deep and lasting misimpression; statistics culled from them still circulate today.

The author of the 1910 *Report*, Wright, became involved in drug politics in 1908, when he was appointed as one of the American delegates to the Shanghai Opium Commission. Although by training a scientist, he was by instinct a politician, that is, he was not above bending the facts to achieve legislative ends. His *Report* is better understood as a carefully constructed brief than a disinterested scientific document.

Wright lobbied for domestic narcotic legislation as a part of his larger strategy for controlling the international traffic. Essentially he believed that, in order to assume moral and diplomatic leadership on the world question, the
United States must itself possess exemplary narcotic laws. Shortly after the Opium Commission convened on February 1, 1909, Congress passed, at the behest of the State Department, the Smoking Opium Exclusion Act. Wright saw the ban on imported smoking opium as a step in the right direction, but he wanted more comprehensive legislation, and he wanted it before the projected Hague Opium Conference began. He drafted a series of bills (H.R. 25240-25242) which were introduced by House Foreign Affairs Committee Chairman David Foster on April 30, 1910. Two of these were relatively non-controversial amendments to the 1909 Smoking Opium Exclusion Act, but the third, generally known as the Foster Anti-Narcotic Bill, was clearly designed to circumscribe domestic narcotic traffic. Its elaborate provisions for registering dealers and recording all narcotic sales, backed by stiff fines for infractions, were vigorously opposed by the drug industry.

Rather than compromise with the drug trades, Wright sought to secure passage of the Foster bill through scare tactics. His Report painted a lurid picture of the domestic drug problem; he was especially keen on the danger posed by black cocaine users to white women, probably to secure the votes of Negrophobic Southern Congressmen. On the question of extent, however, he shifted to more subtle tactics. As has been shown, per capita consumption of both smoking and medicinal opium was dropping during the years 1900-1910. But Wright needed to convey quite the
opposite impression. He did this by combining the recent, lower per capita import figures with those of years for which imports were relatively high. Taking a 50 year span as his point of reference, he created the statistical illusion of a sustained increase in per capita consumption of opiates. He concluded, "Thus against the 351 per cent increase in our importations of all forms of opium for the last five decades we find a 133 per cent increase in our total population. These figures speak louder than words." So loudly, in fact, that they completely obscured the decline in per capita consumption of opiates which had taken place during the previous decade.58

Although the Report failed of its immediate end (the Foster bill died in committee), Wright's disingenuous statistics lived on. Within a short time his 351 to 133 ratio had resurfaced in a Presidential message, a bobk-length Public Health Bulletin, a manual of pharmacology, a Journal of the American Medical Association editorial, and a New York Times feature vividly entitled "Uncle Sam Is the Worst Drug Fiend in the World."59 When the Harrison Narcotic Act, essentially a watered-down version of the Foster bill, was being considered, Wright's figures turned up again in a favorable House Report.60 They are still being circulated, over 60 years later.61

Although Wright's Report intimated that addiction was increasing, he did not venture an exact estimate. More
explicit was the widely publicized 1919 Treasury Department report, *Traffic in Narcotic Drugs*, which concluded that "the total number of addicts in this country probably exceeds 1,000,000 at the present time." Nowhere in the document is the basis for this startling estimate made clear. What is certain, however, is that the chairman of the committee which issued the report, Congressman Henry T. Rainey, was then sponsoring legislation designed to strengthen the Harrison Act. At a strategic time Rainey leaked the report's sensational statistics to the press. Although the estimate was later repudiated in print by one of the report's co-authors, it served its immediate purpose; most of Rainey's proposed amendments were adopted.

Rainey's leak may also have influenced the Supreme Court. Two Harrison Act cases, *Webb et al. v. United States* and *United States v. Doremus* were then pending; the former dealt with the status of the physician-addict relationship, the latter with the constitutionality of the act itself. The government briefs for both cases quoted statistics to the effect that between 750,000 and 1,500,000 Americans were addicted, and argued, *à la* Brandeis, that social conditions justified the legislative response. News of the Treasury Department's estimate could only have corroborated the government's inflated statistics. On March 3, 1919, the Court upheld the constitutionality of the act and, reversing an earlier, pro-maintenance decision,
ruled that a physician might not prescribe "for the purpose of providing the user with morphine sufficient to keep him comfortable by maintaining his customary use." Both cases were decided by a 5 to 4 vote.

Conclusion

Widely quoted government reports created the impression that opiate addiction was both pervasive and malignant. Objective evidence, however, indicates that the rate of addiction steadily declined during 1890-1914, down from a peak of perhaps 4.59 per thousand in the 1890s. Per capita opiate imports, compared to earlier periods with similar duties, were dwindling; moreover addiction rates derived from the records of maintenance programs were, with few exceptions, substantially lower than rates based on surveys taken in the 1870s and 1880s, such as Marshall's in Michigan or Earle's in Chicago. Even allowing for 100 percent under-reporting, the clinic records indicate a maximum of 209,866 addicts in 1920, or about 1.97 per thousand persons. Similarly, if the rates based on addicts registered in the Tennessee (1913), Pennsylvania (1920-1922), and New York City (1919-1920) programs are doubled (as some officials suggested they should be to arrive at the true rate), it is still apparent that there were not more than between roughly 2.0 to 2.6 addicts per thousand persons in these places. Add to this the fact that military medical
examinations turned up only 3,284 drug addicts (not the 500,000 some predicted\textsuperscript{69} and the case for the early twentieth century decline in opiate addiction becomes overwhelming. Why the rate of opiate addiction dropped so sharply, after nearly a century of increase, is a central concern of subsequent chapters.
NOTES TO CHAPTER 1

1 Simple increase/decrease surveys include F. E. Oliver, "The Use and Abuse of Opium," Massachusetts State Board of Health, Annual Report, 3 (1872), 162-177, and B. H. Hartwell, "The Sale and Use of Opium in Massachusetts," Ibid., 20 (1889), 137-158. Another Massachusetts study, Enos Stevens, "Opium," Boston Medical and Surgical Journal (hereafter BMSJ), 41 (1850), 120, states that, "In every part of the country, I have found two or three persons of every thousand inhabitants using from a quarter to half ounce of opium every week...." Note, however, that his estimate is based, not on a systematic survey, but on limited personal observation; it is possible that some users escaped Stevens' eye. Note too that Stevens speaks of opium only; morphine was not in wide use at this time.


3 Ibid., 63.


6 H. F. Hynson, et al., "Report of Committee on Acquirement of the Drug Habit," Proceedings of the American Pharmaceutical Association, 50 (1902), 569-570. The question asked for the number of persons with "drug habits," not just opium habits. The actual average recorded was 4 per pharmacist but, due to suspicions of underreporting, the committee insisted that the actual figure was closer to 5 per pharmacist, which would yield a national rate of about 3.0 per thousand (p. 570).

The committee also sent questionnaires to 100 physicians in Baltimore, and an undisclosed number to physicians in Philadelphia. The respondents knew an average of 6 addicts each. According to R. L. Polk's directory of practitioners, cited on p. 344 of William G. Rothstein, American Physicians in the Nineteenth Century: From Sects to Science (Baltimore: Johns Hopkins University Press, 1972), there were 119,749
U.S. physicians in 1900. Extrapolation yields a total of 718,494 addicts, a rate of more than 9.44 per thousand. But note that these figures include those who habitually used cocaine, chloroform, trional, sulfonal, and a host of other preparations, as well as opiates. Moreover there is the likelihood of overreporting, as many addicts trekked from one physician to another, vainly seeking a cure.


11 For example, Pearce Bailey, "The Heroin Habit," *New Republic*, 6 (1916), 315, reports that, when the Harrison Act went into effect on March 1, 1915, the price of street heroin rose immediately from $.85 to $7.50 per drachm.


13 Ibid., 1182.


17 Thomas S. Blair, "Some Statistics on Drug Addicts Under the Care of Physicians in Pennsylvania," Journal of the American Medical Association (hereafter JAMA), 76 (1921), 608, and Kolb and DuMez, 1181. From context it is clear that most of the Pennsylvania "drug addicts" were opiate users. In addition to the Pennsylvania and Tennessee studies, there is a Massachusetts document, Report of the Special Commission to Investigate the Extent of the Use of Habit-Forming Drugs (Boston: Wright & Potter Printing Co., 1917), which hypothesized 60,000 drug addicts in the state, but without hard evidence.


Not all studies of New York City addiction were based on the clinic data. State of New York, Final Report of the Joint Legislative Committee Appointed to Investigate the Laws in Relation to the Distribution and Sale of Narcotic Drugs (Albany: J. B. Lyon Company, 1918), 3, claims that "[e]stimates were given the committee by persons in position to be able to gauge conditions with a fair degree of accuracy that from two to five percent of the entire population of the city of New York were victims of drug addiction." Precisely what is meant by "drug addiction" and how the experts arrived at this estimate are nowhere made clear. For an equally speculative estimate of the number of addicts in New York State as a whole, see State of New York, Second Annual Report of the Narcotic Drug Control Commission (Albany: J. B. Lyon Company, 1920), 5. A later article by New York City's Commissioner of Correction, Frederick A. Wallis, "The Menace of the Drug Addict," Current History, 21 (1925), 743 stated that there were "200,000 addicts of the underworld type" in that city alone, but, again, without evidence.

19 The base figure of 3,764,101 is given in Digest of the Proceedings of the Council of National Defense During the World War, Franklin H. Martin, compiler, Senate Document No. 193, 73rd Congress, 2nd Session (1934), 322. The number
of addicts, 3,284, is reported in Pearce Bailey, "Nervous and Mental Disease in United States Troops," *Medical Progress*, 36 (1920), 195. United States, War Department, *Defects Found in Drafted Men*, Albert G. Love and Charles B. Davenport, compilers (Washington: G.P.O., 1920), 107, gives an even smaller figure of 1,448 drug addicts. This disparity is apparently due to the fact that Love and Davenport did not study all American soldiers (p. 25). There is also a study by George E. McPherson and Joseph Cohen, "A Survey of 100 Cases of Drug Addiction Entering Camp Upton, N. Y., Via Draft, 1918," *BMSJ*, 180 (1919), 636, which found 178 addicts out of 53,000 recruits examined, a rate of approximately 3.36 per thousand. McPherson and Cohen's relatively high rate was almost certainly due to the camp's proximity to New York City, which had a high incidence of heroin addiction among draft-age youth.

Bailey, "Nervous and Mental Disease," 195. There was, however, some heroin and cocaine use in the armed forces before America entered the war, a point which will be considered in Chapter 4.

C. F. Holder, "The Opium Industry in America," *Scientific American*, 78 (1898), 147. Emil Weschcke, "On Poppy Culture and Production in the United States," *Pacific Medical Journal*, 48 (1905), 457, notes that some domestic opium was cultivated during the War of 1812 and in the South during the Civil War. "The Opium Poppy," *United States Department of Agriculture Report*, 1870 (Washington: G.P.O., 1871), 206-210, pointed to a few successful peacetime experiments, but American farmers, increasingly involved with mechanization, were generally loath to undertake the tedious, backbreaking labor involved in collecting the opium. There was a suggestion by Emanuel Weiss, "Hint as to the Development of Our California-China Trade," *Hunt's Merchants' Magazine*, 47 (1862), 522-526, that opium could be grown as an export crop by exploiting cheap Chinese labor in California; nothing, however, came of this proposal.

To give some idea of the prevalence of this bias, I append here a partial list of books and articles which have made use of import data, but have failed to control for or have discounted altogether the possibility of smuggling: "Use of Opium in the United States," *BMSJ*, 72 (1865), 476; Oliver, 163; Marshall, 67-69; Fred· Heman Hubbard, *The Opium Habit and Alcoholism* (New York: A. S. Barnes & Co., 1881), vii; H. H. Kane, *Drugs That Enslave: The Opium, Morphine, Chloral and Hashisch Habits* (Philadelphia: Presley Blakiston, 1881), 6; Hartwell, 141;

23 "First Arrest Made in Smuggling Plot," New York Times, February 14, 1909, 8; "Two More Arrests in Smuggling Case," Ibid., February 16, 1909, 3; and "Smugglers' Big Profits," Ibid., February 17, 1909, 4. The doctor allegedly committed suicide because he "knew that the smuggling plot was about to be exposed, and he had also been accused of bigamy."


26 Wright, Report, 39.

27 Frederick J. Masters, "The Opium Traffic in California," Chautauquan, 24 (1896), 58. See also Hynson, et al., 573.

28 Letter from the Secretary of the Treasury Submitting a Draught and Recommending the Passage of a Bill to Prohibit the Importation of Opium in Certain Forms, House Ex. Document No. 79, 50th Congress, 1st Session (1888), 2.

29 "Opium Smuggling on Our Northern Border," JAMA, 11 (1888), 885.


32. There were exceptions to this rule, especially when seized smoking opium was involved. See Masters, "Opium Traffic in California," 60.


34. Masters, "The Opium Traffic in California," 58-59. Hollow beams were later used in sea smuggling operations, according to J. E. Hasty, "Opium Smuggling," Illustrated World, 26 (1917), 687.

35. Letter From the Secretary of the Treasury, 1.

36. Excess morphine must be removed from crude opium containing more than 9 percent morphine before it is fit for the pipe; otherwise the smoker suffers "skin eruptions and headaches." Masters, "The Opium Traffic in California," 60.

37. This provision is actually part of the Tariff of 1890, Statutes at Large, 51st Congress, 1st Session, Chapter 1244, Sections 36-40, 620.

38. Holder, 147. See also Frederick J. Masters, "Opium and Its Votaries," California Illustrated Magazine, 1 (1892), 643.

39. Note 22, above.

40. For a detailed description of this traffic, see Jacques M. Downs, "American Merchants and the China Opium Trade, 1800-1840," Business History Review, 42 (1968), 418-442. The trade died out after 1838, when the Chinese attempted to put an end to the commerce. Thereafter most of the imports actually went to the domestic market.

41. Note that, whether merchandise was dutiable or not, the law required that it be entered at the customhouse. Hamilton Bruce, The Warehouse Manual, and General Custom House Guide... (New York: the author, 1862), 17. In years when there was no duty on opium there would have been no point in attempting to circumvent customs, thereby risking a valuable cargo.

It is necessary to anticipate an objection here. John Helmer and Thomas Vietorisz, *Drug Use, the Labor Market, and Class Conflict* (Washington: Drug Abuse Council, Inc., 1974), 3, assert that first generation Chinese immigrants, being of the "better-off independent peasantry or the urban petty bourgeoisie ... neither used opium in China nor brought the habit or the demand for the drug with them between 1850 and 1870." This claim is open to serious objections. In the first place, the bulk of the early immigrants were in fact impoverished laborers (Barth, 57-58). In the second place, smoking opium was clearly being imported prior to its separate listing in 1862. Hamilton Wright, "Report from the United States of America," *Report of the International Opium Commission, Shanghai, China, February 1 to February 26, 1909*, 2 (Shanghai: North-China Daily News & Herald, 1909), gives $407,041.00 as the value of smoking opium imported in fiscal 1860 alone, with an undetermined amount in the 1850s (p. 40). Who was consuming the imported smoking opium? It was not white Californians; H. H. Kane, *Opium-Smoking in America and China* (New York: G. P. Putnam's Sons, 1882), 1-20, makes it perfectly clear that the practice spread from the immigrants to the natives, and not vice versa. The obvious and inescapable conclusion is that there were opium smokers among the Chinese immigrants in the 1850s and 1860s, that they continued to smoke in America, and that they created a demand for the product which was reflected in the import statistics.

Crude opium contains an average of 10 percent anhydrous morphine. 1 part of anhydrous morphine will make 1 1/4 parts morphine sulfate. Therefore a pound of crude opium will yield, on average, 2 ounces of morphine sulfate. Using this formula it is possible to combine crude opium imports, recorded in pounds, with imports of morphine or its salts, recorded in ounces. In fiscal 1890, for example, 380,621 pounds of crude opium and 19,953 ounces of morphine or its salts were (officially) imported. This may be re-expressed as 781,195 ounces \(= (380,621 \times 2) + 19,953\). Average duty for the 781,195 ounces of "medicinal opiates" can then be easily computed. The source for the opium-morphine sulfate equivalence formula is Kolb and DuMez, 1193.

Some of the unexplained variance is attributable to the effect of the outlying observations for the speculative years 1883-1884. When these are dropped the correlation between amount imported and duty becomes -0.51.

Kolb and DuMez, 1189-1191. The true average is probably higher; 6 grains is a highly conservative estimate, suitable only for computing the maximum number a given supply will support. It should be noted that Terry and
Pellens challenged the average dose approach: "...so far as we know there has been made no study of a sufficiently large and representative number of individual cases under suitable conditions to permit of any definite statement as to an average daily dose." (Opium Problem, 3.) In this case Terry and Pellens, whose research was normally circumspect, were simply wrong. Their rivals, Kolb and DuMez, cited an impressive array of studies, some based on thousands of cases, to support their contention that 6 grains was the minimum average daily dose. Where Kolb and DuMez did go wrong, however, was in applying their average dose ratio to all import statistics, regardless of the likelihood of smuggling. Not realizing that high duty also led to smuggling, they inferred that, because opium was not proscribed, "there was no incentive to the smuggling trade as there is to-day." (p. 1193).

47 Base year for computing the .725 rate is 1835.

48 Base year for computing the 3.25 rate is 1894. Fiscal year 1897 was also duty free but, owing to the speculative importation mentioned earlier, its total was artificially high and is therefore not included in the 1,109,822 ounce average. 3.25 as a maximum rate for addiction to medicinal opiates is consistent with the surveys of physicians and pharmacists discussed earlier -- save one, Marshall's in Michigan. Why Michigan suffered such a high rate (5.8 per thousand) in comparison to those places listed in Table 1 is difficult to say. In any event, the fact that a single state survey produced a higher rate in no way falsifies the claim that the national average rate of addiction to medicinal opiates, computed on the basis of import statistics, was no more than 3.25 per thousand.

49 Obviously not all who received opiates became addicted. Estimates of the quantity of opium required for therapeutic purposes (other than maintenance) varied. Two leading authorities, Alonzo Calkins and E. R. Squibb, put the amount at about 1/5 of the total imported. "General Facts About the Use of Opium in this Country," Quarterly Journal of Inebriety, 2 (1878), 215. There also would have been an undetermined amount of wastage.

50 According to the Statistical Abstract of the United States, issued annually by the Bureau of Statistics of the Department of the Treasury, the value of patent medicine exports more than tripled from 1884 to 1914, reaching a peak of more than $7,540,000.00 in 1912. Undoubtedly some of the exported nostrums contained opiates, although how much is impossible to say.
Kolb and DuMez, 1190, cite a Formosa study which indicated a 2.5 pound per smoker annual average. This may be too low, however. "Opium in China. How Many Smokers Does the Drug Supply?" BMJ, 107 (1882), 186, states that "[t]he average smoker consumes 3 mace or 6/15 of an ounce avoirdupois daily," or 9.13125 pounds per annum. Kane, Opium-Smoking, 19, estimates that the average white smoker in America consumed 6.34 pounds per annum, the average Chinese smoker 3.8 pounds. Nevertheless, in the interests of establishing a maximum, it is better to err on the side of too small an average dose, so I will employ the 2.5 pound per annum estimate.

Base year for computing the 4.59 rate is 1894. Whether the national rate was ever higher than 4.59 per thousand is difficult to say. It is logically possible that in the late 1880s, just before the duty on crude opium was lifted, true per capita consumption (that is, legitimate plus smuggled opiates divided by population) was actually greater than in fiscal 1891-1896. (See Figure 3.) However evidence will be presented in the next chapter that headway against iatrogenic addiction -- the most common form -- was not really made until the late 1890s, which in turn suggests that the rate peaked in the 1890s, rather than the late 1880s.

Figures 5 and 6 show medicinal opiates and smoking opium per capita dropping by roughly 50 percent during 1900-1910, while population grew by less than a quarter during the same decade.

Wright made his reputation as a researcher of tropical diseases. His most celebrated discovery was that beriberi was an infectious disease -- a finding we now know to be erroneous. For more on Wright's personality and career, see Dictionary of American Biography, 20 (New York: Charles Scribner's Sons, 1936), 552-553; National Cyclopedia of American Biography, 22 (New York: James T. White & Company, 1932), 430-431; Musto, American Disease, 33-62; and Arnold H. Taylor, American Diplomacy and the Narcotics Traffic, 1900-1939: A Study in International Humanitarian Reform (Durham, N.C.: Duke University Press, 1969), 54-56.

H. R. 27427; Public No. 221; approved February 9, 1909. This law is discussed in greater detail in Chapter 3.

The Foster Bill is discussed in more detail in Chapter 4.

Musto, American Disease, 43-44; Wright, Report, 48-50.
Wright, Report, 42. Emphasis added. On p. 38 Wright sought to anticipate this objection by claiming that duty free opium imported speculatively in the 1890s was only then being released for consumption. But such an assertion is counterintuitive. Why, one wonders, would an importer pay 15 years of storage costs in the hopes of realizing a $1.00 per pound profit? Why would imports continue at all if the warehouses were as glutted as Wright suggests? The truth is that the speculative importation to which Wright refers, the 1,073,999 pounds entered in fiscal 1897, was mostly consumed the following year, when a scant 72,287 pounds were brought into the country.


Traffic in Narcotic Drugs: Report of the Committee of Investigation Appointed March 25, 1918, by the Secretary of the Treasury (Washington: G.P.O., 1919), 21. This figure includes cocaine users. The committee did evaluate a number of questionnaires. An extrapolation based on its survey of physicians (p. 10) indicated a total of 237,655 addicts, a plausible figure. The committee disregarded its own survey, however, in reaching the round-number estimate of 1,000,000.


A. G. DuMez, who served on the committee, denied there were even 237,655 addicts, the figure mentioned in note 62, above. Kolb and DuMez, 1184-1185.
Musto, *American Disease*, 134-136. Nor was Congressman Rainey's propagandizing confined to the Treasury Department report. In April, 1919, he made known the "astounding facts" that 80,000 draftees were rejected for drug addiction, 8,000 in New York City alone. Rainey had "lists" to support his accusations; that these lists were the purest fabrications is demonstrated by the official tally published the following year, which showed no more than 3,284 recruits rejected nationwide for drug addiction. "8,000 Lads in City are Drug Addicts," *New York Times*, April 15, 1919, 24.


Bailey, "Nervous and Mental Disease," 195.
CHAPTER 2
ADDICTION TO OPIUM AND MORPHINE

The term "opiate addiction," as it has been used thus far, serves as a unifying concept. Like the word "alcoholism," it is a way of speaking about a diverse group of people who have in common addiction to a certain drug. The aim of this and subsequent chapters, however, is to divide opiate addicts into smaller, more homogeneous groups. Doing so will enable me to better explain the overall decline in addiction, documented above, and lay the foundations for the analysis of the social transformation of opiate addiction which is the subject of Chapter 5.

In establishing addict subgroups I will exploit the fact that nineteenth and early twentieth century addicts were distinguished by the form of opium they used. The background of a morphine addict, for example, was different from that of an opium smoker. Not only was the morphine addict a "better" person in the conventional social sense, but he (or, more likely, she) typically began using the drug for medical, rather than euphoric or experimental, purposes. Recognizing the presence of such distinct patterns of addiction, each centering on the use of a particular
drug or drugs, is the key to organizing these amorphous
opiate addicts into more manageable -- and meaningful --
groups.

The first pattern, and the subject of this chapter, is
addiction to opium and morphine. By "opium" and "morphine"
I have something quite exact in mind. "Opium" here means
the dried milky juice of white poppy capsules, except when
it has been prepared for smoking. (For clarity I will
always refer to opium in the latter form as "smoking
opium.") "Morphine" means the principal active alkaloid
of opium, or any of its salts, such as morphine acetate,
morphine hydrochloride, or morphine sulfate. It does not
include diacetylmorphine or heroin, a semi-synthetic
derivative, which, like smoking opium, will be discussed in
a separate chapter. Let me further stipulate that, when I
refer to opium and morphine addiction, I mean addiction to
these substances either alone or as part of some medicinal
preparation. Opium and morphine were commonly included in
official preparations, such as Dover's powder or laudanum,
as well as unofficial preparations, particularly patent
medicines.1 While some opium and morphine addicts took
their drug as a pure powder or salt, others ingested it as
a part of some polypharmaceutical concoction. Both types
will be considered here.

I will begin with the epidemiologic aspect of the
problem, reviewing evidence bearing on the sex, age, race,
national origin, geographic distribution, class, and occupation of opium and morphine addicts. Subsequent sections will deal with the four leading etiological factors: the administration of opium and morphine by physicians, the Civil War, self-dosage medicines, and the use of opium and morphine for non-therapeutic purposes. The relation of each of these etiological factors to the number and kind of addicts will be considered in turn.

Characteristics of Opium and Morphine Addicts

Sex. The majority of opium and morphine addicts were women. Marshall's 1878 Michigan survey, Earle's 1880 Chicago survey, and Hull's 1885 Iowa survey, described in the previous chapter, indicated that 61.2, 71.9, and 63.4 percent of their respective samples were female. Marshall further differentiated between "Opium eaters," of whom 56.3 percent were female, and "Morphine eaters," of whom 65.6 percent were female. The place with the highest percentage of female addicts was allegedly Albany, where it was reported that "[f]ully four-fifths of the opium-eaters are women." The disproportionate number of female opium and morphine addicts persisted, in some places, well into the twentieth century. In 1913 Charles Terry reported that 57.9 percent of Jacksonville's opiate addicts (most, though not all, of whom used morphine, laudanum, or gum opium)
were female.\textsuperscript{5} Tennessee's registration/maintenance program revealed that 66.9 percent of morphine users, 75.0 percent of laudanum users, and 66.7 percent of gum opium users were female. By way of contrast, women comprised but 22.6 percent of the registered heroin users.\textsuperscript{6} As late as 1919 a report from Memphis indicated that the majority (57.0 percent) of morphine addicts in that city were female.\textsuperscript{7}

Not every early twentieth century study indicated a majority of female opium and morphine addicts, however. Of 26 morphine addicts studied in the Cleveland City Hospital in 1915, 16 were male and 10 were female.\textsuperscript{8} More surprising are the figures for Willis Butler's Shreveport clinic, which indicated that 76.4 percent of the patients were male.\textsuperscript{9} This high percentage of males may be due in part to the itinerant character of many of Butler's patients;\textsuperscript{10} nevertheless it would appear that, at least in some places, males comprised the majority of morphine addicts by 1915-1923.\textsuperscript{11}

\textbf{Age.} Most who became addicted to opium and morphine did so between the ages of 25 and 45. "It is," wrote Earle, "a vice of middle life."\textsuperscript{12} Statistics from the Tennessee program support Earle's dating of addiction, if not his assessment of it as a vice. The average age at which addiction began was for males 37 years, 10 months; for females, 37 years, 6 months. For both sexes the average
age at time of registration was 49 years.13 Other studies, although they yield somewhat lower average ages, generally support the characterization of opium and morphine addiction as a condition of middle life.14

Race. Among opium and morphine addicts whites were overrepresented, blacks underrepresented. In 1885 Dr. J. D. Roberts of the Eastern North Carolina Insane Asylum, after making a number of inquiries, reported that he knew of "but three well authenticated cases of opium-eating in the negro ..."15 In Jacksonville 407 or 75.2 percent of the 541 opiate addicts were white, even though whites made up slightly less than half of that city's population.16 Fully 91.5 percent of Butler's patients were white, a remarkable statistic in view of the substantial black populations of Shreveport and the other Southern cities from which the clinic drew.17 Brown noted that only 10 percent of Tennessee's registered addicts were black, even though blacks made up roughly a quarter of that state's population.18 The only exception to this general pattern is Chicago, where blacks appear to have been overrepresented among opium and morphine addicts.19

National Origin. Most opium and morphine addicts were native-born. 73.2 percent of the Chicago addicts were listed as Americans, even though, according to the 1880 Census, the
native-born comprised but 59.3 percent of that city's population. Germans, Irish, English, and Scandinavians were all underrepresented among Chicago addicts; only the Scots were overrepresented. An 1887 study of 12 morphine addicts in the Pennsylvania Hospital for the Insane showed all to be of American birth. Finally, case summaries published in Drysdale's 1915 Cleveland study also indicate that the foreign-born were underrepresented among morphine addicts. Thus it appears that, with the exception of Chinese opium smokers, to be discussed later, immigrants did not increase the rate of opiate addiction in America.

**Geographic Distribution.** Opium and morphine addicts were concentrated in the South. Table 2, above, lists the number of addicts attending narcotic clinics in 34 cities, 1919-1924. Most, though not all, of these addicts used opium and morphine. The 23 Northern and Western cities averaged .93 addicts per thousand, while the 10 Southern cities (including Houston and Clarksburg but excluding Shreveport) averaged 1.5 addicts per thousand persons --a 61.9 percent higher rate. The other Southern maintenance programs mentioned in Chapter 1, those of Jacksonville and Tennessee, also produced addiction rates in excess of the Northern and Western average.

Further evidence for higher Southern use is found in pharmacy records. A survey of the records of 34 Boston
drug stores published in 1888 revealed that, of 10,200
prescriptions sampled, 1,481 or 14.5 percent contained "some
preparation of opium." 23 Unfortunately there is no com-
parable study of the prescriptions of a major Southern city.
I have, however, located and sampled the contents of 2
surviving New Orleans pharmacists' record books, dating from
the late 1870s and 1880s. An astonishing 24.5 percent of
these prescriptions contained opium or morphine, a full 10
points more than the Boston percentage. 24 Of course such
a limited comparison does not prove that an entire region
had a higher rate of addiction; nevertheless it does
corroborate the differences in clinic registration outlined
above.

One important implication of the higher Southern
clinic and pharmacy figures is that Southern whites ran the
greatest risk of opium and morphine addiction of any
regional racial group. Since Southern blacks had a very low
rate of addiction, and since blacks made up roughly a third
of the postbellum Southern population, 25 it follows that,
to compensate for the low black rate, Southern whites must
have suffered a rate even higher than their regional
average.

A second question bearing on the geographical distri-
bution of opium and morphine addicts is whether they were
situated in urban or rural areas. Given the concentration
of addicts in the South, and the predominantly rural
character of that region prior to 1920, the latter would seem more likely. It is possible that, even in Northern industrial states, opium and morphine were found more often on farms or in small towns. In 1919 Thomas S. Blair, who made a careful study of addiction in Pennsylvania, observed that, although there was little addiction among active farmers, there was a good deal of addiction among

...retired farmers, invalids on the farms, tenants, domestic farm help, and the much-harassed farmers' wives. ...[O]ur reports..., while showing less free use of narcotics in rural communities than formerly, do very positively show a per capita consumption of opiates in the small towns and villages adjacent to the farms where the drugs are secured from physicians or on prescription, very far in excess of the per capita consumption in the large cities.26

Morphine use in Pennsylvania, Blair later reported, was concentrated as follows: towns with populations ranging from 1,000-30,000 had the highest per capita consumption, followed by cities of 30,000-100,000, and finally by Philadelphia and Pittsburg, which had the lowest per capita consumption of all.27

The idea that the rate of opium and morphine addiction was negatively related to city size is an intriguing one, and one which runs counter to current expectations. Unfortunately data from cities outside Pennsylvania fail generally to substantiate Blair's views. In his Michigan survey, Marshall tabulated the number of opium and morphine addicts per town, together with the town's population.28
Although the survey canvassed no large cities, it did include 96 places ranging in population from 315 to 10,235. A regression of the rate of addiction (A) on town population (P) yields
\[
\hat{A} = 4.778 + 0.23949 \times 10^{-3} P
\]
\[(t = 1.13)\]
Not only is the relationship exceedingly weak \((R^2 = 0.0135)\), but the sign of the coefficient is positive. Clearly there was no pronounced negative relation between town size and the rate of addiction in Michigan.

A similar test can be performed on the clinic data in Table 2. In this case I have regressed the rate of addiction on the respective populations of 33 cities. Shreveport has been dropped, and a dummy variable (D), where South = 1, has been added, to compensate for regional differences:
\[
\hat{A} = 0.11005 - 0.1305 \times 10^{-5} P + 0.5563 D
\]
\[(t = -1.47) \quad (t = 2.1)\]
In this equation the relation between the rate of addiction and population is negative, but there remains a great deal of unexplained variance \((R^2 = 0.1869)\). In part this is due to the differing practices of individual clinics; poorly run programs undoubtedly drew fewer addicts. Even so, the relatively poor fit of the regression lines leads one to doubt the strength and consistency of Blair's postulated negative relation between the rate of addiction and city size. In sum, opium and morphine addicts seem to have been
well scattered with respect to urban and rural areas.

Class. "While all classes of people are to be found in the ranks of morphine addiction," wrote C. B. Pearson in 1918, "the better class of the native American stock seem to be the most susceptible." This remark summarizes a half century of medical testimony; there was a consensus that opium and morphine addicts were primarily of the upper and middle classes. Evidence of a statistical nature is scant, but what there is supports Pearson's view. In 1889 B. H. Hartwell asked Massachusetts pharmacists and physicians which classes of people in their community used opium or its preparations. The 446 pharmacists answered as follows: 22 percent all classes, 22 percent middle classes, 7 percent upper classes, 7 percent lower classes, and 31 percent "do not know" or some other answer. The answers of the 166 physicians were more decidedly weighted toward the upper classes: 30 percent all classes, 22 percent upper, 12 percent upper and middle, 8 percent middle, 6 percent lower, plus 22 percent "do not know" or "nervous women." While Hartwell was counting questionnaires, Virgil G. Eaton was thumbing through the prescription records of 34 Boston drug stores. He observed that a drug store with a distinctly upper-class clientele had more prescriptions containing opium or morphine (16.3 percent) than stores patronized by "poorer people" or "poor Italian laborers"
(12.0 and 10.7 percent, respectively).\textsuperscript{32} Evidently American laborers and factory operatives did not take to opium and morphine with the enthusiasm of their English counterparts.\textsuperscript{33}

In addition to strictly statistical evidence, contemporary accounts abound with allusions to addicts of refinement and position; their plight served to drive home the point that addiction was, as Charles B. Towns put it, "no respecter of persons."\textsuperscript{34} Discrete references tantalize the historian; who were the "several" Congressmen and Senators whom Washington physician D. Percy Hickling supplied with opium, or the Congressman addict who resorted to opium to bolster his "oratorical efforts?" Who was "Mrs. E.D.P. ... sister of a Governor and U.S. Senator," mentioned by pamphleteer Edward Sell as a former addict, or the brilliant and famous inventor cited by Clyde Langston Eddy?\textsuperscript{35} Letters and diaries also occasionally provide clues about the use of these drugs in prominent families. Correspondence by Jefferson Davis' female relatives reveals how commonly opium preparations were resorted to for illness, as do the diaries of Confederate aristocrats Mary Boykin Chesnut and William Pitt Ballinger.\textsuperscript{36} Henry S. Lane, a man of similar pharmaceutical habits if dissimilar political views, noted in his journal that he dosed himself with opium for the "cramp cholic" he suffered during the Mexican War.\textsuperscript{37} Of course not all opium and morphine
addicts were rich or distinguished, or even middle class; prostitutes and criminals used these drugs as well. Generally speaking, however, opium and morphine addicts were concentrated in the upper and middle classes, at least during the nineteenth century.

**Occupation.** Among female addicts the most common occupation was that of housewife. The majority of female addicts were married and therefore stayed at home. Unmarried female addicts were observed among domestics, actresses, and prostitutes. 38 Another type, mentioned as early as 1832, was the harried society lady, who downed opium or morphine to steady her nerve and enhance her wit. 39 Women associated with the medical profession, nurses and doctors' wives, also suffered an unusually high rate of addiction. 40

Among male addicts the leading occupation was unquestionably that of physician; sources differ only over how large a percentage of the medical profession was actually addicted. The most widely quoted estimate was that of T. D. Crothers. Based on a study of 3,244 physicians, he concluded that "from six to ten percent. [of the physicians] in this country are opium inebriates." 41 T. J. Happel thought the figure even higher. "I find, he wrote in 1900, "in a list of the names of one hundred and fourteen physicians ... eighteen who became addicted to morphine -- nearly 16 percent..." 42 In 1913 B. C. Keister announced to
a startled audience of addiction specialists that fully 23 percent of the medical profession were "victims of the morphine habit." Asylum records, although they cannot be used to establish an exact percentage, on the whole lend support to these allegations.

Country doctors, due to their especially arduous routine, were said to have made up a disproportionate share of physician addicts. No stratum of the profession was exempt, however; cases of physician addicts as eminent as William S. Halsted, pioneering surgeon and professor at Johns Hopkins, have been documented. Members of the allied health professions, notably dentists and pharmacists, also suffered a high incidence of addiction.

"Brain workers" or "professional men" were other occupational categories frequently mentioned in connection with opium and morphine addiction. Data on white collar addiction is sketchy, however. Businessmen, lawyers, clerks, clergymen, and the like are mentioned in surveys, but in such a way that it is impossible to tell precisely how many of their number were addicted. Similarly, it is difficult to test assertions that active farmers, skilled, and semi-skilled workers had relatively low rates of addiction.

Summary: A Modal Addict Type. In Harper Lee's novel, To Kill a Mockingbird, there is a character, Mrs. Henry Lafayette Dubose, who is a morphine addict. Mrs. Dubose,
a propertied and cantankerous widow, resides in a small Alabama town, Maycomb. She has been addicted for years as a consequence of a chronic, painful condition. Informed that she has only a short while to live, she struggles to quit the drug, for she is determined to "leave this world beholden to nothing and nobody."51

I mention Mrs. Dubose here because, although fictitious, she personifies the late nineteenth - early twentieth century American opium and morphine addict. If all of the foregoing statistics were condensed into a single, modal type, it would closely resemble Mrs. Dubose: a native Southerner, possessed of servant and property, once married, now widowed and homebound, who has evidently been addicted since late middle age. In all respects -- her sex, age of addiction, race, nationality, region, class, and occupation (or lack thereof) -- she is typical. Typical, too, is the origin of Mrs. Dubose's condition: she was addicted by her physician.

Medical Administration of Opium and Morphine

The administration of opium and morphine by physicians to their patients was the leading cause of addiction in the nineteenth century, and the principal reason opium and morphine addiction assumed the pattern just described. Estimates of the number of opium and morphine addicts who
could trace their plight back to their doctor ranged from a simple majority to "ninety-nine ... out of a hundred." The problem became particularly acute with the spread of hypodermic medication during the 1860s and 1870s, when morphine injection became a virtual panacea. In spite of repeated warnings, therapeutically engendered morphine addiction remained a serious problem until the early twentieth century, when the American medical profession largely abandoned the liberal use of opium and morphine.

Before tracing in detail the course of iatrogenic, or therapeutically induced, addiction, it is necessary to qualify one term, "physician." When I speak of physicians causing addiction, I mean to refer to regular practitioners or "allopaths." Sectarian practitioners, thanks to their distinctive therapeutic regimens, seldom addicted anyone. Thomsonians denounced the use of opium; their successors, the eclectics, used it, but with circumspection; the homeopaths believed that opiates, as all drugs, should be administered only in miniscule amounts. Hydropathy, osteopathy, chiropractic, and Christian Science all advocated drugless therapy. Regular practitioners, on the other hand, made free use of drugs, including opium and morphine, throughout the period. It is on the regulars, therefore, that attention should focus.

The therapeutic use of opium was passed down to the American physician as an ancient and honorable practice,
sanctioned by the greatest medical authorities. The drug had been employed by figures no less illustrious than Galen (A.D. 130-201), Paracelsus (1493-1541), Francis de le Boé (1614-1675), Thomas Sydenham (1624-1689), Herman Boerhaave (1668-1738), and John Brown (1735-1788).\(^5\) The basis for opium's lasting popularity was not its curative power, but rather its superb analgesic properties.\(^6\) No other naturally occurring drug can match it as an anodyne, a fact recognized by even the most skeptical contemporaries. When Oliver Wendell Holmes, Sr., made his famous remark, "... I firmly believe that if the whole materia medica, as now used, could be sunk to the bottom of the sea, it would be all the better for mankind, -- and all the worse for the fishes," he specifically exempted opium, a medicine "which the Creator himself seems to prescribe."\(^7\)

The therapeutic use of opium was common in Colonial America,\(^8\) although it is impossible to venture even a guess as to the amount consumed. The drug was given to dull surgical pain, combat pleurisy, intermittent fevers, asthma, and probably a good deal more; both the British and American armies made use of it during the Revolutionary War.\(^9\) There are several documented cases of "opium eaters" whose addiction dated from the eighteenth century.\(^10\) One of these, James Hurlbut (1717-1794), was in all probability the first American physician addict:
He would not prescribe or even look at a patient in the last years of his life, till the full bottle [of spirits] was placed in his entire control, and daily replenished; it was his practice to take very frequently small potations, and at the same time swallow enormous quantities of opium. For many of his last years all the avails of his medical practice were expended in the purchase of this one drug; his spirits he obtained from his employers, which was a heavy tax, and he probably took as much opium as the most devoted Turk.63

Contemporaries, however, did not believe that such behavior was widespread. In 1803 Daniel Wilson published a letter from Benjamin Rush stating that he, Rush, had been acquainted with only 3 such cases during the last 10 years.64

Opium addiction did not remain a relative curiosity for long. Use of the drug continued unabated until, in 1834, The Dispensatory of the United States reported that it was "at present more frequently prescribed than perhaps any other article in the Materia Medica."65 Opium's continued popularity was due in part to the Brunonian cast of American medicine in the early nineteenth century.66 The influential Scottish physician John Brown held that diseases were of two types: sthenic, resulting from too much stimuli, and asthenic, resulting from too little. The latter could be cured by administering stimulants, notably opium and alcohol, to restore the body to its proper level of excitability.67 Admittedly, not all American physicians held with Brown that opium was a stimulant. Valentine Seaman, for one, argued in his inaugural dissertation that
opium was a sedative. But, stimulant or no, most American physicians shared Brown's enthusiasm for the drug; lists of indications for it in treatises on therapeutics and materia medica ran to several pages.

Opium's principal alkaloid, morphine, was also employed after the method for its isolation was published in 1817. Morphine crystals had definite advantages; they were pure and of consistent potency, qualities imported opium often lacked. Nevertheless morphine did not supplant opium as the therapeutic opiate of choice until the spread of hypodermic medication during and after the 1860s. Not only did morphine cost more, but, as one student shrewdly observed, doctors "never ... abandon an article whose virtues are known, and universally acknowledged, for one not yet proved, but just introduced."

The frequency with which the medical profession resorted to opium did not go uncriticized. Writers began to speak of the "injudicious use" of the drug. Prior to 1830 most of the literature on the drug dealt with opium poisoning and its treatment; after that date one finds increasing cases of and references to addiction. This newfound concern is certainly consistent with the precipitous rise in opium imports after 1843 -- although, as noted earlier, tariff policy and Chinese immigration had something to do with this increase. Nevertheless it is likely that, even though it may not have spread as rapidly
as a casual appraisal of import statistics would suggest, iatrogenic opium and morphine addiction was a steadily growing problem during the first 60 years of the nineteenth century.

Problem became crisis during and after the 1860s. Two events, the Civil War and the spread of hypodermic medication, triggered a massive increase in iatrogenic opium and especially morphine addiction. For simplicity I will consider here only hypodermic medication, as practiced by civilian doctors upon civilian patients; the impact of the Civil War, a subject about which there is some controversy, will be discussed later.

Like any other new device the hypodermic syringe, first brought to America in 1856, was greeted with skepticism. But the writings of Antoine Ruppaner, Roberts Bartholow, and others, plus the first hand experience of some physicians with it during the Civil War, helped persuade the profession of the value of the instrument. The percentage of American physicians who practiced hypodermic medication grew dramatically during the 1870s; by 1881 H. H. Kane could report that virtually every American physician possessed the instrument.

The hypodermic syringe was developed for the purpose of injecting morphine, and this proved to be by far its most popular use during the nineteenth century. Morphine injected hypodermically produces stronger analgesic and
euphoric effects than opium administered orally or rectally, and it produces them much more quickly. The following passage, from the casebook of surgeon Charles Schuppert, conveys vividly the strength and rapidity with which an injection of morphine works. Dr. Schuppert has just been called upon to treat an Irishman wounded in a barroom fray:

I was immediately summoned and on my arrival ... found him [the Irishman] in a deep stupor from the effects of liquor and bleeding profusely. I gave him an injection of morphine subcutaneously of ½ grain, this acted like a charm, as he came to in a minute from the stupor he was in and rested very easy.80

Although effective in the short run, such treatment enhanced the likelihood of addiction in several ways. First, the patient, instantly reinforced by the relief of pain and infused with a sense of well-being, would have remembered the wonderful effect of the drug administered in this way and would likely have requested or sought out the same treatment in the future, particularly if he suffered from a chronic disease, and experienced recurring pain.81 The physician, for his part, was also reinforced by the injection. The patient responded quickly; pain disappeared and mood improved. Praise was effusive and patronage continued. More important still was the sense -- which must have been precious for the frustrated nineteenth century physician -- that he could at last do something for for the patient; for the first time in the entire history of medicine near-instantaneous, symptomatic relief for a
wide range of diseases was possible. A syringe of morphine was, in a very real sense, a magic wand. Though it could cure little, it could relieve anything; doctors and patients alike were tempted to overuse. 82

I do not mean to imply, however, that all patients who received morphine injections subsequently became addicted. Why some succumbed and others did not is an interesting and potentially controversial question. Rather than postulate personality defects in those who became addicts, as some authors do, I propose that the circumstances of administration plus the nature of the patient's illness were the most important factors in determining who became addicted. In order to become addicted to an opiate, one must first become physically dependent, that is, experience withdrawal symptoms if the drug is discontinued. In order to become physically dependent, one must consume the drug continuously over a period of time, say, 10 to 14 days. 83 Ideally, then, to avoid iatrogenic addiction, measures should be taken to insure that opiates are administered as infrequently as possible, lest physical dependence develop. 84 Nineteenth century physicians seldom achieved this ideal. If they did not by repeated administration addict the patient themselves, they often made addiction possible by leaving morphine and syringe with the patient or the patient's family, with instructions to use as needed for pain. 85 Nothing prevented the patient from increasing the
frequency and amount of the dose on his own initiative. Another practice which heightened the risk of addiction was mentioning the name of the pleasing anodyne the patient was receiving. This information was dangerous for several reasons. First, if dependence resulted, addiction might still have been avoided if the patient was unaware that his withdrawal stress was due to the absence of morphine, and thought his discomfort but a sequel to his illness; but if the physician failed to disguise the medication, and the patient learned that he could alleviate withdrawal distress simply by continuing the morphine, addiction was bound to occur. Another danger, particularly acute in the nineteenth century, when morphine and other opiates were freely available, was that the patient, if he knew what he was taking, could supplement the prescribed dose, or continue to consume the drug after the physician ceased prescribing it. These risks were compounded if the patient suffered from a chronic disease. Physical dependence will soon develop if, as soon as an injection wears off, symptoms recur and the patient's doctor or the patient himself immediately administers more.

Case histories, clinical notes, and remarks in the medical literature support the claim that, although opium and, increasingly after 1860, morphine were given for practically everything (even for such exotic disorders as photophobia, nymphomania, and "violent hiccough"), it
was principally in those suffering from chronic ailments that these drugs led to addiction. Those afflicted with neuralgia\textsuperscript{90} seemed especially prone to addiction, as morphine was commonly employed to treat neuralgic attacks.\textsuperscript{91} Another common recurring nervous disorder, headache, was also treated with opium and morphine.\textsuperscript{92} Women suffering from "female complaints," particularly dysmenorrhea, were similarly dosed. "Uterine and ovarian complications," wrote one author, "cause more ladies to fall into the habit, than all other diseases combined..."\textsuperscript{93} Alcoholics seeking relief from hangover or delerium tremens often became addicted.\textsuperscript{94} Patients suffering from chronic respiratory disorders (asthma, bronchitis, tuberculosis) or infectious diseases of long duration, especially chronic diarrheas, dysentery, malaria, or syphilis, were also likely candidates.\textsuperscript{95} Other addicts had histories of rheumatism.\textsuperscript{96} Postoperative syndromes, such as neurona, took their toll.\textsuperscript{97} Finally, it was often mentioned that insomnia, anxiety, and fatigue resulting from overwork could, if treated with opium or morphine, easily lead to addiction.\textsuperscript{98}

The fact that the overwhelming majority of opium and morphine addicts suffered from one or more of the aforementioned conditions\textsuperscript{99} goes far in explaining why certain groups had such a high incidence of addiction. The higher rate of women derives, in part, from the prevalence of dysmenorrhea and other female disorders, plus the habit of
middle and upper class females complaining of (or of being diagnosed by male doctors as suffering from) "diseases of a nervous character." The onset of opium and morphine addiction in middle age or later is also attributable to the nature of these disorders; it is unlikely that there were too many patients under the age of 25 suffering from rheumatism, delerium tremens, chronic headache, bronchitis, and the like. Blacks, for their part, had a relatively low rate of addiction, not because they did not suffer from any of these diseases, but because they lacked access to doctors. Postbellum Southern blacks' lack of professional medical care, while it did nothing to improve their appalling mortality rate, at least spared them the risk of iatrogenic opium and morphine addiction. Southern whites, on the other hand, did have access to drug-dispensing physicians and, of equal importance, were often afflicted with malarial and diarrheal diseases. The presence of these endemic diseases, together with the lingering trauma, physical and psychological, of the Civil War, insured that the South would suffer a higher rate of addiction. Northern immigrants, by contrast, numbered fewer candidates for addiction. Lack of funds for professional medical care undoubtedly played a role; the weeding of the weak and chronically ill by the Atlantic passage may also have been a factor. Finally, the widespread use of opium and morphine as tranquilizing and somniferous agents helps
explain why so many physicians and other health professionals became addicted. Long and irregular hours, stiff competition, and constant pressure from impatient patients sorely tempted the physician to treat his headache or insomnia with opium or especially morphine, a drug which he knew to be quick, effective, and readily available. As many as 12,000 physicians became addicted in this way, a professional pandemic which struck some as a kind of ironic justice.

The creation of addicts through the hypodermic administration (or self-administration) of morphine for stress or chronic illness continued unabated until the late 1890s. This prolonged, excessive use of morphine is made all the more remarkable by the fact that, beginning in 1870 and continuing through the 1880s and 1890s, warnings about the possibility of iatrogenic morphine addiction appeared in numerous books, journal articles, and published speeches. The reader was cautioned, often sharply, that the drug should be used sparingly, avoided in chronic cases (except terminal), disguised if possible, never refilled without his permission, and, above all, that the patient should never be left with a syringe and a supply of morphine with instructions for self-medication. These animadversions were reinforced by a growing body of European addiction literature, in which English, French, and German doctors decried similar abuses in their countries. Why then, in
spite of numerous warnings, did American physicians persist in creating addicts?

Critics of the profession charged that a major source of continued abuse was inadequate medical education. Not only was the graduate of a typical proprietary school ill-informed about the danger of the repeated administration of opiates, but his general lack of diagnostic skills tempted him to fall back on blind, symptomatic treatment, i.e., morphine.\textsuperscript{110} In epidemiologic terms, the ignorant, hypodermic-wielding physicians churned out of diploma mills were like the "carriers" of a communicable disease; though not necessarily addicts themselves, they succeeded in transmitting addiction to many patients with whom they came in contact. Thus the number of addicts in a given place hinged, in part, on the competence of the local practitioner -- a fact which helps explain the apparently random distribution of addicts in the Michigan towns.\textsuperscript{111} In addition to incompetence, the greed of unscrupulous physicians was also cited as a reason for continued abuse:

A physician is called for the first time to a well-to-do home. A practice might be secured which would be valuable if he can only show his ability, and he does -- there is not very much pain in the prick of a needle, and the result is so quick, so calming -- wonderful man, -- the patient begins to improve at once.\textsuperscript{112}

The upper class background of many addicts is certainly consistent with the allegation that some physicians courted the wealthy client with a little morphine. Finally, it was
charged that physicians were routinely offered 10 to 20 percent kickbacks from "quack cure joints" for referring addicted patients. The utterly unscrupulous practitioner could realize a handsome profit by addicting patients, and then sending them trekking from one asylum to another -- asylums with which he had an "arrangement."

To the vast majority of physicians, of course, such practices were unthinkable. In fairness, too, it should be pointed out that there were formidable pressures acting on the individual physician to disregard the warnings and proceed as before. Simple distance, for one, rather than laziness or incompetence, prompted many doctors to leave opium or morphine with the patient. Before the automotive age it was practically impossible, especially in the countryside, for the physician to administer every dose himself, as the learned journals now admonished. Moreover doctors were often under tremendous pressure from patients and their families to continue the treatment indefinitely; it felt good, it relieved the pain. "Most impatiently did she await the injection," wrote one physician of a neuralgic female, "... always exclaiming, as I entered -- 'Oh doctor, shoot me quick!'" Complicating matters further was the doctor's knowledge that, if he did not "shoot quick," a competitor would, thereby gaining a patient. Or the patient might simply persuade a druggist to refill the prescription without the physician's
knowledge. Nineteenth century pharmacists were notorious for their willingness to supply a user; opium and morphine were their bread and butter, and there is no steadier customer than an addict. "There are druggists in Houston, now," complained N. J. Phenix in 1896, "making a living selling narcotics." 117 Confessed a New York apothecary, "If it were not for this stuff [morphine] and my soda-water I might as well shut up shop," 118 The efforts of even the most conscientious physicians to check repeated administration were thus undermined.

It was not until approximately 1895-1905 that physicians managed to slow and then reverse altogether the growth of iatrogenic morphine addiction. Underlying the profession's volte face was the growing acceptance after 1895 119 of the germ theory of disease, an event which had several important and interrelated consequences. Public health measures based on the new bacteriology dramatically reduced the prevalence of gastrointestinal diseases, such as dysentery, for which opium and morphine were freely given. 120 Vaccination, as against typhoid fever (1896), or chemotherapy, as against syphilis (1909), provided obvious and effective alternatives to opium and morphine for some diseases. Moreover the achievement of greater diagnostic precision, made possible in part by the discovery and classification of pathogenic microorganisms, in part by the development of new techniques, such as x-radiation, brought about a diminution in
the need for purely symptomatic treatment. In the event symptomatic treatment was still indicated, however, particularly in chronic cases, a host of new -- and less dangerous -- anodynes were available. The introduction of the so-called minor-analgesics, the salicylates and aniline and pyrazolone derivatives, constitutes the second major factor in the decline of iatrogenic opium and morphine addiction. Although originally introduced for the purpose of reducing fever, the pain-relieving qualities of these "antipyretics" soon became apparent, and in 1889 J. F. A. Adams published an important article in the *Boston Medical and Surgical Journal* urging their wholesale substitution for opiates.\(^{121}\) A decade later Adams' proposal, which had already won a number of adherents,\(^{122}\) received an important impetus with the accidental discovery of the analgesic properties of aspirin. The introduction of this common household drug, highly effective against head, muscle, and joint aches, undoubtedly saved thousands of persons from becoming addicted to opium or morphine.

Reinforcing the growth of narcotic conservatism brought about by bacteriological advances and the availability of safer analgesics were the stern injunctions against the liberal use of morphine issued by a new generation of professors and textbook writers. Warnings which had previously been confined largely to medical journals began, in the 1890s, to percolate into medical curricula. This
development is neatly illustrated by the conflicting advice offered by two famous American gynecologists, William H. Byford, and his son, Henry T. Byford. In his 1865 text, The Practice of Medicine and Surgery Applied to the Diseases Incident to Women, the elder Byford counseled the use of opium in dysmenorrhea as part of an "energetic palliative treatment" — standard practice for the time. However in the 1898 American Text-Book of Gynecology, coauthored by the younger Byford, this course was condemned in the strongest possible terms: "He who is compelled to resort frequently to opium and stimulants [in dysmenorrhea], must be considered devoid in diagnostic ability, and consequently ought not to be entrusted with the management of such cases." Similar sentiments were expressed by neurologist W. J. Herdman. "I have not failed in my attempt," he remarked in 1902, "to impress on the minds of my students how unwise is the indiscriminate use of these powerful drugs." Other commentators directed their message to the practicing physician, emphasizing that the best doctors were the most sparing in their use of opiates. Still others pressed, with some success, for legislation aimed at restricting the availability of narcotics. During 1895-1915 most states and some localities passed laws limiting the sale of narcotics (usually defined as cocaine and the opiates) to those possessing a valid prescription. Although these laws were unevenly and often inadequately
enforced, their net effect could only have been to reduce the number of unauthorized refills.\textsuperscript{128}

By 1910, then, a reform movement generated within the medical profession was well on its way to eradicating iatrogenic addiction. Opium and morphine had fallen into such disfavor that some thoughtful physicians began to worry that they might be withheld in even the most dire cases. "[T]he present generation has been so thoroughly warned, both by teaching at college and by observation," wrote New Hampshire physician Oscar C. Young, "that now they are in many instances so very afraid to give it, even for the worst pain, that the patient suffers agonies worse than any hell for want of one-eighth of a grain of morphine."\textsuperscript{129} On the other hand, it is undoubtedly true that a few physicians, out of ignorance, expedience, or cupidity, continued to rely on the syringe. Nevertheless, the overall effect of the profession's newfound narcotic conservatism was a reduction in the number of opium and morphine addicts; old addicts died off faster than new ones were created.\textsuperscript{130} This is the principal reason that imports of medicinal opiates, the most sensitive barometer of iatrogenic addiction, declined in both per capita and absolute terms during the first decade of the twentieth century.\textsuperscript{131}
Impact of the Civil War

Traditional explanations of the increase in opium and morphine addiction have focused not so much on the civilian practitioner, as on his military counterpart. During the Civil War sick and wounded soldiers, liberally injected with morphine, frequently became addicted, as did many veterans who, in the course of treatment for war-related injuries, were also given opiates. Proponents of this view often refer to the fact that during the nineteenth century morphine addiction earned the sobriquet "the army disease."\textsuperscript{132}

There are, however, a number of obvious problems with this theory. In the first place, the majority of nineteenth century opium and morphine addicts were women. If the Civil War was such an important factor, why should the Michigan (1878), Chicago (1880), and Iowa (1885) surveys have reported so many female addicts? In the second place, there is reason to doubt that the hypodermic injection of morphine, the technique most likely to produce addiction, was common during the war. Hypodermic medication was still in its infancy; few American physicians possessed the syringe in 1860; and it appears that the instrument was not issued in quantity by either medical department.\textsuperscript{133} Those army doctors who happened to have access to a syringe no doubt used it freely; they were, however, decidedly in the minority. For these and other reasons recent
scholarship has downplayed the significance of the war; one writer, Mark A. Quinones, has gone so far as to label it a mere "scapegoat" on which the spread of addiction was subsequently blamed.134

While it is true that the explosive growth of morphine addiction during the years 1865-1895 was more than a simple epidemic of "the army disease," critics like Quinones, in dismissing the war as a "scapegoat," have seriously overstated their case. Although morphine injection may have been relatively rare, the oral administration of opium was not; massive quantities of the drug were given to soldiers in circumstances likely to lead to addiction. Nearly 10,000,000 opium pills and over 2,841,000 ounces of other opium powders and tinctures were issued to Union forces alone. Victims of the common camp diseases, diarrhea, dysentery, and malaria, were routinely dosed with opium, as were those recuperating from battlefield wounds. When these diseases and injuries developed into chronic conditions — which was often — the likelihood of physical dependence forming was high. Even if a disabled soldier survived the war without becoming addicted, there was a good chance he would later meet up with a hypodermic-wielding physician. That was precisely what happened to the anonymous Yankee author of *Opium Eating: An Autobiographical Sketch by an Habituate* (1876).135 As a consequence of deprivations suffered at Andersonville and other prisons, the young soldier developed constant headache
and racking stomach pains. After discharge his doctor treated him with injections of morphine, to which he became addicted. His experience was repeated by J. M. Richards, an ex-army surgeon, who began taking morphine in 1867 to combat chronic diarrhea. Over 63,000 veterans were plagued with this debilitating disease; given what is known about the medical practice of the day, it seems likely that a substantial portion of them eventually became addicted to opium or morphine. (Precisely how many is impossible to estimate; addicted veterans went to great length to conceal their condition, for fear of losing their pensions). Thus the awful pathological aftermath of the war, of which lingering intestinal disease was but one manifestation, created a vast potential pool of addicts. The war's greatest impact would have been felt during 1861-1900; after that time veterans, addicted or otherwise, would have been fast succumbing to old age -- a demographic fact which dovetails nicely with the post-1900 drop in opium and morphine consumption.

Self-dosage with Medicines Containing Opium and Morphine

The third factor in the spread of addiction was self-dosage with medicines containing opium and morphine. In some instances this meant the outright purchase, on a friend's advice and without a doctor's prescription, of some official
preparation of opium, such as paregoric. But the more common pattern involved the unwitting consumption of opium or morphine in the form of a patent or proprietary medicine, purchased from a druggist, mountebank, or mail-order house.

"Patent" medicines (the term is a misnomer, for most patent medicines bore no patent at all) were secret formulae marketed, usually with the most extravagant claims, by entrepreneurs seeking to capitalize on real or imagined ills. Although these concoctions could contain virtually anything, opium and morphine, with their ability to alleviate a wide range of symptoms, were particularly attractive as ingredients. The career of "Scotch Oats Essence" is illustrative. One day the proprietor of this remedy, a young man with an eye on the main chance, asked his physician, in an offhand manner, how he would prepare a successful patent medicine. "Oh, well," replied his physician, "make the basis whisky; put in some opiate; disguise the whole with a bitter tincture; get high-sounding testimonials or endorsements [sic], and especially give it an attractive, 'taking' name. Then extensively advertise it from 'Dan to Beersheeba' and the thing is done." The young man, evidently impressed with the simplicity of the scheme, did precisely that. Scotch Oats Essence enjoyed a successful, if devastating, career as a nerve tonic, until someone analyzed the solution and announced that it contained morphine. "As
a result the sales fell off, insolvency and financial ruin followed. Then the proprietor drank himself to death, mortified at his failure and public exposure."143 Ruin following exposure was a fate common to many narcotic nostrums, a point to which I will return later.

The exact percentage of opium and morphine addicts who owed their plight to narcotic patent medicines is impossible to estimate; it is certain, however, that they were in the minority. Careful studies of addicts in sanitaria (1911) and the Jacksonville maintenance program (1913) establish that prescription by physicians, rather than self-medication, was a far more important etiological factor.144 Another clue lies in the social background of opium and morphine addicts. Patent medicines were used principally by poorer people.145 Yet the majority of addicts were middle or upper class, i.e., those people who could afford physicians. One inference is that direct administration by a physician was more likely to lead to addiction than disguised consumption in the form of a patent medicine. This conclusion may seem counterintuitive; morphine by any other name is, after all, still morphine. The difference is that the farmer who nursed a bottle of Scotch Oats Essence was blissfully unaware of its habit-forming potential; if physical dependence occurred, and withdrawal symptoms ensued, he still might have escaped addiction by attributing his sickness to something other than the discontinuation of the medicine.
If, on the other hand, he, like most doctors' patients, discovered that he had become dependent on morphine, and that he could forestall withdrawal symptoms simply by consuming more of the drug, then he was sure to become addicted. Hence the very secrecy which surrounded the nostrum served, in at least some instances, to prevent addiction to it.

There are other reasons why narcotic patent medicines did not spawn as many new addicts as physicians, involving the purposes for which these products were advertised. First, there was a class of opiate-laced nostrums, known as soothing sirups [sic], which were promoted as infant pacifiers. Bawling babies were regularly stupefied into silence by impatient mothers or nurses who resorted to these sirups, as well as other opium preparations. "Paregoric by the bottle / emptied down the baby's throttle," ran an old but true ballad. Naturally if the infant survived this regimen (and thousands did not) dependence was bound to form. But, again, dependence was unlikely to develop into full-blown addiction, for the child could not comprehend the nature of the withdrawal distress it experienced when the drug was discontinued. The second special class of narcotic patent medicines consists of the numerous habit cures. These nostrums, labeled "Opacura," "Denarco," and the like, were the most outrageous frauds; invariably they contained the drug from which they promised freedom.
person who set aside the syringe to take up the "cure" was simply maintaining his habit in a different -- and more expensive -- way. However, as reprehensible as these products were, they at least did not create new addicts; only persons who were already addicted would be tempted to buy them. So, in the special cases of infants' soothing sirups and habit cures, narcotic patent medicines cannot be held responsible for the spread of opium and morphine addiction. It was instead those nostrums which purported to cure some specific, chronic disease (e.g., "Prof. Hoff's Consumption Cure," containing opium) which were likely to have contributed to the problem.

After 1906 the narcotic patent medicine situation, as I have described it, was drastically altered by Federal legislation. The Pure Food and Drug Act's provision that medicine packages and labels state any narcotic content destroyed the market for habit cures and reduced the demand for other opium and morphine products. "The average sufferer," as one chemist put it, "... took alarm at the names of these familiar poisons on his medicine bottle, and feared to use the medicine." Consequently opium and morphine were dropped from many proprietary formulae. Other patent medicines retained their narcotic contents, but only at the risk of being shunned by the increasingly chary buyer. Thus unwitting addiction via patent medicines, a factor of limited importance before 1906, declined even further with the passage of the Pure Food and Drug Act.
The Use of Opium and Morphine for Non-therapeutic Purposes

The etiological factors examined thus far, physicians' administration, the Civil War, and self-dosage, have all been of a therapeutic nature: the addiction process commenced with the treatment or self-treatment of some injury or disease. Some addicts, however, began their careers in an entirely different way. They turned to opium and morphine either as a stimulus to imagination, or as a substitute for alcohol, or even as a primitive form of birth control.

The use of opium as a stimulus to imagination is closely tied to the writings of Thomas De Quincey, whose popular Confessions of an English Opium Eater first appeared, in serial form, in 1821. Although the Confessions touches on many subjects, the passages contemporaries found most intriguing were those which dealt with De Quincey's fantastic opium dreams. As Althea Hayter, a leading De Quincey scholar, has pointed out, these dreams were more a product of the author's own extraordinary imagination than the drug itself; nevertheless, it was an easy step for the reader to conclude that he too might journey through fantastic inner realms if only he downed a little opium.

Translating De Quincey's influence into a precise number of opium and morphine addicts is, again, impossible. At best one can only attempt to assess the relative importance of the different etiological factors. Although
there is some evidence that the Confessions induced a few literati to dabble in opium, it is doubtful that its overall impact, especially in comparison with iatrogenic addiction, was great. In the first place, aside from the spin-off confessions of the few literati who mimicked De Quincey, it is extremely difficult to find documented cases of Americans whose addiction stemmed from a reading of the Confessions.\textsuperscript{155} It is true that nineteenth century addiction literature contains a number of pointed references to De Quincey; but these remarks are better understood as pro forma warnings to the unwary than as actual evidence of the extent of his influence. It was almost a literary convention among addiction writers to denounce the famous English opium eater, even though the thrust of their etiological analysis was elsewhere.\textsuperscript{156}

A more likely non-therapeutic route to addiction, at least in America, was the use of opium or morphine by women as a substitute for alcohol. Throughout the nineteenth century it was considered unseemly, by both males and temperance-minded females, for women to drink. But there was a powerful temptation, particularly for women of high social station, caught up in the social swirl, or for women stranded in rural areas, thoroughly bored with their lot, or for seamans' wives, separated for long periods from their husbands, to resort to some euphoric agent.\textsuperscript{157} Opium and morphine, drugs which, at least in the initial stages of
their use, produce euphoria,\textsuperscript{158} suited these purposes well.

The euphoric properties of opiates were not lost on another important female addict group, the prostitutes. Life in the cribs, entertaining a succession of grunting, sweating males, must have been emotionally devastating; opiates offered an attractive, if temporary, escape. Moreover the regular use of opiates conferred an important physiological benefit: the disruption or total cessation of menstruation.\textsuperscript{159} An amenorrheal prostitute obviously did not have to contend with either the risk of pregnancy or enforced "time off" for her monthly period. (Some ladies of refinement, also anxious to conduct their affairs without risk of pregnancy, evidently acquired this contraceptive practice from their sisters in the demimonde.\textsuperscript{160}) So it is not surprising that the prostitute addict figured in several studies, especially those involving urban areas.\textsuperscript{161} The particular opiate used, however, varied from time to time and place to place. During 1870-1900 smoking opium made considerable inroads on morphine as the drug of choice among prostitutes and their underworld companions. Then, during 1900-1920, there was a switch back to morphine or, in some places, to its new derivative, heroin. The reasons for these changing preferences will be explored later; suffice it for now to say that the number of opium and morphine using prostitutes -- never the dominant addict type -- fluctuated throughout the nineteenth century.
Conclusion

Although there was always an undercurrent of non-therapeutic use, the predominant pattern of opium and morphine addiction was iatrogenic. But as doctors put aside these drugs in favor of new and safer analgesics and superior therapeutic agents and techniques, and as narcotic patent medicines were subjected to adverse legislation, the likelihood of chronic disease or injury leading to addiction diminished sharply. After 1900 aging opium and morphine addicts, including veterans who had become addicted during or after the Civil War, were dying off faster than new addicts were being created. One important consequence of this trend was that the more disreputable types of users, such as opium smokers and heroin sniffers, came to occupy a progressively larger share of the total addict population. The transformation of the American opiate addict had begun.
NOTES TO CHAPTER 2


2 Marshall, 67; Earle, "Statistical," 442-443; and Hull, 539. I concur with Terry and Pellens, Opium Problem, 17 n. 10, that the phrase "129 females" on p. 539 of Hull's report is a typographical error, and should read "149 females," in order to be arithmetically correct.

3 Marshall, 66.


5 Terry and Pellens, Opium Problem, 25. (The figure "58.9%" given on p. 471 is evidently a typographical error and should read "57.9%." For a breakdown of the types of opiates used, see Charles E. Terry, "Habit Forming Drugs," City of Jacksonville, Florida. Annual Report of the Board of Health for the Year 1913, 57.

6 Brown, "Enforcement," 327.


8 H. H. Drysdale, "Some of the Effects of the Harrison Anti-Narcotic Law in Cleveland. (Analysis of Cases of Drug Addiction Treated in the Cleveland City Hospital)," Cleveland Medical Journal, 14 (1915), 354-357.


10 Kolb and DuMez, 1187-1188. For an account of one addict's odyssey from Oregon to Shreveport, see Sidney Howard, "The Inside Story of Dope in this Country," Hearst's International, 43 (June, 1923), 118-119. The real question, as yet unanswered, is what percentage of native Shreveport morphine addicts were male?
11. Massachusetts' Special Commission to Investigate the Extent of the Use of Habit-Forming Drugs, 10, and Joseph McIver and George E. Price, "Drug Addiction: Analysis of One Hundred and Forty-Seven Cases at the Philadelphia General Hospital," JAMA, 66 (1916), 477, also indicate a majority of male addicts. Unfortunately their sample included heroin, cocaine, and "combination" users, and the sex of those addicted strictly to morphine is not clear from context. Kolb and Duñez, 1186, state that "[t]he percentage of females among 2,455 [out of 4,123] cases at the clinics was 44.25...." This low figure may be due to the inclusion of the New York City clinic patients, many of whom were male heroin users, in the sample. Another resume' of the clinic data, "Survey of Drug Addicts," JAMA, 75 (1920), 1655, stated that, of "several thousand" addicts registered, women slightly outnumbered men. The possibility of an emerging majority of male morphine users in 1915-1923 will be discussed further in Chapter 4.


13. Brown, "Enforcement," 327. See also Table IV, 328. Note that 98.31 percent of the Tennessee addicts used some form of opium or morphine.

14. Willis P. Butler, "How One American City is Meeting the Public Health Problem of Narcotic Drug Addiction," American Medicine, 28 (1922), 158, gives the average age of his Shreveport patients as 41 years and their average length of addiction as 13 years, while the 26 addicts listed by Drysdale, 354-357, as using morphine exclusively averaged in age 38 years 3 months, with an average length of addiction of 8 years 2 months (24 cases). Alonzo Calkins, Opium and the Opium Appetite (Philadelphia: J. B. Lippincott & Co., 1871), 164, stated that the "medium period" [median?] was 30 to 35 years. Other writers, rather than compute an average, sorted opium and morphine addicts into age brackets. The age distributions recorded in Earle, "Statistical," 443; Hull, 539; Eli E. Josselyn, "An Analysis of Twelve Cases of the Morphia Habit," Medical Register, 1 (1887), 195; and "Drug Addicts in the South," 147, all support the view of opium and morphine addiction as a condition of middle age. Also of interest are the frequency polygons in W. A. Bloedorn, "Studies of Drug Addiction," U.S. Naval Medical Bulletin, 11 (1917), 313-314, especially Chart No. 7.


17 Waldorf, et al., 28.

18 Brown, 330.

19 Earle, "Statistical," 443. The author states that 12 of 235 addicts (5.1 percent) were "colored." According to the 1880 census only 6,480 of 503,185 Chicagoans (1.3 percent) were colored. This disproportion is probably related to the large number of prostitutes (56 or 23.8 percent) in Earle's sample -- larger, in fact, than any comparable study. We know that in 1872 in St. Louis 16.2 percent of all prostitutes were "colored," even though coloreds made up only 7.1 percent of the population. (Philip D. Jordan, Frontier Law and Order: Ten Essays [Lincoln: University of Nebraska Press, 1970], 137; 1870 census.) Assuming that blacks also made up a disproportionate share of prostitutes in Chicago in 1880, and bearing in mind that Earle's sample contained an unusually large number of prostitutes, then the relatively high addiction rate for Chicago blacks becomes more understandable. Note that the large number of prostitutes, black or otherwise, also helps explain why Earle reported a very high percentage (71.9) of females.

20 Earle, "Statistical," 443; 1880 census. In arriving at these figures I have counted Earle's 12 coloreds as Americans.

21 Josselyn, 195.

22 Drysdale, 354-357. Of 26 straight morphine addicts, only 5 (19.2 percent) were evidently foreign; 2 "Hebrew," 1 Finnish, 1 "Scotch," and 1 German. Foreign-born whites, by contrast, made up fully 34.9 percent of Cleveland's population in 1910.


24 30 of 100 randomly selected entries in the prescription record book of George D. Feldner, Rudolph Matas Medical Library, Tulane University School of Medicine (hereafter RMML), contained opiates; 19 of 100 randomly selected entries in the prescription record book of Erich Brand, Historical Pharmacy Museum of New Orleans, contained opiates. The Feldner sample falls in the years 1886-1889; the Brand sample, 1877-1878. Both druggists were situated on Magazine Street. The fact that a larger percentage of Feldner's 1886-1889 prescriptions contained opiates than Brand's 1877-1878 prescriptions may indicate that opium and morphine addiction increased in New Orleans during the 1880s. This interpretation is certainly consistent with the national increase in opium importations during that decade (Figure 6).
25 According to census data, the black share of Southern population ranged between 36.4 and 26.9 percent during 1870-1920.


27 Thomas S. Blair, "The Dope Doctor and Other City Cousins of the Moonshiner," Survey, 44 (1920), 19-20. Note, however, that Philadelphia did have a growing heroin problem, a point to which I will return in Chapter 4.

28 Marshall, 64-66.

29 C. B. Pearson, "Is Morphine 'Happy Dust' to the Addict?" Medical Council, 23 (1918), 919.


31 Hartwell, 139-140.

32 Eaton, 665.

33 See also Blair, "The Relation of Drug Addiction to Industry," passim, which argues that relatively few American workers used opium or morphine. Contrast this to the
description of English working class opiate use in "The Narcotics We Indulge In -- Part II," Blackwood's Edinburgh Magazine, 74 (1853), 608; or Elizabeth Gaskell's 1848 Manchester novel, Mary Barton, or Calkins, Opium and the Opium Appetite, 34-35, 162, or Alethea Hayter, Opium and the Romantic Imagination (Berkeley: University of California Press, 1968), 32-33.


36 Mary Lucinda Mitchell to Lucinda Bradford, February 9, 1845, Mitchell Family Papers, Special Collections Division, Howard-Tilton Memorial Library, Tulane University; Varina Davis to Margaret K. Howell, December 13, 1847, Jefferson Davis Papers, University of Alabama, Tuscaloosa; Varina Davis to Jefferson Davis, January 24, 1849, cited in Hudson Strode, Jefferson Davis: American Patriot, 1808-1861 (New York: Harcourt, Brace & World, 1955), 207. Mary Boykin Chesnut, A Diary from Dixie, Ben Ames Williams, ed. (Boston: Houghton Mifflin Company, 1949), 84, 504-506; William Pitt Ballinger diary, Archives Department, Rosenberg Library, Galveston, Texas, entry dated 2/24/66. I am grateful to John Collinge, Walter Buenger and the staff of the Jefferson Davis Association for calling these sources to my attention.

37 Graham A. Barringer, ed., "The Mexican War Journal of Henry S. Lane," Indiana Magazine of History, 53 (1957), 404. There is a similar reference to morphine for cramp cholic in the Civil War diary of Confederate artilleryman Miles S. Bennet, p. 79, Eugene C. Barker Texas History Center, University of Texas at Austin.

38 Earle, "Statistical," 444. Drysdale, 354-357; and Lyman F. Kebler, "The Present Status of Drug Addiction in the United States," Monthly Cyclopaedia and Medical Bulletin, 4 (1911), 20, provide bits of statistical information on female addict occupations and marital status. Massachusetts' Report of the Special Committee, 10-11, also provides some information on occupational status, but note that not all of these addicts used opium or morphine.


45 Cobbe, 189-190; Aikin, 332.


50 Oliver, 168; Cobbe, 160; Blair, "The Relation of Drug Addiction to Industry," 291, et passim. Only Oliver thought use common among the manufacturing classes, and he allowed that American workers consumed less than English. Waldorf, et al., 20, provides figures which show skilled and semi-skilled workers to have been well-represented among Shreveport addicts, but the authors caution that "[t]hese data undoubtedly reflect the economic life of the community," oriented toward oil and agriculture (p. 20). Moreover, as pointed out in Chapter 1, upper-class and professional addicts tended to shy away from such clinics. Another factor, which will be discussed further in Chapter 5, is that by 1919-1923, many of the upper-class and professional addicts were dead and had been replaced by addicts recruited from the lower social strata.


53 Joseph F. Kett, The Formation of the American Medical Profession (New Haven: Yale University Press, 1968), 105; Rothstein, 155-156; Thomas S. Blair, "The Relative Usage of Narcotic Drugs in Hospital Service and Private Practice," JAMA, 75 (1920), 1630, notes, unsurprisingly, that homeopathic hospitals used less narcotics than regular hospitals. Eclectic texts gave some indications for opiates (e.g., dysentery, cancer of the uterus), but only in conjunction with other drugs or as a last resort. See, for example, William Paine, An Epitome of the American Eclectic Practice of Medicine: Embracing Pathology, Symptomatology, Diagnosis, Prognosis, and Treatment (Philadelphia: H. Cowperthwait & Co., 1857), 84-85, and John King, Woman: Her Diseases and Their Treatment (Cincinnati: John M. Scudder, 1875), 196.

54 Rothstein, 159, 323 n. 62.

55 It is true that in the nineteenth century therapeutic skepticism and therapeutic nihilism won some converts in the regular medical profession, but, as Erwin H. Ackerknecht, Therapeutics: From the Primitives to the 20th Century, F. E. Verlag, trans. (New York: Hafner Press, 1973), 120, points out, such scruples were held only by a small "elite." See also Rothstein, 180-181, 184-185.

56 It is not my intention here to discuss at length the early use of opium. Readers interested in the subject should consult Glenn Sonnedecker, "Emergence of the Concept of Opiate Addiction," Journal Mondial de Pharmacie, No. 3 (1962), 276-280. Other accounts, which differ in some particulars from Sonnedecker, include D. I. Macht, "The History of Opium and Some of Its Preparations and Alkaloids," JAMA, 64 (1915), 477-480; Terry and Pellens, Opium Problem, 53-60; E. S. Ellis, Ancient Anodynes: Primitive Anaesthesia and Allied Conditions (London: Wm. Heinemann, 1946), 44-52; Arthur Dickson Wright, "The History of Opium," Medical and Biological Illustration, 18 (1968), 64-65; and Albert Fields and Peter A. Tararin, "Opium in China," British Journal of Addiction, 64 (1970), 371-373.

57 Ackerknecht, Therapeutics, 37, 68, 78; Wright, "History of Opium," 62, 70.

58 Wright, "History of Opium," 62.


62 "R," 157; Perry, 319; "Effects of Opium Eating," BMSJ, 6 (1832), 130.

63 James Thacher, American Medical Biography; or, Memoirs of Eminent Physicians Who Have Flourished in America, 1 (Boston: Richardson & Lord and Cottons & Barnard, 1822), 309.


66 Kett, 101, 156, 159.


The best English language article on the discovery and early development of opium alkaloids I have found is P. J. Hanzlik, "125th Anniversary of the Discovery of Morphine by Sertürner," Journal of the American Pharmaceutical Association, 18 (1929), 375-384.

Wood and Bache, 477, describes the impurities found in imported opium.

Smith, 16.

George W. Carpenter, "Observations and Experiments on Opium," American Journal of Science and Arts, 13 (1828), 17; Smith, 23. The record book of Dr. John McNeil Stewart of Brazoria County, Texas (1836-1837), Woodson Research Center, Fondren Library, Rice University, reveals the penchant for opium prescription to which Carpenter and Smith refer. Stewart, it should be added, had one of the finest medical educations of the day, at the University of Pennsylvania Medical School. Edward Parrish, A Treatise on Pharmacy..., 3rd ed. (Philadelphia: Blanchard and Lea, 1864), 172, notes that many alcoholics, as well as opium addicts, were created by prescription of Brunonian stimulants. Benjamin Rush concurred. Apropos spirits he told his students, "It is better to die of your disease, than rely on this detestable Brunonian remedy [sic]." John Austin, Notes on the Lectures of Benjamin Rush by John Austin (MS) 322, RML. Significantly, Rush was much less cautious about opium; at several points in the lectures on therapeutics he commended it as a useful stimulant.

This was due to the fact that opium was extremely popular as a euthanasic-suicide agent. John Awsiter, "An Account of the Effects of Opium as a Poison; with Methods of Cure; and proper Directions what to do when medicinal [sic] Assistance is not at hand," Gentleman's Magazine, 33 (1763), 51; Alonzo Calkins, "Statistics of Opium-poisoning," Quarterly Journal of Psychological Medicine and Medical Jurisprudence, 2 (1868), 738; George S. Courtright, "Report of a Case of Poisoning, by Tinct. Gelsemium. Treated by the Hypodermic Injection of Morphia," Cincinnati Lancet and Observer, 19 (1876), 961. Doctors were often called upon to treat such overdoses, accidental or otherwise; hence the interest in opium toxicology reflected in the literature.


77 Antoine Ruppaner of Boston published the first important article on hypodermic medication in an American journal, "Researches upon the Treatment of Neuralgia by the Injection of Narcotics and Sedatives, with Cases," BMSJ, 62 (1860), 193-199, 216-222, 241-247, 280-289, and authored the first American text on the subject, Hypodermic Injections in the Treatment of Neuralgia, Rheumatism, Gout and Other Diseases (Boston: T.O.H.P. Burnam, 1865). Roberts Bartholow's Manual of Hypodermic Medication, 1st ed., op. cit., was published later (1869), but was also very influential, going through 5 editions by 1891. Hypodermic medication in the Civil War is discussed below.

78 Bartholow, 1st ed., 18, remarks that as late as 1869 only a minority of American physicians used the hypodermic syringe. However a survey taken by E. Flethcher Ingals, "Danger From the Hypodermic Injection of Morphia," Chicago Medical Journal and Examiner, 36 (1878), 491, indicates that use of the instrument was common by the late 1870s. See also Kane, Drugs That Enslave, 29-30.

79 G.-V. Lafargue, F. Rynd, Alexander Wood, and other early pioneers of hypodermic medication were all seeking a way of injecting morphine; the best account of their efforts is Norman Howard-Jones, "A Critical Study of the Origins and Early Development of Hypodermic Medication," Journal of the History of Medicine and Allied Sciences, 2 (1947), 201-249. See also David I. Macht, "The History of Intra-venous and Subcutaneous Administration of Drugs," JAMA, 66 (1916), 859. For an account of the early injection of drugs other than morphine, see Bartholow, 1st ed., 73-88, 99-144.

80 Charles Schuppert, Notes, Case Records and Observations, Charity Hospital Medical College (MS, 1875-1879), 54, RMHL. For a similar description, see Meylert, 14.

on a suffering patient. Physicians replying to Kebler, "Present Status," 16, overwhelmingly indicated that the hypodermic method was the one most likely to produce addiction.

82 C. C. Stockard, "Morphinism," Atlanta Journal-Record of Medicine, 1 (1900), 866.

83 The 10 to 14 day period is an arbitrary one, chosen only for purposes of illustration. The actual span will vary with the individual, his expectations, the form of opium used, method of administration, and circumstances under which the drug is taken.

84 Unless, of course, the physician is treating a painful, terminal illness such as cancer, and elects to deliberately addict the patient.

85 The practice of leaving the hypodermic syringe with the patient was frequently remarked on. See, for example, McFarland, 289-290; Kane, Drugs That Enslave, 18; and Bartholow, 5th ed., 252.

86 I am here following closely the habituation/addiction distinction made by Alfred R. Lindesmith, Addiction and Opiates (Chicago: Aldine Publishing Company, 1968), 47-67. In this study Lindesmith argues that full-blown addiction, which includes psychological dependence or craving, cannot occur unless the patient recognizes the connection between withdrawal symptoms and the absence of the drug. For an excellent illustration of this principle, see F. B. Morris, The Panorama of a Life, and Experience in Associating and Battling with Opium and Alcoholic Stimulants: a Treatise for the Cure of Opium and Alcoholic Inebriacy (Philadelphia: Geo. W. Ward, 1878), 69.


Defining what contemporaries meant by neuralgia is a difficult task. Today the term is reserved for cyclic attacks of acute pain of a peripheral sensory nerve, where no pathological change in the nerve itself is discernible, e.g., trigeminal neuralgia. However doctors in the nineteenth and early twentieth centuries used the term in a looser sense, to include virtually any acute pain following the course of a nerve, from whatever cause. Rothstein, 191, goes even further in arguing that "neuralgia" was merely a catchall term for any pain of obscure origin, and that the disease was "invented" so doctors would have something else to treat with opiates. I think this too sweeping a generalization. If one examines, for example, the pioneering article of Alexander Wood, "New Method of Treating Neuralgia by the direct application of Opiates to the Painful Points," *Edinburgh Medical and Surgical Journal*, 82 (1855), 265-281, it is clear that the concept of neuralgia antedates the hypodermic administration of morphine, and that the term is used in a strict sense. On the other hand, Rothstein is undoubtedly correct that some physicians, out of laziness or ignorance, dubbed all obscure painful symptoms "neuralgic" and proceeded to treat them with opium or morphine. For more on the definition of neuralgia, see Robley Dunglison, *A Dictionary of Medical Science...*, revised ed. (Philadelphia: Blanchard and Lea, 1860), 631-632, and F[rederick] W[alker] Mo[tt], "Neuralgia," *Encyclopaedia Brittanica*, 11th ed., 19 (Cambridge: Cambridge University Press, 1911), 427-428.


27 (1907), 466-467; and Scheffel, 853, speak respectively of "neuralgic headache," "nervous headache," and "chronic headache" in connection with addiction.

93Hubbard, The Opium Habit, 17. See also the comment by Dr. Goodell in H. Y. Evans, "The Hypodermic Employment of Sulfate of Morphia, in fifty distinct cases," Medical Times, 1 (1871), 265. In addition to dysmenorrhea, opiates were used to treat morning sickness, uterine colic, difficult or protracted labor, and various other unspecified female disorders. See Anon., Notes on Dudley's Lectures Taken in 1830 (MS), 163-164, RMML; [Ernest Kormann,] "Injections of Morphia in the Pains and After-pains of Labour," Practitioner, 1 (1868), 325; O. Hendrick, "On the Value of Hypodermic Injections of Morphia in Obstetric Practice," Richmond and Louisville Medical Journal, 8 (1869), 397-399; Calkins, Opium and the Opium Appetite, 152, 155, 239; Marshall, 70; Earle, "Statistical," 444; T. L. Papin, "Morphia and the Morphia Habit," St. Louis Courier of Medicine, 9 (1883), 18-23; Charles H. Goodwin, Treatment of Diseases of Women, Fuerperal and Non-Fuerperal (New York: the author, 1884), 314-316; William H. Byford, The Practice of Medicine and Surgery Applied to the Diseases and Accidents Incident to Women (Philadelphia: Lindsay & Blakiston, 1865), 96-97; T. D. Crothers, "New Sources of Danger in the Use of Opium," JAMA, 35 (1900), 339; J. A. Witherspoon, "A Protest Against some of the Evils in the Profession of Medicine," JAMA, 34 (1900), 1591.


95For respiratory diseases, Gibbons, 483; Marshall, 70; Sell, 18-19; W. B. Cheadle, "The Clinical Uses of Opium," Clinical Journal, 4 (1894), 349; and J. M. Anders, "The Morphine Habit," Medical Bulletin, 21 (1899), 6-7. For diarrhea and dysentery, Anon., Notes on Dudley's Lectures, 153; Oliver, 167; Marshall, 70; Cheadle, op. cit., 350; and the second and sixth cases recorded in Jacob Everett Fitch, Case. Records, Charity Hospital, New Orleans
Opium and morphine, of course, possess useful constipating, as well as analgesic, properties. Note that "diarrhea" and "dysentery" signified in the nineteenth century practically any disease in which the chief symptom was a loose stool (diarrhea) or a loose stool with blood and pus (dysentery). Other diseases in which diarrhea was a symptom, such as cholera, or in which diarrhea was sometimes present, such as typhoid fever, were also treated with opium and morphine. Charles E. Kennon, Notes on the Lectures of Drs. Chaillé, Notl, Jones and Stone on Obstetrics, Pharmacology, and Therapeutics, Medical College, University of Louisiana, New Orleans, January 15, 1866 - February 6, 1866, Vol. 1 (MS), no pp., RMML; Case 5 in Fitch, op. cit.; Richard Harrison Shryock, Medicine in America, Historical Essays (Baltimore: Johns Hopkins Press, 1966, 54; Norman Howard-Jones, "Cholera Therapy in the Nineteenth Century," Journal of the History of Medicine and Allied Sciences, 27 (1972), 380. "Dr. Labadie's Cholera Remedy," Dr. Nicholas D. Labadie Papers, Archives Department, Rosenberg Library, Galveston Texas, illustrates the tendency to use opium, in conjunction with other drugs, in the treatment of cholera. For malaria, opium and morphine were given to "arrest or modify the [intermittent] paroxysm." Beck, 368; "Opium in Fevers," JAMA, 8 (1887), 265. For syphilis and other venereal diseases, see Terry, Annual Report, 57-58; Blair, "Some Statistics," 608; Butler, 158; and Waldorf, et al., 23. The use of opium and morphine to combat diarrhea, dysentery, malaria, cholera, and typhoid fever is also mentioned, passim, in John Bernard Vandergriff, Pharmaceutical Preparations and Select Prescriptions (MS, 1850), RMML; Harry Bowers, Note Book on Practice of Medicine, Materia Medica (MS, 1882), Eugene C. Barker Texas History Center, University of Texas at Austin; and Samuel Merrifield Bemiss, Clinical Lectures, Charity Hospital, Session 1882-83 (MS), RMML. See also the table of indications in Charles Hunter's popular manual, On the Speedy Relief of Pain and Other Nervous Affections, by Means of the Hypodermic Method (London: John Churchill & Sons, 1865), 27.


98 As the species name of the opium poppy, papaver somniferum, suggests, opiates possess sleep-inducing and tranquilizing, as well as analgesic, properties. Their use in treating insomnia, anxiety, and other nervous conditions was common. Musser, 77; Kane, Drugs That Enslave, 17-18; Hubbard, Opium Habit, 71; Mattison, "Genesis," 304;
Bancroft, 326; Sterne, 610; T. D. Crothers, "Criminality and Morphinism," New York Medical Journal, 95 (1912), 163; Scheffel, 853; Musto, American Disease, 1.

Note that I have deliberately omitted cancer from the list of diseases most likely to lead to addiction. It is not that opium and morphine were denied to cancer patients, but, rather, that victims of this disease were not likely to survive as addicts for long. See G. W. Scranton, Case Book, Case Sessions, 1873-1874, Charity Hospital (MS), 6-7, RMML. Thomas H. Nott, Notes, Long Island Col. Hosp. Brooklyn N.Y. (MS, 1874), no pp.; Thomas H. Nott Papers, Eugene C. Barker Texas History Center, University of Texas at Austin, remarks, apropos stomach cancer, "Make an opium eater of yr [sic] patient as early as possible."

Kane, Drugs That Enslave, 25; W. S. Whitwell, The Opium Habit (San Francisco: n.p. [?], 1887), 17; Francis G. Gosling III, American Nervousness: A Study in Medicine and Social Values in the Gilded Age, 1870-1900 (Unpublished Ph.D. Dissertation, University of Oklahoma, 1976), 164-169. For a contemporary account of why American women, particularly beautiful women of the upper class, were so prone to nervousness, see George M. Beard, American Nervousness: Its Causes and Consequences (New York: G. P. Putnam's Sons, 1881), 66.


Kolb and DuMez, 1184; William H. Deaderick and Loyd Thompson, The Endemic Diseases of the South (Philadelphia: W. B. Saunders Company, 1916), 21, 399. Kolb and DuMez also mention endemic hookworm as a factor, but I have found little evidence that this condition was routinely treated with opiates. The prevalence of diarrheal diseases in the South is reflected in Record of Cases Attended at Charity Hospital, New Orleans, October 1868 - February 1875, compiled by Samuel Merrifield Bemiss, RMML. Leslie Caine Campbell, Two Hundred Years of Pharmacy in Mississippi (Jackson: University Press of Mississippi, 1974), 78, notes that in 1907 paregoric "was being 'abused in Mississippi most grievously'." This is a significant clue, for paregoric is the form of opium commonly given for diarrhea.

Keeley, 22.

105 The two best contemporary accounts of the pressures and attitudes leading to a high rate of addiction among physicians are J. B. Mattison, "Opium Addiction in Medical Men," Medical Record, 23 (1883), 621-623, and Ashworth, "Increasing Frequency," 36-39. Note too that a physician with ready access to these drugs might use them to treat similar conditions in his own family -- hence the high rate of addiction for doctors' wives.

106 12,000: Using Crother's 6 to 10 percent estimate, and assuming there were roughly 120,000 physicians at the turn of the century. (Rothstein, 344.) Ironic justice: Bayard Knerr, "Morphinism," Hahnemannian Monthly, 40 (1905), 344.

107 American physicians were well aware of opium eating before 1870, but morphine addiction as a consequence of hypodermic injection was not well-publicized until 1870, when J. G. Sewall, "Opium Eating and Hypodermic Injection," Medical Record, 5 (1870), 137; Gibbons, 481-495; and Clifford Albott, "On the Abuse of Hypodermic Injections of Morphia," Practitioner, 5 (1870), 327-331, all appeared. Bartholow, 1st ed. (1869), 71-73, also discusses morphine addiction, but erroneously suggests that the condition is easily treated. There is also an 1869 article, "Hypodermic Use of Opium," op. cit., 7-9, documenting a case of morphine addiction via the hypodermic route. Terry and Pellens, Opium Problem, 67, attribute this article to Joseph Parrish, but I have found no evidence to confirm this.


111 Nickerson, 49, also ties the local rate of addiction to the carelessness of the local practitioner. Others, such as Brown, "Enforcement," 322, pointed out that a physician who was both incompetent and addicted was doubly dangerous to his patients.

112 Eberle, et al., 472.

113 Burnett, 328.


115 Gibbons, 487.


117 Phenix, 210. Commented Burton R. Corbus, "Some Factors in the Causation of Drug Habits," *Medical Standard*, 27 (1904), 15, "it is almost as easy to get opium as epsom salts."

118 "Opium Habit's Power," 8. The problem of unauthorized refills was much discussed. See Brown, *Opium Cure*, 12-13; Kane, *Drugs That Enslave*, 219-220; Duncan, 248; Whitwell, 17; Nickerson, 50-51; and Terry, "Drug Addictions," 34-35. Statistics on the volume of opium and morphine sales by druggists are found in Ashbell Parmelee Grinnell, "A Review of Drug Consumption and Alcohol as Found in Proprietary Medicine," *Medico-Legal Journal*, 6 (1906), 594-595; data on
the frequent refilling of prescriptions containing opiates are found in Eaton, 665. Hypodermic syringes were also easily obtained. Towns, 582; Morgan, 6.

119 Phyllis Allen Richmond, "American Attitudes Toward the Germ Theory of Disease (1860-1880)," Journal of the History of Medicine and Allied Sciences, 9 (1954), 428-454, dates the reception of the theory in America in the early 1880s, but Rothstein, 272-278, argues persuasively that it was the success of diphtheria antitoxin in 1895 which really won over the rank and file of the profession.


121 J. F. A. Adams, "Substitutes for Opium in Chronic Disease," BMSJ, 121 (1889), 351-356. Adams also emphasized that agents other than opiates could be used to induce sleep and check diarrhea.

122 Hunter Robb, "The Use of Morphia and Other Strong Analgesics in Gynecological Practice," JAMA, 18 (1892), 680; Reber, 393. One physician, E. V. Swing, was so alarmed at the shift to synthetic analgesics that he felt compelled to reassert the propriety of opium for certain conditions. "The Therapeutics of Opium," Pennsylvania Medical Journal, 3 (1900), 505-508. A few physicians, such as Barr, 161-162, advocated another opium alkaloid, codeine, as a substitute. However this course was not as safe as substituting antipyretics, since codeine, although weaker than morphine, can still lead to physical dependence.

123 Byford, Diseases and Accidents, op. cit., 96-97.

124 Henry T. Byford, et al., An American Text-Book of Gynecology, Medical and Surgical, for Practitioners and Students, 2nd ed., J. M. Baldy, ed. (Philadelphia: W. B. Saunders, 1898), 105. Charles Terry, a lifelong critic of medical education vis à vis opiates, remarks in Opium Problem, 72, "From the earliest warnings until 1900 the great majority of textbooks ... failed to issue any warning of the dangers of the hypodermic use of morphin." That statement is true, as far as it goes, but it obscures the fact that the new texts issued in the 1890s (the "minority") were much more conservative, signaling the growing sensitivity of the profession.

125 W. J. Herdman, comment on Burr, 1592. T. J. Happel, "The Opium Curse and Its Prevention," Medical and Surgical Reporter, 72 (1895), 728, shows that Herdman's stance was not unusual. "The teaching of today," wrote Happel, "is, when in doubt as to the propriety of an opiate, do not give it." Note too that concerned instructors like Herdman had
more time to make their point; the length of medical education expanded significantly in the 1890s. (Rothstein, 288.)

e.g., Mattison, "Morphinism in Medical Men," 188; Towns, 580; Douglas, "Morphine in General Practice," 882; Jacob Diner, "Drug Addiction and Its Treatment," Medical Record, 94 (1918), 317.

Houston's ordinance, passed August 8, 1898, is entirely typical: "...all persons in the City of Houston are hereby prohibited from selling cocaine, morphine or any opium in any quantity unless by order of some reputable physician residing in the City of Houston." The fine was $25.00 to $100.00 for each unauthorized sale. City of Houston, Revised Code and Ordinances of 1904.

On inadequate enforcement, Martin I. Wilbert, "Efforts to Curb the Misuse of Narcotic Drugs: A Comparative Analysis of the Federal and State Laws Designed to Restrict or to Regulate the Distribution and Use of Opium, Coca, and other Narcotic or Habit-Forming Drugs," Public Health Reports, 30 (1915), 898. However, L. F. Kebler, "Habit Forming Agents," Department of Agriculture, Farmers' Bulletin, No. 393 (1910), 3, attributes the 1900-1910 decline in per capita opium imports to "anti-narcotic legislation and publicity." He also remarks that "most physicians are using greater circumspection than formerly when prescribing opium...."


This trend was noted as early as 1908, when a District of Columbia official reported that "...[t]he morphine, laudanum, and kindred drug users ... have been greatly reduced in number through the efforts of the medical profession." Reports of the President's Homes Commission, Senate Document No. 644, 60th Congress, 2nd Session (1909), 255. Alexander Lambert, Importation and Use of Opium: Hearings Before the Committee on Ways and Means, 61st Congress, 3rd Session (1910-1911), 144-145, also testified that the dangers of iatrogenic addiction "have been greatly eliminated in the last years."

For the per capita decline, see Figure 5. In absolute terms, medicinal opiate imports (in equivalent ounces of morphine sulfate) dropped from an average of 1,053,476 ounces per annum in fiscal 1900-1904 to 900,075 ounces per annum in fiscal 1905-1909. The duty was the same for both periods. My analysis assumes that death was a more potent factor than voluntary renunciation in reducing the
total number of addicts; the rate of relapse was very high. Eaton, 665-666; "Practical Notes on the Morphine Habit," Asclepiad, 5 (1888), 308-310; and Lichtenstein, "Truth," 522.


Complete documentation for these and other assertions made in this section is found in David Courtwright, "Opiate Addiction as A Consequence of the Civil War," Civil War History, 24 (1978), 101-111.

Mark A. Quinones, "Drug Abuse During the Civil War (1861-1865)," International Journal of the Addictions, 10 (1975), 1019. See also Musto, American Disease, 251 n. 2.

Anon., Opium Eating: An Autobiographical Sketch by an Habituate (Philadelphia: Claxton, Remsen & Haffelfinger, 1876), especially 50-60.

Keeley, 163.


Crothers, Morphinism and Narcomanias, 75-76.

Watson, 673; Parrish, Treatise, 172. Official opium preparations were also available in commercial medicine chests, complete with guides for self-medication. Robert Cumming Wilson, Drugs and Pharmacy in the Life of Georgia, 1733-1959 (Atlanta: Foote & Davis, Inc., 1959), 77-80.

Sometimes patent medicines were also prescribed by physicians, but this practice became increasingly rare as professional opposition to nostrums mounted. David L. Dykstra, "The Medical Profession and Patent and Proprietary Medicines During the Nineteenth Century," Bulletin of the History of Medicine, 29 (1955), 402.
The best account of patent medicines in America remains James Harvey Young, *The Toadstool Millionaires: A Social History of Patent Medicines in America before Federal Regulation* (Princeton: Princeton University Press, 1961). Patent medicines (of British extraction) were common in eighteenth century America, but the golden age of the nostrums was the nineteenth century, particularly 1865-1900.

Eaton, 665, remarks that, in the Boston drug stores he visited, patent medicines containing opiates sold most briskly.

Lewis D. Mason, "Patent and Proprietary Medicines as the Cause of the Alcohol and Opium Habit or Other Forms of Narcomania -- with Some Suggestions as to How the Evil May be Remedied," *Quarterly Journal of Inebriety*, 25 (1903), 5-6; Oleson, 167; and Hartwell, 150.

Kebler, "Present Status," 15; Terry, "Drug Addictions," 32. See also note 52, above.

Dykstra, 402.

R. E. Griffin, "Morphine -- Its Uses and Abuses," *Kentucky Medical Journal*, 8 (1910), 1584, adds that once the victim discovered that the active ingredient in his nostrum was morphine he would simply "buy ... the drug direct."


Note that some contemporaries, such as Brown, *An Opium Cure*, 13, or T. D. Crothers, "The Danger of the Use of Opium in Infancy," *Medical News*, 84 (1904), 1173, held that the use of soothing sirups made the child more prone to addiction in later life. This is an interesting hypothesis, but the evidence needed to substantiate it, namely, an epidemiologic study of matched adult groups, one given soothing sirups as children, the other not, was to my knowledge, never forthcoming.

On the content of habit cures: Oliver, 167; Stanford E. Chaillé, "The Opium Habit, and 'Opium-Mania Cures.' With Chemical Analysis of Dr. Beck's 'Opiummania Cure,'" by J. Johnson," reprint from *New Orleans Medical and Surgical Journal* (May, 1876), RMML; McFarland, 290-291; Hull, 538-539;

150 Samuel Hopkins Adams, The Great American Fraud (Chicago: Press of the American Medical Association, 1907), 113, prophesied, correctly, that the disclosure provision of the Pure Food and Drug Act would eventually force the habit cures out of business.


152 Ibid., 1038; Wright, "Report from the United States," 19, states, "Since the passage of our National Pure Food Law, and the State and City Laws modelled upon it, there has been a reduction of 40 per cent. in the sale of proprietary medicines containing opiates." Any Wright statistic is suspect, but this one seems to be corroborated by other evidence, particularly M. I. Wilbert, et al., "Report of the Commission on Proprietary Medicines of the American Pharmaceutical Association for 1915-1916," Journal of the American Pharmaceutical Association, 5 (1916), 1379.


154 Ibid., 7-8, 21.


156 Calkins, Opium and the Opium Appetite, 91-92, 158-160; Anon., Opium Eating, 70-76, 124-130; Keeley, 11-13; Nolan, 827; Mattison, "Genesis," 304; Cobbe, 184; Frese, 60; and Crothers, Morphism and Narcomanias, 204, all comment on De Quincey's influence, but only as one of several relevant factors, most notably physicians' prescriptions.

157 Smith, 21; Parrish, Treatise, 172; Oliver, 169-170; Happel, "Opium Curse," 731; Wright, "Report from the United States," 20; and Hector St. John De Crèvecoeur, Letters from an American Farmer, No. 640 of Everyman's Library, Ernest Rhys, ed. (London: J. M. Dent & Sons, 1945), 149-150. Some sources, such as "Opium and the Opium Trade,"
National Quarterly Review, 20 (1870), 298-299; Dr. Kendall, comment on McFarland, 293; Friends for New England, The Traffic in and Use of Opium in Our Own and Other Countries (Providence: Rhode Island Printing Company, 1882), 13; and Cobbe, 172-173, speculated that opium use was higher among both sexes in "dry" areas. I find no evidence to substantiate this claim, however. In fact Michigan and Jacksonville, places with relatively high rates of addiction (Chapter 1), were both "wet" at the time of their respective surveys. It may be that recurring hangover and other alcohol-related disorders treated with opiates more than compensated for the unavailability of drink, or it may be that drink was not unavailable in supposedly "dry" areas.

158 For most persons opium and morphine serve, like alcohol, to elevate mood. This effect is strongest in the early stages of use; later, after dependence has been established, the drug is consumed primarily for the sake of staving off withdrawal, the so-called "reversal of effects." (An analogy may be useful here: neophyte smokers puff on cigarettes because, among other things, they enjoy the effects of nicotine; confirmed smokers keep on smoking mainly because they fear the effects of quitting, i.e., they are "hooked." The principal difference between opiates and nicotine in this regard is that with opiates the reversal of effects sets in much more quickly.) Thus those who dabbled with the drug for euphoric or experimental purposes could easily end up in the same predicament as those who took the drug to relieve the effects of chronic disease.

159 Female addicts who have reached a high level of tolerance are the most likely to experience amenorrhea. M. O. Magid, "Narcotic Drug Addiction in the Female," Medical Journal and Record, 129 (1929), 308.


161 e.g., Earle, "Statistical," 443; Phenix, 206; and Terry, Annual Report, 57-58. Terry noted that many of the prostitutes also suffered from venereal disease. Marshall, 71, and Hull, 539-540, both concur that the prostitute addict was largely confined to cities.
CHAPTER 3
ADDICTION TO SMOKING OPIUM

Addiction to smoking opium, unlike addiction to opium or morphine, was never the consequence of medical treatment. As Hogarth had distinguished between beer and gin, the American practitioner distinguished between medicinal and smoking opium; the former was beneficial and indispensable, the latter dangerous and unnecessary. There was controversy over opium and morphine, but the issue was not so much whether these drugs should be used, as in what circumstances and with what precautions. Opium prepared for smoking, on the other hand, was held to be worthless. The consensus was that opium smoking had no legitimate therapeutic purpose; worse, it was a ruinous vice, indulged by the irresponsible and the wicked. The motives of opium smokers were unfavorably compared to those of "morphinists;" smokers became addicted through the gratification of a "purely sensuous appetite," morphinists as a consequence of treatment for a painful disease. Reflecting the widespread opposition to smoking opium, in 1892 the Journal of American Medical Association called for a ban on all imports of the drug.¹

This attitude on the part of the medical profession,
while it reveals much about the motives and characteristics of those who smoked opium, also creates serious evidential problems. Because opium smoking was so far beyond the therapeutic pale, and because opium smokers were so alien and offensive, relatively few serious and virtually no statistical studies of the problem were undertaken.²

Nineteenth century physicians who wrote about addiction concentrated on opium and morphine addicts, persons with whom they were in close contact and with whom their sympathies lay. The result is a gross evidential imbalance: there is too much material on opium and morphine addiction, too little on opium smoking. Outside the professional literature one finds several popular accounts, but these are often marred by sensationalism and lack precision and dispassion.

Accordingly it is impossible to create anything like the detailed epidemiologic outline of opium and morphine addiction with which Chapter 2 began. It is, however, possible to sketch some of the prominent characteristics of opium smokers, to provide some idea of how sharply they differed from their morphine-injecting counterparts. Because opium smoking was for some time associated exclusively with the Chinese immigrant community, I will begin by characterizing the typical Chinese immigrant addict, as he might have appeared during the years 1850-1880. After 1870 the practice began spreading among whites. As the white smokers differed in many respects from the Chinese, I
will include a separate discussion of their background and characteristics. The remainder of the chapter is devoted to the rise and fall of opium smoking in America, beginning with the background of the practice in China, its popularity among Chinese immigrants, its spread to the white underworld, and, finally, its demise in the face of adverse legislation.

The Chinese Opium Smoker in America

The typical Chinese opium smoker was a young man of peasant stock who came to America as an indentured laborer, hoping to earn enough money to support his family, repay his creditors, save some money, and eventually return to his village. The determination to leave the family in China, plus the backbreaking nature of the work at the mines, precluded female immigrants; women comprised less than 10 percent of the Chinese population in America. Many of the Chinese women who did come, however, served as prostitutes, and it seems reasonable to assume that some of them also smoked opium. Even so, contemporary portrayals of opium dens, verbal as well as graphic, generally depicted the Chinese occupants as men.

Male opium smokers in China ranged in age between 20 and 55. The majority of immigrants, however, were between 18 and 30, which would suggest a lower average age of
addiction among Chinese smokers in America. Only occasionally does one find reference to "old smokers" (age unspecified) in this country. 8

During 1850-1870 opium smoking was strictly confined to the areas of Chinese settlement. This meant primarily California and the Far West, although sizable numbers of Chinese began working in the South and East after 1870. 9 The typical immigrant led a dual existence, dividing his time between a work camp, where he toiled as a gang laborer, and the Chinese quarters of a city or town, where he went on an occasional spree. These recreational quarters might be nothing more than a ramshackle store or laundry in a nearby mining town, or it might be San Francisco's Chinatown itself, with its gaudy array of vices; smoking opium was available in either place. 10 For the Chinese, then, there was nothing to correspond to the lonely farmer's wife, comforting herself with a little morphine; opium smoking was always a social enterprise, carried on in a community place.

The White Opium Smoker

After 1870 a new type of addict began to emerge, the white opium smoker. The white smokers were drawn primarily, though not exclusively, from the underworld: prostitutes, gamblers, and petty criminals, their pimps, apprentices, and hangers-on. 11 J. B. Mattison tersely dismissed them as
"[e]vil men and ill-famed women...[who], being undesirable patients, rarely come under regular care." Because they so seldom came into contact with physicians like Mattison, information about them is generally sketchy. On the question of sex, for example, it is impossible to ascertain the proportion of men to women; all that can be said definitely is that male smokers predominated, although perhaps not to the extent they did among the Chinese.

Another difficult question pertains to the extent of opium smoking in the upper classes. Several sources mention that the practice eventually spread from the underworld to the "idle rich," and other wealthy neurotics who had nothing better to do than dabble in dangerous vices. There is practically no evidence, however, with which to gauge how extensive opium smoking among the wealthy actually became.

Fortunately there is some fairly precise information bearing on age. According to case histories published in an 1886 article by Earle, the average age at which the white male smoker began his career was 22.5 years. Former opium smokers treated in Cleveland in 1915 began at an average age of 19.75 years; World War I draftees rejected for opium smoking began at 18.25 years. Female smokers were also young; according to Allen S. Williams, a reporter who wrote a lengthy exposé of the dens in New York City, the "women who smoke are almost without exception under thirty years of age. A majority of those whom I have observed are under twenty one years." These statistics are corroborated
by several other remarks in the literature which refer to white smokers as "young" or "young people." The relatively early age of addiction for the white opium smoker differs noticeably from that of the opium or morphine user, who typically became addicted in middle, rather than early, adulthood.

Finally, the geographic distribution of white smokers closely paralleled that of the Chinese. The earliest smokers were situated in Western cities and towns; it was there that white gamblers and prostitutes first learned to smoke opium. Later, as the Chinese fanned out into the South and East, the practice went with them. The presence of a few Chinese, in fact, was almost a prerequisite for opium smoking to take root in a given place. As a rule the Chinese controlled the supply and ran the dens. Peripatetic white smokers helped to spread opium smoking to places like New York and Chicago, but it is doubtful that the practice would have flourished without the presence of Chinese communities in those cities.

The Background of Opium Smoking in China

The close association of Chinese with opium smoking began well before the first wave of immigration to California. Opium was first introduced into China by Arab traders around 700 A.D., and soon came to occupy an important place in the
Chinese materia medica, much as it had in the West. Opium smoking, however, was not practiced until the early seventeenth century. At first the drug was smoked in combination with tobacco, but sometime during the eighteenth century the tobacco was dropped, and the opium smoked alone. It was not crude opium which was smoked alone, but rather a refined product, of suitable strength, purity, and consistency for the pipe. Precisely who developed the complicated boiling, evaporating, and straining process for refining opium, or precisely when the technique was perfected, is not known.

During the late eighteenth and early nineteenth centuries, opium smoking was confined largely to the upper classes, especially to the idle young sons of wealthy families. But the practice soon spread to other classes; "mandarins, gentry, workers, merchants, servants, women, and even nuns, monks, and Taoist priests ... became addicted to the drug." Opium smoking also made great inroads in the army, undermining efficiency and morale. Jonathan Spence, perhaps the leading authority on opium smoking during the Ch'ing period, has speculated that different groups had different motives for smoking: eunuchs, members of the imperial clan, and soldiers took to the pipe to overcome ennui; the wealthy, to relax and put aside their worries; the merchants, to increase their business acumen; and the laborers and peasants, to escape for a while the drudgery of their lives. Alcohol might have fulfilled these needs, as it
did in the West; but the Chinese were rather moderate 
drinkers, so opium and tobacco emerged as the leading euphoric 
agents. An even more important factor was the determination 
of the British, who began exporting opium from India to 
China in the late eighteenth century, to foist massive 
quantities of the drug on the Chinese. The opium traffic, 
although prohibited by Imperial edict, was seen by the 
British as a lucrative source of revenue and a means of re-
addressing an unfavorable balance of trade; conversely, 
responsible Chinese officials came to view the traffic as a 
source of domestic corruption and a serious drain on the 
nation's specie. Chinese efforts to end the illegal traffic, 
culminating in Commissioner Lin Tse-hsü's seizure and 
destruction of over 20,000 chests of opium stored in hulks 
off Lintin Island, provoked the series of skirmishes known 
as the First Opium War (1839-1842). Western weaponry 
and tactics prevailed; the Chinese agreed to pay a stiff 
indemnity, cede Hong Kong, and open five ports -- Canton, 
Amoy, Foochow, Ningpo, and Shanghai -- to foreign trade. 

From the standpoint of the opium traffic, the opening of 
these cities can be likened to the opening of five flood 
gates; the drug poured into the country in ever increasing 
quantities. Another blow fell in 1858, when the Treaty 
of Tientsin effectively legalized the opium traffic. 
Imports nearly doubled, from 40,000 chests in 1839 to 76,000 
 chests in 1865. The spread of addiction, with the constantly
increasing demand it entailed, also stimulated the domestic industry; cultivation of the opium poppy in China was widespread by the 1870s.

Assessments of the overall rate of addiction vary sharply. Depending on the estimated supply, the estimated average daily dose, the date the calculation was made, the region studied, and the political sympathies of the authority, anywhere from 1 out of 166 to 9 out of 10 Chinese were said to be addicted to smoking opium.\textsuperscript{23} But, in spite of the disparity of the estimates, one fact is clear: China maintained the highest rate of opiate addiction of any nation in the world throughout the nineteenth century. The immigrants who landed in California came from a society in which opium smoking was commonplace, the opium den an institution. Moreover the overwhelming majority of immigrants came from the area around Canton, a region which had long be associated with the opium traffic, serving as the sole point of entry for the drug prior to 1842. Cantonese immigrants were therefore especially likely to have knowledge of or actual experience with opium smoking.\textsuperscript{24}

\textit{Opium Smoking in America}

The Canton area, in addition to being a locus of the opium traffic, was in the mid-nineteenth century a region of profound turmoil. Political instability, widespread
corruption, ethnic conflict, and population growth combined to put great pressure on the peasantry. But this pressure was equally matched by the peasant's determination to maintain his way of life; loyalty to family and clan were paramount. The result of this conflict was a kind of compromise: the peasant would emigrate to a land of greater economic opportunity, but only temporarily; he would work and save and send money back to his family, with the ultimate goal of returning to his village a wealthy and respected man. His self-image was thus that of a sojourner, rather than a permanent immigrant -- although relatively few Chinese who left managed to return to a life of ease.

The early sojourners found work in Southeast Asia, but, with the discovery of gold in California in 1848, America's West Coast became the logical destination. The climate was amenable and cheap labor was badly needed to run the mines. The problem was how to finance the passage. Chinese merchants, anxious to exploit the situation, devised a credit-ticket system, whereby the immigrant agreed to repay the cost of his passage, plus interest, through his labor in California. The debt repaid, the laborer could, at least in theory, accumulate enough money to sustain his family, buy a return ticket, and eventually retire to his homeland. But as long as he was in debt to the merchant-creditor, he was a virtual slave, forced to work where the merchant-creditor dictated, and at the wages he stipulated. A network of
"district companies," under the leadership of the merchants, evolved in California to insure that the laborer upheld his end of the bargain.  

It was an oppressive system, and the indentured laborer, bound to labor in a barbarian land until his debt was repayed, was subject to tremendous psychological pressure. Lest that pressure explode into open revolt, the system required some sort of safety valve. A leading historian of Chinese immigration, Gunther Barth, has suggested that the emotional safety valve was found in the early Chinatowns, especially in the vices they offered. ("Chinatown," as Barth uses the term, refers to the Chinese quarters of any city or town, from San Francisco to the meanest mining camp.) The most popular forms of recreation were gambling, prostitution, and opium smoking, often found together in a single establishment. There the sojourner might lose his troubles for a while in a game of fan tan, or in the company of a slave girl, or, what is of most concern here, in the familiar fumes of opium.  

In addition to serving as a safety valve, this triad of vices also served as a subtle means of reinforcing the debt bondage system. Gambling, prostitution, and opium smoking were expensive pastimes, particularly for steady customers. Opium smoking was especially deadly in this regard, because of its addictive potential. The indentured laborer who became addicted to smoking opium was
literally on the slippery slope; he could make no headway repaying his original debt, and soon acquired new ones. By the early 1880s the cost of an addict's daily supply of the drug was 50 cents or more, though the maximum daily income a Chinese laborer could hope to earn was little more than $1.00.\textsuperscript{27} Moreover the time spent languishing in the den could not be used to earn income, a problem which worsened as the habit took deeper and deeper hold. Then, too, the sense of despair the addict must have felt as the dream of returning to his homeland slipped away could only have increased his need for the soothing drug, creating a vicious circle of anxiety, opium smoking, more anxiety, and finally more opium smoking. Two groups benefitted from the addict's misery, the merchant-creditors and the secret criminal societies (tongs) which dominated the opium traffic. The merchant-creditor retained control over the addict's labor as long as the debt went unpayed, while the tongs fattened off his increasing consumption.

There were, to be sure, several variations on this basic pattern. Some Chinese immigrants were undoubtedly addicted before they set foot in California. The most important evidence for this, aside from the high rate of addiction in China itself, is the fact that searches of arriving immigrants often netted concealed smoking opium.\textsuperscript{28} It may have been that the immigrants were simply doubling as couriers, as a part of an organized smuggling operation of
the sort described in Chapter 1. Alternately, the intercepted "couriers" may have been addicts, who had brought along a supply to tide them through the long sea-voyage and the early, uncertain weeks in the new world. Possibly it was a combination of motives. In any event, it is likely that at least some immigrants were experienced smokers. It is also likely that some of the resident merchant-creditors were or became addicted to smoking opium. William Speer, a missionary who instructed Chinese immigrants, complained that "[s]ome of the brightest young merchants who entered my school fell victims to opium smoking," while San Francisco's health officer remarked that opium smoking was "very general" among the Chinese in that city, and not just confined to the "loafing class." The merchant smoker's higher income, however, would have permitted him to forestall or avoid altogether the pauperism which beset the common Chinese addict. Finally, there was a type of user who might be designated a "social smoker." He was not addicted, smoking only on occasion. This pattern of opiate use was uncommon in America; there was, for example, no comparable class of "occasional" morphine shooters. Two explanations come to mind. First, the Chinese understood opium smoking as something especially appropriate to holidays. Just as some American families imbibed wine only on sacred or festive occasions, many Chinese restricted their smoking to feast days. Such infrequent use would
have minimized the chance of physical dependence. A second factor pertains to the combustion of smoking opium. Although opium prepared for smoking contains up to 9 percent morphine, when it is smoked only a fraction of the morphine is sublimated up the pipe. Most of the morphine remains in the ash, or yenshee. Because less morphine is consumed, dependence takes longer to develop -- a full 15 days of "regular smoking," according to one observer. This in turn would have helped the occasional smoker to escape full-blown addiction to the drug.

Taking all types of users together, what percentage of the Chinese immigrant community smoked opium? The estimates are equally if not more at variance than those for opium smoking in China. B. S. Brooks who testified in 1877 in favor of continued Chinese immigration, ventured that only 1 Chinese in 20 smoked the drug, and that only 1 in 100 was addicted to it. Brook's figures were turned completely around, however, when a San Francisco policeman, George W. Duffield, testified at a later hearing that "[n]inety-nine Chinamen out of one hundred smoke opium." Hamilton Wright, who, as we shall see, lobbied hard for a ban on imported smoking opium, stated that nearly half of the Chinese in America smoked opium, 15 percent being "heavy smokers," 20 percent "light smokers," and 10 percent "social smokers." More cautious and disinterested authorities gave somewhat lower estimates. Frederick J. Masters, a Methodist missionary who made a fairly thorough
study of the problem, thought 30 percent of San Francisco's Chinese population was addicted, though he noted that the Chinese Consul, Colonel Frederick A. Bee, insisted that the rate was but half that. 35 Another missionary, Ira M. Condit, estimated that 30 to 40 percent of the Chinese smoked, 15 to 20 percent regularly. 36 H. H. Kane, a physician who specialized in treating opiate addiction, wrote that "about twenty per cent. of ... [the Chinese] smoke opium occasionally, and fifteen per cent. smoke it daily." 37 There seems to be no objective way of choosing among these diverse estimates. 38 Those in the best position to know were the tong leaders, and they went to their graves -- or back to China -- without talking. But though these authorities differed over percentages, they were virtually unanimous on one point: that addiction to smoking opium afflicted a significant portion of the Chinese immigrant community.

Opium Smoking by Whites

For 20 years, from roughly 1850 to 1870, opium smoking was confined to the Chinese. The principal reason that the habit did not spread to whites during those years was the extreme isolation, physical and psychological, of the Chinese community. Since the typical immigrant saw himself as a sojourner, with no intention of settling, there was no
incentive to abandon old ways and adapt to the new culture. Instead he banded together with his fellow sojourners, a tendency reinforced by the pooling of immigrants into labor gangs. The white community also contributed to this isolation. Ambivalence or outright intolerance toward a strange race and their customs, coupled with a growing fear of cheap "coolie" labor, fueled a virulent anti-Chinese campaign, culminating in the 1882 Exclusion Act. Given their discordant goals and mutual distrust, Chinese and whites naturally had little to do with one another; they mingled, wrote political commentator James Bryce, "as little ... as oil with water." 39

There was, however, one element of the white community willing to mix with the Chinese: the underworld. Operating beyond the bounds of respectability, gamblers, prostitutes, and assorted other criminals would have had the fewest scruples about associating with Orientals or experimenting with one of their vices. Why the practice actually took hold in the 1870s, rather than the 1850s or 1860s, is difficult to say, although it seems likely that the accelerating geographical dispersion of the Chinese, which would have increased the frequency of contact, plus their growing familiarity with the English language, which would have increased the intimacy of contact, had some bearing on the timing.

The identities of the aboriginal white smokers are
uncertain, although there are apocryphal stories. The first, and most commonly quoted, was reported by Kane:

The first white man who smoked opium in America is said to have been a sporting character, named Clendenyn. This was in California, in 1868. The second -- induced to try it by the first -- smoked in 1871. The practice spread rapidly and quietly among this class of gamblers and prostitutes...40

A second account appears in a testimonial published by Dr. S. B. Collins, proprietor of an opium habit cure. The letter, signed Wm. L. Kennedy, begins

Dear Sir: -- I will probably reside in Kentucky this winter. You may use my name in your paper. I am known in all the large cities of the U.S. by most all OPIUM SMOKERS [sic] as I was one of the first who started use of the drug in the way of smoking it. That was in 1871, in the state of Nevada...41

It is just possible that William Kennedy was the "second" smoker alluded to by Kane, as both accounts correspond on the date, 1871.42 Whatever the identities of the first white smokers, Kane and other sources concur that the practice made rapid progress through the world of "sporting characters" during the 1870s.

Why did so many gamblers, prostitutes, and other criminals take up smoking opium, in preference to some other opiate? After all, the hypodermic injection of morphine was just becoming popular, and it was quicker, cheaper, and stronger. Moreover prostitutes already had a history of opium and morphine use. Why should they not have continued as before?
The answer is twofold. In the first place, some gamblers and prostitutes continued to use opium and morphine, either because they were not exposed to smoking opium or because they simply preferred the more traditional opiates. One who was addicted to opium or morphine in 1865 and had developed considerable tolerance might find it difficult in 1875 to switch to the milder smoking opium. But for members of the underworld who were not yet addicted, smoking opium possessed certain charms that opium or morphine lacked. Above all opium smoking was a social vice, a way of relaxing and getting "high" with one's criminal friends. "The morphinist wishes to be alone to enjoy his drug," explained T. D. Crothers, but

the opium-smoker differs from him in a peculiar manner, and wants company, is talkative, his mind turns in a philosophical direction, to monosyllabic comments on men and events. He goes to a 'joint,' or a room which persons of a similar desire frequent. Here, reclining on a bench or a table, he inhales the vapors of burning opium and is immediately at peace with every one. Kane agreed with this assessment, declaring flatly, "I have never seen a smoker who found pleasure in using the drug at home and alone, no matter how complete his outfit [pipe and paraphernalia], or how excellent his opium." In many respects it was the nature and complexity of opium smoking itself which insured its status as a social, rather than a private, act. Smoking opium, unlike
tobacco or marijuana, cannot simply be stuffed into an ordinary pipe and lit; a special pipe and method of preparation are required. The opium pipe typically consists of a 16" to 20" bamboo stem, with a ceramic bowl inserted about a third of the way down from the stoppered end. Also required is a lamp, as a source of heat, a large needle, to manipulate the viscous drug, and a knife, to scrape the bowl. The smoker, reclining on a wooden platform, dips the needle into a container of prepared opium, purchased from the proprietor of the den. He then holds the globule of opium above the lamp's flame, where it swells and bubbles to several times its original size. Once it is properly "cooked" and distended, the opium is transferred to the pipe's bowl, where it is rolled into a small mass. This mass is forced into the hole at the bottom of the bowl and heated, then the needle stuck through and withdrawn. This leaves a ring of smoking opium around the hole connecting to the pipe stem. The pipe is then tilted, the flame strikes the opium, and the smoker draws in the fumes. Then the whole process begins again, until the desired state is achieved. Such a complex procedure must obviously be learned; it is not nearly so simple as downing a spoonful of Scotch Oats Essence or sticking a needle in one's arm. The neophyte who visited a den out of curiosity or at the urging of an associate was not unlike a student attending school; he was totally dependent on the experienced smokers
for instruction. But once he mastered the art, he might in
turn assume the role of instructor and transmit the ritual
to others. All of this, of course, would have been im-
possible in isolation. Had smokers been as scattered and
secretive as morphinists, the practice would have died out
in a single generation.

An opium den (or "dive" or "joint") was more than a
school, however; it was also a meeting place, a sanctuary,
and a vagabonds' inn. There members of the criminal sub-
culture could gather in relative safety, to enjoy a smoke
with their friends and associates. One addict has left
us a remarkable portrait of life in the New York dens. "The
people who frequent these places," he recalled, "are, with
very few exceptions, thieves, sharpers and sporting men,
and a few bad actors; the women, without exception, are
immoral." But in spite of the desperate character of the
clientele, fights were practically unknown. Instead the
smokers passed the time between pipes by chatting, or telling
stories, or cracking jokes, or even singing in low voices.
Then they might venture out for a bite to eat and return for
some sleep. Early in the morning the prostitutes who worked
the nearby neighborhoods would begin drifting in, to have
a smoke before retiring. Even those who did not smoke
would sometimes stop by to visit their acquaintances.
Within the den a rigid code of honor prevailed: smokers
will not take advantage of other smokers, or tolerate those
who do. "The old saying, 'There is honor among thieves',"
continued the New York addict,

applies equally well to opium fiends. They
never steal from each other while in the
joint. I have seen men and women come in
the joints while under the influence of
liquor, lie down and go to sleep with
jewelry exposed and money in their pockets,
but no one would ever think of disturbing
anything.47

Another advantage, from the underworld point of view, was
that there was a den in every major city, and practically
every Western town. "It's a poor town now-a-days," re-
marked one white smoker, "that has not a Chinese laundry,
and nearly every one of these has its lay-out. You once
get the first ticket [letter of introduction written in
Chinese] and you're booked straight through. I tell you
it's a great system for the fiends who travel."48 Availability was an important consideration, since many smokers,
especially gamblers and prostitutes, pursued itinerant
professions.49 Given all these advantages -- comradery,
security, and availability -- it is not surprising that the
opium den became such a popular underworld institution
during the 1870s.

The opium den appealed to more than criminals, however.
There are also occasional references to actors and trav-
elling, salesmen, groups for which the ubiquity of the dens
also represented a great convenience.50 But of more con-
cern to authorities was the alleged spread, after 1875,
of opium smoking to upper-class whites, particularly white
females. As mentioned earlier, it is difficult to ascertain how deeply the "idle rich" of New York, San Francisco, and other cities became involved in the practice, but there were some alarming reports.51 A parallel concern was that respectable white women were being seduced in the dens. It was commonly reported that opium smoking, at least in its initial stages, aroused the sexual desire, and that some shameless smokers persuaded "innocent girls to smoke in order to excite their passions and effect their ruin." Naturally this spectacle was made all the more shocking by the specter of miscegenation.52

The Legal Response

Public outrage was soon translated into restrictive legislation. Municipal governments, especially those of cities with large Chinese populations, reacted first; San Francisco in 1875 and Virginia City in 1876 passed ordinances penalizing opium smoking. Enforcement of these ordinances was selective; dens patronized by whites were most likely to be raided.53 This had the effect of driving white smokers away from Chinatown into nearby lodgings, where they continued to smoke in small groups. "[T]here are few second or third class lodging houses...," remarked San Francisco physician William S. Whitwell, "where daily and nightly 'hitting the pipe' is not practiced by men and women,
boys and young girls."\textsuperscript{54} Wealthy smokers also set up private dens, albeit in more sumptuous surroundings, furnished with mattresses and jeweled pipes. The smoking opium itself was obtained from a network of Chinese street dealers. Although the route of supply was different, the new private dens mirrored the old public dens in at least one respect: they remained social centers, with several persons smoking together. Later, when enforcement abated (or in places where no anti-opium smoking ordinance was enforced), some smokers would drift back to the Chinese dens, or to a den run by a Chinese but largely patronized by white customers. An incident, such as the death of a young female teacher in a Chinese den in Philadelphia,\textsuperscript{55} might trigger a crackdown, but in general enforcement was sporadic. Moreover, as Kane pointed out, the fact that opium smoking was illegal led "many who would not otherwise have indulged to seek out the low dens and patronize them, while the regular smokers found additional pleasure in continuing that about which there was a spicc of danger."\textsuperscript{56} In sum, municipal ordinances had little impact on the spread of opium smoking.

State laws, although some carried stiff sanctions, also had relatively little effect. An 1881 California statute, for example, stipulated a fine of up to $500.00 and 6 months in jail for persons convicted of operating or patronizing a public den.\textsuperscript{57} By 1915 26 other states had passed anti-opium smoking measures, most of which aimed
at closing down the public dens, rather than forbidding the practice outright. The result may be guessed: whenever there was a concerted effort to enforce these laws, white smokers simply transferred their operations elsewhere, to the sort of private den described above. The net effect was a measure of segregation -- not cessation -- of the practice, although some observers thought the laws may have had a slight deterrent effect.

In the end it was national legislation which had the greatest impact; Congressional statutes, rather than municipal ordinances or state laws, eventually succeeded in making opium smoking so risky and driving up the price so high that most smokers were forced to switch to other opiates. The progress of national anti-opium smoking legislation was slow and halting, but, because of its ultimate import, is worth some study.

Congressional efforts to check opium smoking began as early as 1880, when Representative James F. Briggs of New Hampshire introduced a bill designed to increase the duty on imported smoking opium and tax its domestic manufacture. In 1884 California's Representative James H. Budd introduced a stronger measure, aimed at the total prohibition of smoking opium imports. Although neither bill was reported out of committee, they foreshadowed the strategy employed by later, successful legislation. Congressional efforts to do something about opium smoking were bound by
the then limited perception of federal police power, which did not permit a direct attack on social problems within the states. Briggs and Budd showed how this problem might be circumvented, by resorting to the taxing and commerce powers, in an effort to restrict the supply.

It would be wrong, however, to suppose that all anti-opium smoking measures involved the taxing and commerce powers; a variety of different approaches were tried. In 1887 Congress passed a bill designed to enforce provisions of an 1880 treaty with China. Article II of that treaty stipulated that United States citizens should not be allowed to import opium to China, and vice versa. Until enabling legislation was enacted, however, the article was essentially a dead letter. After years of delay and confusion, Congress finally managed to pass the appropriate legislation. The first section of the bill forbade "the importation of opium into any of the ports of the United States by any subject of the Emperor of China." On paper a significant blow to the Chinese-dominated traffic, in reality the law had little effect; Chinese dealers in America either took the drug on consignment from legitimate white importers, or continued to traffic in smuggled smoking opium.

A different tack was taken by New Hampshire's Senator Henry W. Blair. Informed that opium smoking had spread to the capitol, Blair in 1886 introduced a strong measure designed to outlaw the practice in the District of Columbia
and United States Territories, where exercise of the police power was possible. The bill failed, but Blair, undaunted, reintroduced it in 1888, only to see it pass the Senate but die in the House Judiciary Committee. He tried again in 1889, with similar results. 64

More successful was legislation designed to curtail opium smoking in the Philippines. When in 1898 the United States assumed control of the Philippines, it also assumed responsibility for the 70,000 Chinese resident there, many of whom smoked opium. The displaced rulers, the Spanish, had sought to regulate the practice through a contract or "farming out" system: contracts to sell opium were auctioned to the highest bidders, with the proviso that opium could not be sold to Filipinos for smoking purposes. This system both raised revenue, about $600,000.00 per annum, and effectively checked the spread of the vice to the Filipino majority. But when the Americans first assumed control of the islands the contract system was replaced by a tax on opium and a ban on opium dens. Unfortunately there followed "a marked increase in opium consumption, especially among the Filipinos." This was partly due to a cholera epidemic in 1902, partly the looser nature of the American system, which did not forbid the non-medicinal use of opiates by native Filipinos. 65

By 1903 the civil governing body of the islands, the Philippine Commission, and Governor William Howard Taft had
become convinced that the contract system should be rein-

stated. There was, however, growing concern voiced by

missionaries such as Bishop Homer C. Stuntz, a Methodist
elder in Manila, that opium use by natives was a serious
evil and that it was immoral for any government to profit
by taxing traffic in the drug. Reverend Wilbur Crafts, head
of the International Reform Bureau of the United States,
organized domestic opposition to the contract plan; he
arranged for 2,000 protests to be sent to the White House.
Bishop Charles Henry Brent, a distinguished and in-

fluential Episcopalian missionary who would later serve as
President of the Shanghai Opium Commission, also voiced his
opposition. The administration gave in; Secretary of War
Elihu Root instructed Taft to withdraw the proposal. Al-
though the contract plan was shelved, the Philippine
Commission still opposed outright prohibition as unworkable.

Governor Taft next appointed an Opium Committee whose
task was to study how other Far Eastern governments dealt
with their narcotic problems. The committee consisted of
Dr. José Albert, a Filipino physician, Major Edward C.
Carter, Commissioner of Public Health of the Philippines,
and Bishop Brent, who had long been concerned with opium
abuse. Their investigation was thorough, covering Japan,
Formosa, Shanghai, Singapore, Burma, and Java. The
committee concluded that systems of regulation by taxation,
especially as practiced by the British, were more concerned
with revenue than reform, and that the Philippines would benefit from a policy of gradual prohibition, similar to that implemented by Japan in its recently acquired territory of Formosa. Congress received a draft of the Opium Committee's report, and in March, 1905, passed a law declaring that the importation of opium for other than medicinal purposes should cease in the Philippines as of March 1, 1908, and that it was henceforth illegal to sell non-medicinal opiates to native Filipinos. 66

Concern over the Far Eastern opium situation, aroused by the Philippine controversy and sustained by the growing American involvement in that area of the world, continued after the passage of the 1905 measure. American missionaries pressed for action, especially for limitation of British imports to China. They were encouraged by the 1906 victory of the Liberal Party, which was opposed to the continuation of the traffic, and by the growing anti-imperialist sentiment in China, which manifested itself in widespread support for a new government campaign against opium smoking. Bishop Brent wrote Roosevelt in July, 1906, urging the President to take the initiative in calling an international meeting. "From the earliest days of our diplomatic relations with the East," Brent wrote,

the course of the United States of America has been so manifestly high in relation to the traffic in opium that it seems to me almost our duty, now that we have the responsibility of actually handling the
matter in our own possessions, to promote some movement that would gather in its embrace representatives from all countries where the traffic in and use of opium is a matter of moment. 67

Roosevelt agreed, seeing in the proposed meeting an opportunity to improve Sino-American relations, which had been damaged by the exclusion controversy, as well as to achieve humanitarian ends. Invitations for an international opium commission were issued, although it was not until February 1, 1909, that the meeting, held in Shanghai, got under way. 68

The American delegates to the commission were Bishop Brent, Charles C. Tenney, a missionary and educator with long experience in China, and Hamilton Wright. Brent and Tenney were familiar with opiate addiction in China and the East; Wright, who made a survey of addiction in America shortly after his appointment, was conversant with the domestic situation. Wright and the State Department understood that the American delegation faced a special diplomatic problem: the almost complete lack of effective anti-narcotic legislation. Before the United States could assume leadership in the suppression of the Eastern opium traffic, it had to produce some tangible evidence that it was putting its own house in order; otherwise the American delegation was open to a charge of hypocrisy. Moreover the United States collected a great deal of revenue on imported opiates, particularly smoking opium; it could hardly fault the British for profiting from the Sino-Indian
traffic. Therefore it was expedient that some sort of domestic legislation be enacted before the Shanghai meeting convened.

Doubtless Wright would have preferred a comprehensive anti-narcotic statute, along the lines of the later Harrison Act (1914), but time did not admit the passage of such a controversial bill. What was needed was a quick "face-saving" measure, as Musto has termed it. Elihu Root, now Secretary of State, solved the problem by drafting and then submitting to Congress a bill "to prohibit the importation and use of opium for other than medicinal purposes," i.e., smoking opium. Since smoking opium was identified with Chinese, gamblers, and prostitutes, since American firms had little financial interest in its importation, and since physicians professed to see no therapeutic value in the drug, little opposition was anticipated. Introduced January 4, 1909, the bill was signed into law on February 9, a little more than a week after the Shanghai Commission convened. Wright made the most of the occasion, reporting to the assembled nations that, with the passage of this bill, "[a] new era has dawned in the United States."

Consequences

Wright's grandiloquence aside, the 1909 Act did represent the first national anti-opium smoking policy, however
indirectly or erratically derived. The law banned all
importations of the drug, provided for fines ($50.00 to
$5,000.00) and imprisonment (up to 2 years), and stipulated
that mere possession of smoking opium was sufficient to
warrant conviction,"unless the defendant shall explain
the possession to the satisfaction of the jury." What
this meant, from the black marketeer's point of view, was a
great deal more trouble and risk. In the past, once
smoking opium was smuggled into the country, there was little
danger of prosecution, for it was virtually impossible to
prove that the drug had not been legitimately imported and
duty paid. But, after 1909, the burden of proof was re-
versed; anyone caught with smoking opium was presumed
guilty, because there were theoretically no more legitimate
imports in circulation.74 Of course, this did not prevent
the illicit traffic -- if anything, smuggling increased
after 1909 -- but it did have pronounced market effects; as
the legitimate supply dried up and the risk of smuggling
increased, the price of smoking opium skyrocketed. By
1917 a 5 tael (6 2/3 ounce) tin of smoking opium, which
sold elsewhere for about $20.00, brought in the United States
an average of $70.00.75 The retail price, in the dens or
on the streets, would have been even higher.

By 1910-1915 the addicted opium smoker and, equally
important, the person thinking about taking up the prac-
tice, were having second thoughts. Opium smoking was now
dangerous and increasingly expensive. Had there been no alternative, that is, no other opiate available, undoubtedly they would have continued to pay the price. But there was always morphine and, in some places, heroin, both of which were considerably cheaper, especially before the Harrison Act went into effect on March 1, 1915. The decision was not an easy one, for many smokers preferred the ambience and companionship of the dens, and had doubts about the safety of hypodermic administration, but the higher price and increased risk of prosecution eventually won out.

White smokers, who had the least cultural attachment to the drug, were the first to switch. A Massachusetts study reported that, of addicts who had begun their careers as opium smokers, by 1917 all but 10 had taken up morphine, either alone or in combination with cocaine. In Philadelphia there was, among "denizens of the 'tenderloin'," a pronounced shift to heroin and, to a lesser extent, morphine after 1910. A 1916 study of addicts in New York City's Tombs Prison revealed a similar pattern: 80 to 90 percent of the whites now used heroin, although the authors noted that the Chinese prisoners remained steadfast opium smokers. Even more than for the white underworld, the den represented for the Chinese an island of security in an otherwise hostile society. But, in the long run, the Chinese addict was also forced to take up the syringe. During 1935-1964 officials at the Lexington
Hospital observed that 90.5 percent of the Chinese addicts admitted were using heroin, even though more than half of this group had once used smoking opium. 80

Even if the Chinese had not abandoned the practice, it is probable that the number of opium smokers per capita would have diminished, thanks to the steady decrease in Chinese population. Immigration restrictions and racial antagonism took their toll: the number of Chinese in America dropped from 103,620 in 1890 to 85,341 in 1900, to 53,891 in 1920. 81 Since the Chinese were the group most prone to use the drug, any sharp reduction in their numbers would effect the overall rate of addiction to smoking opium. This was the primary reason that the per capita importation of smoking opium dropped off slightly in 1900-1909, even before the ban on imports took effect. 82

Conclusion

Two forces, one demographic, the other legal, brought about the decline and fall of opium smoking in America. The demographic force, the decrease in Chinese population during 1890-1920, reduced by one-half the group with the highest incidence of addiction. This in turn reduced the overall rate of addiction to smoking opium, though it did not of itself end the practice. More important was the steady accumulation of anti-opium smoking statutes,
culminating with the 1909 Smoking Opium Exclusion Act. During 1910-1915 white smokers, who had held out for some time against a variety of state and local measures, finally capitulated to the increased risk and higher price engendered by the national legislation; the Chinese smokers remaining in America would follow in the 1920s and 1930s. Capitulation took the form, not of the renunciation of opiates, as some reformers had hoped, but of the adoption of new and more potent forms. Most potent of all was heroin, the drug whose history I will next consider.
NOTES TO CHAPTER 3

1 Mattison, "Genesis," 305; "Opium Smoking as a Therapeutic Means," JAMA, 3 (1884), 100-101; Bancroft, 326; "'Opiokapnism'," 719-720; Walker, 692.

2 The most notable exception to this rule is Kane, Opium-Smoking in America and China. Kane was a New York physician who specialized in treating addiction. Unfortunately this study, although book length, is often impressionistic and contains relatively little detailed information about opium smoking in the Chinese immigrant community.


5 A possible exception is Thomas Byrnes, 1886: Professional Criminals of America (New York: Chelsea House Publishers, 1969 reprint ed.), 382, which mentions men and women in a den together. It is impossible to tell from context, however, whether these women were white or Chinese.


7 JSC, 489.

8 e.g., Kane, Opium-Smoking, 41.

9 Sandmeyer, 20-21, provides useful data on the geographic distribution of the Chinese immigrants.
California Senate, Special Committee on Chinese Immigration, Chinese Immigration, Its Social, Moral, and Political Effect (Sacramento: State Office, 1878), 220; Kane, Opium-smoking, 8-9, 66; Whitwell, 9; "Opium 'Joints' in the Black Hills," Chamber's Journal, 65 (1888), 654-655; Barth, 111.

Kane, Opium-smoking, 1; Chas. Warrington Earle, "Opium-smoking in Chicago," Chicago Medical Journal and Examiner, 52 (1886), 109; Byrnes, 385; Masters, "Opium and Its Votaries," 641; "Opiokapnism," 719; Crothers, Morphinism and Narcomanias, 215. Allen S. Williams, The Demon of the Orient and His Satellite Fiends of the Joints: Our Opium Smokers as they are in Tartar Hells and American Paradises (New York: the author, 1883), 20-21, alludes to prostitutes and "kept women" in the opium dens. Actors and actresses, bartenders, traveling salesmen, and telegraph operators were some other occupations mentioned in connection with opium smoking, though there was a consensus that the criminal or "vicious" element predominated.

Mattison, "Genesis," 305. Remarked one District of Columbia official, "[opium smoking] ... is confined principally to degraded persons, both white and black, who are beyond reformation." Reports of the President's Homes Commission, 255.

The most important piece of evidence on this point is Earle's 1886 article, "Opium-smoking in Chicago," cited above. Although noting that one of his informants had seen men and women smoking together in the dens (p. 106), Earle personally knew of "but two ladies who use the pipe" (p. 109). Significantly, 6 of the 7 case histories of white smokers Earle reported (pp. 105-108) involved men. Similarly, all 7 of the former opium smokers ("former" in the sense that they had switched to other opiates) listed in Drysdale were male (pp. 354-357). There are other accounts, such as Kane, Opium-smoking, Williams, Demon, or Whitwell, The Opium Habit, which mention white men and women smoking together, but when they come to particular cases, usually discuss men. This leads one to suspect that male smokers predominated.

women in the dens. This does not mean they did not smoke, however; the wealthy, as Kane and others pointed out, could outfit private quarters for smoking.

15 Earle, "Opium-Smoking," 107-108. Average age at the time of treatment was 28.7 years.

16 Drysdale, 354-357 (6 cases); McPherson and Cohen, 638 (4 cases).

17 Williams, Demon, 20.


20 S. Wells Williams, The Middle Kingdom: A Survey of the Geography, Government, Literature, Social Life, Arts, and History of the Chinese Empire and Its Inhabitants, 2 (New York: Charles Scribner's Sons, 1899), 380-382, offers a good description of this process. Note that the opium used, whether imported from India or native to China, contained less than 9 percent morphine. Opium containing more than that amount will, unless specially treated to remove the excess morphine, give the smoker severe headaches. (Kane, Opium-Smoking, 25; Masters, "Opium Traffic," 60.) It was for this reason, incidentally, that U.S. tariff law generally classified all opium containing less than 9 percent morphine, prepared or otherwise, as "smoking opium."


22 Jonathan Spence, "Opium Smoking in Ch'ing China," in Conflict and Control in Late Imperial China, Frederic Wakeman, Jr., and Carolyn Grant, eds. (Berkeley: University of California Press, 1975), 144-145.

23 These estimates are cited in Chang, 35, 34.

24 The principal sources for this account of opium smoking in China are Great Britain, Royal Commission on Opium, Final Report: Historical Appendices, Vol. 7, Part 2 (London: Her Majesty's Stationery Office: 1895), 5-63;
'Memorandum on Opium from China,' Report of the International Opium Commission, 2, 44-45; Chang, 17-50; Fields and Tararin, 373-377; and Spence, 143-173. Spence's essay is the most thorough, but there are still many conflicting details and unanswered questions, especially concerning the early spread of opium smoking and the ultimate extent of addiction.

Most of these details of early Chinese immigration are drawn from Barth, 1-108, but see also Sandmeyer, 12-15. For more on the coercive function of the district companies, see JSC, 23-24, et passim, and on the credit-ticket system, Chinese Immigration, House Report No. 240, 45th Congress, 2nd Session (1878), 1-2.

Barth, 109-128.

Kane, Opium-Smoking, 81; Sandmeyer, Table 7, 22. Masters, "Opium and Its Votaries," 638; and Ira M. Condit, The Chinaman as We See Him and Fifty Years of Work for Him (Chicago: Fleming H. Revell Company, 1900), 60, also comment on the pauperizing tendency of opium smoking.

Calkins, Opium and the Opium Appetite, 38.

William Speer, The Oldest and the Newest Empire: China and the United States (Hartford, Conn.: S. S. Scranton and Company, 1870), 635; JSC, 133. Masters, "Opium and Its Votaries," 641, remarks that opium couches were frequently found in the homes of well-to-do Chinese, another indication that merchants smoked.

"The Chinese New Year," New York Times, February 16, 1874, 5; Barth, 120, 123.


Masters, "Opium Traffic," 56.

JSC, 60; California Senate, Chinese Immigration, 114.

Wright, "Report from the United States," 8. According to Wright's definitions, heavy smokers (6 lbs. per year) and light smokers (1.5 lbs. per year) were likely addicts, or, in the case of "light" smokers, well on their way to addiction.

Masters, "Opium and Its Votaries," 640. The author added that about a third of the addicts were "confirmed opium sots" -- evidently the equivalent of Wright's heavy smokers. Masters' estimate was cited 6 years later by Holder, 147.
36 Condit, 61.

37 Kane, *Opium-Smoking*, 17. There is another estimate, of no more than 10 percent total, made by "J.F.M." in a letter to Collins, 64, but, again, no hard evidence was presented.

38 The use of pre-1870 smoking opium import statistics to work out a rate of addiction for the Chinese in America is problematic, due to uncertainty about the level of smuggling, and uncertainty about the average dose (note 51, Chapter 1).


40 Kane, *Opium-Smoking*, 1.


42 But see Kane, *Opium-Smoking*, 3, for a different version of the spread of opium smoking to Nevada.

43 D. F. MacMartin, *Thirty Years in Hell or The Confessions of a Drug Fiend* (Topeka: Carter Printing Company, 1921), is a vivid account of underworld morphine use in the late nineteenth and early twentieth centuries. MacMartin, a shyster lawyer and rakehell, became addicted after he began using morphine to relieve his frequent hangovers. That was in 1889, in Oklahoma. One can easily imagine that if MacMartin had been offered a pipe, rather than a syringe, he would have become an opium smoker. Both Kane, *Opium-Smoking*, 50-51, and Crothers, *Morphinism and Narcomaniacs*, 215, mention that many smokers previously drank to excess.


45 Kane, *Opium-Smoking*, 70.

46 According to Byrnes, 384, some veteran smokers also offered their services as "professional cooks," who received "so much for every twenty-five cents' worth of opium [they helped prepare]." Or the cook might take every other smoke for his fee. Williams, *Demon*, 19.

47 Ibid., 381-385; quotation at 385.
Williams, Demon, 60.

Jordan, 31, 132.

e.g., Kane, Opium-Smoking, 66-68, 71; Keeley, 176.

Note 14, above.


"J.F.M." in Collins, 64.

Whitwell, 10.

"Opium Smoking," JAMA, 34 (1900), 306, 376.

Kane, Opium-Smoking, 2, 1-14 generally. See also Williams, Demon, 21-24, 46-49; Whitwell, 10-11; Masters, "Opium and Its Votaries," 641; and McGuire and Lichtenstein, 185, for more on the private dens and their supply. Byrnes, 385, mentions that most public dens, even those largely patronized by whites, had a Chinese proprietor.

California Statutes (1881), Section 307, 34.


Hartwell, 156.

Congressional Record (hereafter CR), 46th Congress, 2nd Session (1880), 1772. In spite of the failure of this particular bill, the duty on smoking opium remained generally high during this period.


For the legislative history of this measure, see CR, 48th Congress, 1st Session (1884), 475, 4742; Message from the President of the United States, Transmitting a Report of the Secretary of State Relative to Legislation Touching the Treaty of 1880 with China, Senate Ex. Document No. 148, 49th Congress, 1st Session (1886); CR, 49th Congress, 2nd Session (1886-1887), 326, 392, 1512-1513, 2249; and Report to Accompany Bill S. 3044, Senate Report No. 1621, 49th Congress, 2nd Session (1886). Few Chinese in America desired (or could legally obtain) citizenship; hence they could not
legitimately import the drug as United States citizens.

63"Opium Smoking," op. cit., 306. Opium Habit in the District of Columbia, Senate Document No. 74, 54th Congress, 2nd Session (1897), 3, reported that Chinese merchants continued to retail the bulk of the drug.

64CR, 49th Congress, 1st Session (1886) 6105, 50th Congress, 1st Session (1888), 27, 3549, 4879, 4953, 51st Congress, 1st Session (1889-1890), 124, 5118, 9979, 10072. The last version contains some clarifying amendments, designed to avoid interference with legitimate prescription of opiates. One imagines that Blair would have gone right on reintroducing the bill, had he not lost his Senate seat in 1891. During the 51st Congress Representative William W. Morrow of California also introduced a pair of anti-opium smoking bills, although these resorted to the more familiar tactics of controlling importation and manufacture of the drug. He got no further than Blair. CR, 51st Congress, 1st Session (1889), 229, 1789.

65Report of the Committee Appointed by the Philippine Commission to Investigate the Use of Opium..., Senate Document No. 265, 59th Congress, 1st Session (1906), 49; Taylor, American Diplomacy, 32; Musto, American Disease, 26.

66The law is actually in the form of a proviso to the 1905 Philippine Tariff Act. See Report of the Philippine Commission, especially 4, 54-55; CR, 58th Congress, 3rd Session (1905), 2999-3001, 3528, 3714-3718, 3786, 4033; Taylor, American Diplomacy, 33-43. There was one earlier law which dealt with American involvement in the Eastern opium traffic, a minor statute prohibiting Americans from selling guns, opium, and liquor to the natives of certain Pacific islands. CR, 57th Congress, 1st Session (1902), 1202-1203, 1810.

67United States, State Department, Papers Relating to the Foreign Relations of the United States with the Annual Message of the President Transmitted to Congress December 3, 1906 (hereafter Foreign Relations), Part 1 (Washington: G.P.O., 1909), 301-362. Brent was not the only missionary to ask the President to do something about the China traffic. See also Opium in China: Report of the Hearing at the American State Department on Petitions to the President to Use his Good Offices for the Release of China from Treaty Compulsion to Tolerate the Opium Traffic, with Additional Papers, Senate Document No. 135, 58th Congress, 3rd Session (1905), 1-4.
Details of the invitation process and a summary of the aims of the commission may be found in a State Department memorandum from Acting Secretary Alvey A. Adee, *Foreign Relations, 1908*, 98–100. Taylor, *American Diplomacy*, 47–60, and Musto, *American Disease*, 28–35, both have good accounts of the events leading up to the Shanghai Commission, and that meeting's bearing on the 1909 Smoking Opium Exclusion Act.

In 1907 alone the United States collected approximately $1,900,000.00 in duties on opiates, of which $1,460,000.00 was derived from duties on smoking opium.

Musto, *American Disease*, 34.

CR, 60th Congress, 2nd Session (1909), 449, 1396–1400, 1681–1684, 1716, 2098. Henry Cabot Lodge, the bill's manager in the Senate, and Sereno Elisha Payne, manager in the House, emphasized, in connection with the upcoming Shanghai Opium Commission, the need for speedy passage. Relatively little time was spent discussing the nature or extent of the opium smoking problem in America, an omission which underscores the diplomatic and symbolic, rather than domestic reform, intention of the bill.

Though some opposition did emerge, often from unexpected quarters. Senator Joseph W. Bailey of Texas attacked the bill as a disguised and unconstitutional exercise of the police power. "[T]he Government has no right to regulate through a tax a matter which it has no right to regulate directly," he asserted. (*Ibid.*, 1398.) Unfortunately for Bailey, the Supreme Court in *Champion v. Ames* (1903), had previously ruled in favor of such indirect exercises of the federal police power. Albert Beveridge cited the precedent, and managed to persuade the Senate that Bailey's constitutional qualms were misplaced. In the House questions were raised about the cost of the bill (in lost revenue), the efficacy of the bill, and whether or not the enforcement section violated the rules of criminal evidence. The measure survived these objections, only to be held up by a remarkable contretemps. It was decided that, since the bill was ostensibly a revenue measure, it had to originate in the House, so the bill was sent back to the Senate with a House number to be, in effect, repassed. In view of the time pressure, such narrow adherence to the rules is difficult to understand. It is almost as if the Congress never took the whole issue seriously. (*Ibid.*, 1683–1684).

Although some dealers cleverly exploited a technicality. Under the 1909 Act smoking opium imported before April 1, 1909 (the day the law went into effect) was not liable to seizure. By saving the revenue stamps from this smoking opium and then carefully affixing them to containers filled with the smuggled drug, the dealers were usually able to avoid conviction. However this and other loopholes in the 1909 Act were plugged by an amendment approved January 17, 1914. The reasons for this amendment are spelled out in Reenactment of Opium-Exclusion Act, House Report No. 24, 63rd Congress, 1st Session (1913), 1-5. There was also concern that the demand for the drug would be met by large scale domestic cultivation of opium poppies, which would in turn be converted to smoking opium. This eventuality was met by the authorization, also on January 17, 1914, of a law placing a prohibitive tax on the domestic manufacture of smoking opium. See Manufacture of Smoking Opium, Senate Report No. 130, 63rd Congress, 1st Session (1913), especially 5-6. For the texts of the amendment to the 1909 Act and the statute placing a prohibitive tax on the manufacture of smoking opium, see Statutes at Large, 63rd Congress, 2nd Session (1914), Chapters 9-10, 275-278.

Hasty, 689. See also Wright, Report, 57; Importation and Use of Opium, 88.

"many smokers:" The loyalty of opium smokers to their drug was widespread, but evidently not universal. Kane, Opium-Smoking, 44, 59, Crothers, Morphinism and Narcomanias, 211, and Lindesmith, Addiction and Opiates, 215, report a strong preference among opium smokers for their accustomed drug and fear of opiates injected hypodermically. However at least one source, Robertson, 227, 232, reports that many whites switched to morphine well before the 1909 legislation.

Report of the Special Commission to Investigate the Extent of the Use of Habit-Forming Drugs, 10.

McIver and Price, 477, 478.

McGuire and Lichtenstein, 189. W. L. Treadway, "Further Observations on the Epidemiology of Narcotic Drug Addiction," Public Health Reports, 45 (1930), 546, mentions that, as late as 1929, the Chinese addicts "are usually smokers of opium."

John C. Ball and N. F. Lau, "The Chinese Opiate Addict in the United States," in Epidemiology of Opiate
Addiction in the United States, Ball and Chambers, eds., 243.

81 Historical Statistics of the United States, 9.

82 See Figure 6, Chapter 1.
CHAPTER 4

ADDICTION TO HEROIN

Heroin, a drug whose name is today virtually synonymous with opiate addiction, was unknown until the closing years of the nineteenth century. Introduced in 1898 as a cough suppressant it was, like opium and morphine, employed as a therapeutic agent.\(^1\) Also like opium and morphine, its liberal use led to a bout of iatrogenic addiction, although nothing on the scale of the morphine epidemic of the 1870s and 1880s. Unfortunately, just as physicians were becoming more circumspect in their use of the drug, heroin became popular as a euphoric agent, and as a substitute for smoking opium and cocaine. Use of the drug was confined largely to Eastern cities in the 1910s, but because of fundamental changes in American narcotic laws, heroin spread to other parts of the country in the 1920s and 1930s.

More precise information is available about heroin additits than about their predecessors, the opium smokers. Heroin addiction was discussed, not only in sensational features, but in sober journal articles. This medical interest was due in part to the charged political
political atmosphere of 1909-1919, the period when the nation's basic narcotic legislation was enacted, and when interest in all forms of addiction was keen, and in part to the therapeutic nature of early cases of heroin addiction. Another factor was the First World War; any drug that was making inroads on draft-age youth was automatically a matter of concern, particularly for the new public health profession. Finally, when the Harrison Act went into effect on March 1, 1915, many heroin addicts sought or were forced to seek treatment in public institutions, thereby giving physicians an opportunity for firsthand observation. Their combined reports yield a rich body of epidemiologic data, from which it is possible to fashion a detailed profile of the heroin addict. The following description does not apply to the small minority of iatrogenic heroin addicts, who will be discussed later.

Characteristics of Heroin Addicts

Sex. Males predominated among heroin addicts. In 1913 Terry found that men comprised 67.9 percent of the heroin addicts registered in the Jacksonville program.² Studies conducted by Clifford B. Farr in Philadelphia's General Hospital, Drysdale in Cleveland's City Hospital, and Sylvester R. Leahy in Brooklyn's King's County Hospital, all published in 1915, showed that 75.8, 90.0 and
95.0 percent of the heroin addicts treated at their respective institutions were male. A statistical resume' of the New York City narcotic clinic published in 1920 yielded a figure of 78.8 percent male. Most, though not all, of the clinic's patrons used heroin.

**Age.** Like the opium smoker, the heroin addict typically became addicted in adolescence or early adulthood. Drysdale's Cleveland addicts became addicted at an average age of 22 years, 2 months; Leahy's Brooklyn addicts at 19 years. In 1917 W. A. Bloedorn published a series of frequency polygons or graphs which depicted the modal age of admission (not addiction) of heroin addicts to New York's Bellevue Hospital as 21 to 23 years. At the Inebriate Hospital in Warwick, New York, the average age for heroin addicts at time of treatment was 22 years, 7 months; morphine addicts, by contrast, averaged 37 years, 5 months. Finally, in 1919 army psychiatrist George C. McPherson and psychologist Joseph Cohen published case summaries of addicted draftees entering Camp Upton, New York, indicating an average age of addiction for heroin users of 19.8 years. Of course the fact that these men were draftees may have biased that figure downward, but it is still noteworthy that, within the 18 to 31 year draft limits, every one of the 37 heroin users listed was addicted by the time he was 26.
In addition to the purely statistical evidence, there are numerous allusions to the youth of heroin addicts. "[M]ost of the addicts coming under our treatment, wrote Frank A. McGuire and Perry M. Lichtenstein, physicians at New York City's Tombs Prison, "are young individuals. It is not uncommon to find boys and girls sixteen and eighteen years of age who give a history of having taken the drug for two years." A similar description was offered by Brown, who characterized Tennessee's relatively few heroin addicts as "youngsters from 15 to 25 years of age." 

Race. Heroin addiction was concentrated among whites, especially during the decade 1909-1919. The Chinese, as mentioned earlier, continued to smoke opium well into the 1920s and 1930s. Blacks were known to use heroin, although, as Lichtenstein observed, "not as frequently ... as the white race." Terry, Drysdale, and Leahy recorded no black heroin users, while McPherson and Cohen found some heroin addicts of "African" extraction, although they did not specify how many. Blacks were not seriously afflicted with heroin addiction until they began migrating in large numbers to Northern cities.

National Origin. One of the few things heroin addicts had in common with opium and morphine addicts, aside from their racial background, was their nationality. The
majority of heroin addicts were born in the United States. In New York City Leahy and Hubbard found that 4.3 and 30.6 percent of their respective cases were foreign born, even though, according to the 1920 census, the foreign born made up 36.1 percent of that city's population. Moreover only 2 of 37 draftees listed by McPherson and Cohen as heroin addicts were born outside the United States.

If immigrants were relatively immune to heroin addiction, their children were not. Leahy went on to show that 41.7 percent of his sample consisted of second generation Americans. While there were no heroin addicts born in either Ireland or Italy, there were respectively 17 and 11 addicts of Irish and Italian parentage born in the United States. While there was only 1 addicted German and 1 addicted Russian Jew, there were respectively 21 and 6 addicts of German and Russian Jewish parentage born in the United States.

Geographic Distribution. If a compass was placed on a map with its point resting on Manhattan Island, and a circle with a radius equivalent to 180 miles drawn, the region bound by the pencil's arc would have contained in 1920 9 out of every 10 heroin addicts. The adjacent states of New York, New Jersey, Pennsylvania, and Delaware suffered high rates of heroin addiction, with New York City suffering the highest rate of all. There were a few cities outside
the circle, such as Cleveland, which seemed to have a heroin problem, but these were exceptional. In Boston, for example, morphine remained the opiate of choice well into the 1920s; in Chicago, well into the 1930s.

The use of heroin, unlike that of opium or morphine, was concentrated in urban areas. In New York State, for example, virtually all of the heroin addicts resided in New York City. Within the city itself the seemier neighborhoods, the "tenderloins," harbored the greatest number of addicts. The only figures available on this point, involving 100 addicts (93 heroin; 7 morphine) treated at Warwick, are sketchy. An excerpt from the report, compiled by E. W. Phillips, reads, "Neighborhood (always from the laborer's viewpoint.) -- Good, 21; fair, 28; bad, 51." Precisely what, in Dr. Phillips judgment, constituted a "fair" or a "bad" working-class neighborhood is difficult to say, but there is an abundance of other, non-statistical testimony to the effect that heroin addiction was concentrated in impoverished and vice-ridden neighborhoods.

Class. "[U]sing as a standard of comparison the ordinary laborer," Phillips continued, the addicts' social class could be described as "low normal for American communities." Again the description leaves something to be desired, but it would be fair to characterize the heroin addict as the son of a working-class family, in many cases
recently transplanted from Europe. His parents might toil in a factory or sweatshop, leaving him unsupervised on the streets. Many addicts began their careers in juvenile gangs.\textsuperscript{23}

Statistics on income, either the addict's or his family's, are unavailable. Owing to the expense of the drug, however, it is safe to assume that heroin addicts were chronically impoverished, particularly after restrictive legislation went into effect.\textsuperscript{24} Their first priority was obtaining the drug; what little was left over went for the necessities. Hygiene and grooming were generally neglected. Thus the heroin addict, often pale, emaciated, and shabbily dressed, would have struck the onlooker as something worse than "low normal;" he appeared rather as an outcast, more akin the bum or common drunk than the respectable laborer.\textsuperscript{25}

**Occupation.** Heroin addicts changed jobs frequently and were often unemployed.\textsuperscript{26} When they did work they generally held unskilled or semi-skilled jobs: drivers, conductors, elevator operators, factory workers, day laborers, longshoremen, painters, bell boys, peddlers, news dealers, soda jerks, and the like.\textsuperscript{27} A few held skilled jobs, such as plumbers or mechanics, while others gave their occupation as salesman, clerk, or actor.\textsuperscript{28} There were also gamblers and professional criminals, many of whom had a history of opium smoking.\textsuperscript{29} A substantial
number, perhaps a majority, of the female addicts were prostitutes. It was said that many of them lived with addicted lovers, who sponged off their illicit earnings. After 1920 virtually all heroin addicts were forced to supplement their incomes through criminal activities, particularly petty theft. Statistics on this point are suspect, for there was a tendency for the addict to lie about past arrests. Another difficult question, which I will take up later, is whether or not a substantial portion of heroin addicts engaged in criminal activities before they were addicted, or afterwards, as a consequence of increasing tolerance and escalating black market prices.

**Summary: A Modal Addict Type.** The modal heroin addict was a young white male who lived in a slum neighborhood in New York or some other large Eastern city. He was a citizen by birth, though his parents might be immigrants. Poorly educated, he held a blue collar job of an unskilled or semi-skilled variety, when he worked at all. He spent much time on the street, running with a gang, and it was typically within the gang that his heroin use began.

**Iatrogenic Heroin Addiction**

Not all heroin addicts conformed to this pattern, however. In addition to the gang or criminal type of user,
there was another, smaller group of addicts which appeared during 1898-1910, those who were introduced to heroin by their physicians. The key issue is one of extent: how significant a problem was iatrogenic heroin addiction, especially in comparison to non-therapeutic use?

The strongest case for widespread iatrogenic addiction is found in Terry and Pellens' *The Opium Problem* (1928). In all of their writings Terry and Pellens, who were deeply involved in the politics of maintenance, stressed the prevalence of iatrogenic addiction -- be it to opium, morphine, heroin, or codeine -- and tended to portray the addict sympathetically, as the innocent victim of a careless practitioner. Their argument regarding heroin can be summarized as follows: introduced in 1898 as a substitute for codeine and morphine, the drug was enthusiastically received by the European and American medical communities. It was recommended for "every variety of complaint," and enjoyed "wide popularity as a therapeutic agent." Worse, it was touted as non-habit forming, and was even endorsed as a cure for morphine addiction. Warnings that heroin was addictive accumulated gradually, but it was not until 1910 that the profession fully awoke to the danger; by that time "a great many" heroin addicts had been inadvertently created.

There are, however, several problems with this account. If the medical profession was as culpable as Terry and
Pellens suggest, why by 1914 was the iatrogenic heroin addict clearly labeled as a minority type? Terry himself admitted that most of the heroin users at his Jacksonville clinic acquired the habit through "dissipation."\textsuperscript{35} The present heroin habitué," wrote neuropsychiatrist Pearce Bailey in 1915,

\begin{quote}
rarely accuses a physician of being the one who introduced him to his cruel master. The first dose of heroin is neither pill nor hypodermic injection taken to alleviate some physical distress, but is a minute quantity of a fine powder 'blown' up the nose at the suggestion of an agreeable companion who has tried it and found it 'fine.'\textsuperscript{36}
\end{quote}

Somewhat earlier, in 1912, Massachusetts physician Paul K. Sellew published an account of 9 cases of heroin addiction. Although he intended his article as a warning to the profession to avoid overprescribing the drug, a glance at his cases reveals that only 2 had a therapeutic origin. The remaining 7 began through curiosity or dissipation, or as a substitute for smoking opium. Cleveland addicts presented a similar picture.\textsuperscript{37} Something must have kept iatrogenic heroin addiction to a relative trickle, in comparison to the deluge of euphoric heroin use.

A re-examination of the literature on the therapeutic uses of heroin yields one important clue: heroin was indicated principally in respiratory disorders. Regarded as something of a specific, it was given for a limited range of diseases, unlike morphine, which in the nineteenth
century served as a virtual panacea. H. Dreser's early work on heroin emphasized its use in suppressing cough and alleviating respiratory difficulties, a theme reiterated in most American discussions of the drug. In 1900, for example, New York physician Bernard Lazarus reported favorably on the use of heroin in 9 cases. With the exception of a woman suffering from intercostal neuralgia, all the patients had respiratory complaints -- persistent cough, catarrh, difficult breathing, and so forth. A short article in a 1906 issue of the Journal of the American Medical Association summarized the literature on heroin as follows:

[It is] recommended chiefly for the treatment of diseases of the air passages attended with cough, difficult breathing, and spasm, such as the different forms of bronchitis, pneumonia, consumption, asthma, whooping cough, laryngitis, and certain forms of hay fever. It has also been recommended as an analgesic, in the place of morphine in various painful affections.

The last sentence refers to studies by Norman P. Geis, Samuel Horton Brown, Erle Duncan, and others documenting heroin's analgesic potential. Although these researchers were perfectly correct -- heroin is at least twice as potent as morphine in relieving pain -- several dissenting opinions were expressed. An early German report indicated that heroin did not seem suitable as a general pain reliever (schmerzlindernd), emphasizing instead its utility in cough. Morris Manges, writing in the New York Medical Journal, described heroin as "absolutely useless" as a
general analgesic in the usual does (1/12 to 1/10 grain). As misguided as these critics were, they appear to have had an impact on the profession, for heroin was prescribed principally as a cough remedy. This tendency was reinforced by the advertisements of the Bayer Pharmaceutical Company and other heroin distributors who promoted the drug as a specific for cough and other respiratory disorders, and only rarely as an analgesic.

The circumscribed use of heroin greatly reduced the number of potential iatrogenic addicts. Whereas virtually any complaint might warrant an injection of morphone in the 1870s, the chances of a patient suffering from rheumatism or dysentery or some other non-respiratory ailment receiving heroin in the 1900s were relatively remote. Terry and Pellen's intimation that the medical profession used heroin as indiscriminately as morphone obscures this important point.

Another weakness in the case for widespread iatrogenic heroin addiction involves the mode of administration. Heroin was given orally, in tablets, pills, and pastilles, or in an elixir or glycerin solution. It was not generally injected, particularly in cases of cough. Opiates administered orally are not as dangerous as
opiates injected hypodermically. Addiction via the oral route is still possible, of course, but at least the near-instantaneous relief/euphoria of an injection is absent.

This advantage was somewhat offset, however, by the fact that heroin was introduced as a non-addictive drug. "Safe and reliable," "addiction can scarce be possible," and "absence of danger of acquiring the habit" were some of the early, misleading claims made about heroin. More skeptical physicians soon began documenting cases of addiction, however. In 1899 H. C. Wood, Jr., became the first American to urge caution; the following year Manges noted "habituation" as a consequence of treatment in 6 to 8 percent of the cases he reviewed. "[T]he fact is emphasized, he warned, "that after all heroine is a derivative of morphine, and that it is to be dispensed with the discrimination and judgement which are essential to all sedative drugs." In 1903 Pettèy published an even stronger indictment, bluntly entitled "The Heroin Habit Another Curse," in which he systematically rebutted the claims of safety advanced by heroin's enthusiasts. The 1906 Journal of the American Medical Association article, cited above, was equally clear on this point: "The habit is readily formed and leads to the most deplorable results." Abstracts of European work on heroin addiction, which soon began appearing in English language journals, were another source of information.

The significant point about these and other heroin
warnings is that they appeared as early as they did, within a few years of the drug's introduction. (With the hypodermic injection of morphine, a decade-and-a-half, 1855-1870, passed before the alarm was fully sounded.) This would also help to explain why iatrogenic heroin addiction was not as aggravated a problem as morphine addiction.

The early heroin warnings, moreover, appeared in a period of growing professional concern over the excessive prescription of opiates (Chapter 2), and were therefore more likely to be heeded by the average practitioner, now highly sensitive to charges of narcotic overuse. It would be difficult to choose an exact date when iatrogenic heroin addiction ceased to be a problem (Terry and Pellens designate 1910); the situation is probably best described as a slow but steady abandonment of the drug. By 1920 Blair could announce that in Pennsylvania "... there are literally thousands of physicians who have stopped the use of heroin altogether." Doctors prescribed an average of less than 16 grains apiece in 1919, and Blair anticipated that the average for 1920 would "hardly go over 2 grains." The same year the House of Delegates of the American Medical Association endorsed a resolution calling for a total ban on heroin.

Finally, a word about heroin as a cure for morphine addiction. In 1899 a Berlin physician, A. Eulenberg, suggested that heroin might be useful in treating morphine
addiction, a proposal passed on the American audience by Bernard Lazarus of New York.\textsuperscript{57} How widespread this practice became is uncertain, but by 1903 Petey reported that half (4 of 8) of the cases coming under his care "had substituted Heroin for morphine with the idea that they were curing themselves of the habit, but after the substitution was made they were unable to leave off the Heroin."\textsuperscript{58} After word spread that heroin was addictive, however, this practice fell into abeyance.\textsuperscript{59} Moreover, from the standpoint of the overall prevalence of opiate addiction, the substitution cure was hardly important, since no new opiate addicts were being created -- only old ones fitted out with a new drug.

The therapeutic use of heroin, then, did lead to the creation of some new addicts. Some older addicts were also switched to heroin in a vain attempt at cure. Fortunately there were several limiting factors. The most important of these was the fact that heroin, unlike morphine, was indicated principally for one category of disease, the respiratory disorders. It was never a panacea. Heroin was also given orally, rather than injected. The relatively early warnings of heroin's addictive potential, plus the profession's growing narcotic conservatism, also played a constraining role. By approximately 1910 iatrogenic addiction had been reduced to a trickle, and the heroin addict who could blame his condition on his physician was
soon to be eclipsed by a new and less sympathetic type: the juvenile heroin sniffer.

The Origins of Non-medicinal Heroin Addiction

"It is a notorious fact," remarked Representative Joseph Holt Gaines of West Virginia, one of the few Congressmen to speak against the 1909 Smoking Opium Exclusion Act, "that those who are addicted to the opium habit will secure the drug in some form ... if they are prevented from getting it in the form in which it is preferred." Gaines's observation was perspicacious; one of the earliest and most significant incentives to use heroin was the ban on imported smoking opium. This trend, according to Bailey, began about 1910. "[O]ld smokers and their recruits," deterred by the new crackdown on the dens, abandoned the pipe for more powerful (and legal) forms of opiates. Smoking opium could still be had, of course, but it "became very expensive and could only be obtained in small quantities by those who could afford it at all." Heroin, which was cheap and did not require the use of a hypodermic syringe, was an attractive alternative. The identities of the first heroin converts (or "pioneers," as one report aptly described them) are not known.

Veteran opium smokers were not the only ones to adopt heroin. Curious neophytes who in years past would have
gone on to become full-fledged smoking opium addicts, began experimenting with heroin instead. The changing preference of these younger users helps to explain the low average age of heroin addicts.

Another factor behind the increasing popularity of heroin was the growing scarcity of cocaine. Cocaine, a popular underworld stimulant, was, like smoking opium, a target of restrictive legislation. Supplies diminished, prices rose, and substitutes were sought. In order to understand how this situation came about, and why cocaine users switched to heroin, it is necessary to digress briefly on the history of this controversial drug.

Coca leaves, chewed by South American natives for centuries, came to the attention of the Western medical community in the mid-nineteenth century. Although the key alkaloid, cocaine, was isolated as early as 1855, it was not until the mid-1880s that its therapeutic use became common. The major impetus to cocaine's therapeutic use was a series of glowing reports, including articles by a then-obscure Viennese neurologist, Sigmund Freud. Like morphine (but unlike heroin), cocaine was recommended for a wide variety of conditions. As one advertising brochure put it, "[a]n enumeration of the diseases in which coca and cocaine have been found of service would include a category of almost all the maladies that flesh is heir to." Cocaine was recommended variously as an anti-spasmodic, aphrodisiac, anodyne, and local anesthetic, as
a specific for hay fever and asthma, and as a cure for opiate addiction, to name but a few of its proposed uses. It was also recommended as an all-purpose tonic, for patients who exhibited "melancholy" or "the blues" or other less than precisely defined depressive symptoms. Many physicians also tried the drug on themselves, thereby worsening the profession's already serious addiction problem.

The faddish use of such a powerful stimulant inevitably drew a counterattack. The suggestion, advanced by Freud and others, that cocaine be employed to alleviate withdrawal distress was vigorously condemned. Other critics chided the profession for overprescribing the drugs in colds, hay fever, and other common ailments. Even more important was the development of non-euphoric anesthetics, notably eucaine, which could duplicate cocaine's most valuable therapeutic property, local anesthesia. Conscientious practitioners gradually abandoned its use. Unfortunately self-interested patent medicine vendors continued to promote self-medication with the drug, a key ingredient in many of their preparations. Cocaine was also available in a variety of soft drinks (some of which had medicinal pretensions, some not) or in pure form through the mails.

The treatment or self-treatment of disease was only one factor behind the spread of cocaine, however. Sometime in the late 1880s or 1890s -- the date is not certain --
black stevedores in New Orleans began taking the drug in order to "perform more easily the extraordinarily severe work of loading and unloading steamboats," a task at which they toiled for up to "seventy hours at a stretch ... without sleep or rest, in rain, in cold, and in heat."73 It is highly likely that this practice derived from reports of similar use of coca leaves by South American natives, who were able to increase their nervous energy, forestall drowsiness, and "bear cold, wet, great bodily exertion, and even want of food to a surprising degree, with apparent ease and impunity."74 In any event, the New Orleans experiment proved sufficiently successful that other laborers and plantation hands purchased or were given cocaine.75 Other blacks turned to the drug, not as a stimulus to work, but as a form of dissipation.76 Some authorities charged that blacks, crazed by cocaine, went on superhuman rampages of violence -- allegations which have been recently and vigorously denied.77 But, whatever their behavior, it is fair to say that a considerable number of blacks, especially in the South, made at least occasional use of the drug.78

Cocaine also became popular in the white underworld. Around 1900 there were an increasing number of reports that cocaine use was growing among this class of whites in both Northern and Southern cities.79 Its use was especially common among prostitutes, a group whose affinity for
opiates has already been noted. Although some prostitutes may have set aside their preferred opiate for cocaine, it is more likely that they simply used both drugs. Some prostitutes also introduced their customers to the pleasures of cocaine, a factor which helps to account for its spread in urban areas.

Although cocaine as a medicine was inhaled, ingested, or injected, for euphoric purposes it was almost exclusively sniffed. G. C. Biondi, of the Fordham University School of Medicine, commented that out of "about 1000" cases he had witnessed, he could recollect but "three or four instances of exclusive hypo users, and these were at the same time morphine-fiends." Because of the vascularity of the mucous membrane, cocaine sniffed up the nostrils enters the bloodstream, and hence produces its effects, very quickly. Sniffing is also economical, since only "exceedingly small amounts are required, when used in this manner, to produce constitutional effects." Sniffing also avoided the expense, unpleasantness, and possible sepsis involved in hypodermic administration.

Reaction to euphoric cocaine use, among blacks as well as whites, was not long in forthcoming. By 1915 most states had passed laws designed to restrict use of the drug to therapeutic purposes, mainly by limiting its purchase to those with a legitimate prescription. New York passed a series of laws, in 1907, 1908, 1910, and 1913, the last
statute placing "[s]o many elaborate restrictions ... around cocaine that there was little opportunity thereafter for its legal distribution in any significant amount...."\textsuperscript{86}

Of course, these laws did not prevent the euphoric use of cocaine, but they did succeed in stimulating higher black market prices.

With the price of their favorite drug increasing, cocaine users in New York and other Eastern cities in 1910-1914 were forced to consider alternatives. Heroin was doubly attractive: it was cheap, and it was taken in the accustomed fashion, sniffing. Any unpleasant symptoms the regular cocaine user might experience on discontinuing use of the drug, particularly depression, were alleviated by the tranquilizing and mood-elevating properties of heroin.\textsuperscript{87}

From New York, Philadelphia, and Boston came reports of cases of heroin addicts with a prior history of cocaine use.\textsuperscript{88} The press also emphasized the link between the two drugs. One story, appearing in the \textit{New York Times}, stated that heroin, "made by treating cocaine with acetic acid ... is much cheaper than cocaine, [and] its use is proportionate-ly greater."\textsuperscript{89} The slip is revealing; the reporter, aware that heroin and cocaine were taken in the same way and by the same class of people, apparently assumed that one was a derivative of the other.

Other users had no previous experience with cocaine, but began experimenting with heroin directly. They might
later sniff cocaine, when it was available, but its use was "relatively unimportant" compared to the amount of heroin consumed, once addiction was established.90

Many of those who used heroin initially, as well as those who switched from other drugs, were members of juvenile gangs. Gang members were susceptible for several reasons. First, if one of their number passed around some heroin and urged his fellows to sample it, there was tremendous pressure to do so; turning it down was an act of cowardice, entailing loss of status or even expulsion from the gang. On the positive side there was a tremendous curiosity, a quest for new adventure which characterizes all such youthful groups. Finally, the manner in which the drug was taken, sniffing, seemed innocuous enough, particularly to those who had previous experience with cocaine.

Contemporary accounts confirm this description, and serve to emphasize that heroin sniffing, like opium smoking, was very much a group practice. "The majority of the present takers," wrote Bailey, "are boys and young men whose easy sociability has been developed in the gangs...." "A common story," he continued,

is of a group of boys being together at a dance, or a show, at some outdoor gathering in the summer. One of the number produces a 'deck' or 'package' of heroin and tells the others that the taking of it is wonderfully enjoyable; 'try that and you won't have no trouble,' he says; he sniffs it up his nose and has enough of it on hand or within reach to supply all the others who wish to try it. They, of course, all wish
to follow exactly as the majority in any group of small boys will wish to imitate someone whom they see smoking tobacco. The first taking is generally not agreeable, but they try it again, and about twenty-five per cent become victims of the habit within a few months.91

The analogy to smoking tobacco is apt, and was reiterated by others. S. Dana Hubbard, a New York public health official familiar with the workings of that city's narcotic clinic, noted that impressionable young people, coming into contact with experienced users, "in their curiosity give it a trial (similar to the acquirement of cigarette smoking in our young) and soon travel the same road to their own regret."92 Others described the same process in less sympathetic terms. "In many instances the patients [addicted to heroin] are members of gangs who congregate on street corners particularly at night, and make insulting remarks to people who pass," wrote Leahy. "The histories as obtained from the patients and their relatives show that in practically every case the drug had been tried by one of the members of the gang who then induced the other members to try it..."93

Is it appropriate to describe these youthful heroin users as criminal, or as representing a criminal class? The answer to this question is a matter of definition. If by "criminal" is meant a hardened professional, a full time lawbreaker, the answer is no. A boy's association with his gang and its activities was often casual, something he did
after work or school. If, however, by "criminal" is meant "engaging in criminal activities," the answer is a qualified yes. The typical urban street gang of the 1910s and 1920s engaged in a wide range of legal and illegal activities. It was, as Jacob Riis put it, a club gone wild. The same group which would one day organize a baseball game or a dance might be found pilfering box cars or smashing windows the next. Fighting was an ever-popular activity, and beatings, knifings, and shootings, especially of rival gang members, were common. The gang was so structured that those who exhibited the most daring and pugilistic character quickly assumed leadership; hence members were quick to perform and brag about illegal feats. The gang member who began using drugs was no fallen angel; he had a history of indulgence in destructive and dangerous pastimes, of which heroin sniffing was but one manifestation.

Statistics on the age, sex, urban, and social background of the addicts, reviewed earlier, fit well with this portrait of the heroin user as gang member. It would be misleading, however, to characterize heroin sniffing as exclusively a juvenile gang activity. Many who used heroin were older, professional criminals, gamblers, and prostitutes who found it expedient to switch from smoking opium or cocaine. A few addicts came from respectable backgrounds. Army barracks were also the scene of heroin sniffing. The euphoric use of opiates in the armed services was nothing
new; it extended at least as far back as 1898, when soldiers stationed in the Philippines, learned to smoke opium.96 Somewhat later cocaine came into vogue, followed by heroin from 1912 to 1916. Soldiers were either introduced to the drug by their friends, who praised its ability to alleviate fatigue and induce euphoria, or by prostitutes who worked the nearby brothels. Heroin's appeal was enhanced by its reputation as an aide de amour; its use supposedly prolonged the sexual act. Army officers took a dimmer view of the drug, however, and, on the theory that one addict might corrupt an entire company, soldiers caught using heroin (or cocaine) were punished and discharged.97 Similarly, when the draft became a factor, recruits showing signs of drug addiction were summarily rejected. Supervision appears to have been especially strict during the First World War; moreover, an addict shipped overseas, unless attached to a medical unit, would have found it almost impossible to secure a supply.98 Because of these precautions and wartime conditions, heroin in the army remained an isolated and relatively insignificant problem, especially in comparison to growing civilian use. Not until the War in Vietnam did the specter of heroin addiction again seriously trouble army physicians.

Heroin Spreads

In 1920 heroin sniffing was largely confined to New York
and a few nearby cities, the most important of which was Philadelphia. Other Eastern and Midwestern cities had their heroin addicts, but these were a decided minority. By 1940, however, heroin was the opiate of choice among underworld users in virtually every large American city. What effected this dramatic change?

To begin with a narrower question, why was heroin addiction concentrated in the New York-Philadelphia area in the first place? Curiously, contemporaries displayed little interest in this question, so there is practically no direct evidence to go on. Two plausible explanations, however, come to mind. First, the laws restricting the use of cocaine seem to have been enforced with special vigor in New York and Philadelphia; therefore cocaine sniffers in those cities had an especially strong incentive to switch to heroin. A second and complementary theory involves the source of supply: many of the major heroin distributors, such as Bayer Pharmaceutical Company, Schieffelin & Co., or Martin H. Smith Co., were located in New York City. Retail druggists in the city would have been well stocked, and it also would have been relatively easier to divert large amounts of the drug (by re-routing orders, stealing from warehouses, spiriting imports past Customs, and so forth) into the illicit traffic in New York than in other cities. Simply stated, heroin addiction took hold in the New York City area because that was where most of the heroin was.
In other places, where heroin was less abundant, morphine, or morphine in combination with cocaine, assumed new importance as a euphoric agent and substitute for smoking opium. In 1917 L. L. Stanley, resident physician at California's San Quentin Prison, asked addicted inmates which form of opium they had first used. Of 100 prisoners interviewed, 58 indicated smoking opium, 20 morphine hypodermically, 8 morphine orally, 3 "ate 'yen shee!'" (ashes of smoking opium), and 11 "cocaine and laudanum, or eating opium." But when asked which form of the drug they had last used, 48 replied morphine hypodermically, 8 morphine orally, 28 morphine and cocaine, 3 smoking opium, while the remaining 13 used "morphine by mouth and syringe together, according to circumstances" or took "heroin and laudanum." Heroin, as these statistics indicate, remained a relative novelty in the California underworld. Massachusetts furnishes another example. As mentioned in Chapter 3, opium smokers in that state had largely switched to morphine, or morphine and cocaine, by 1917. In Boston there was some experimentation with heroin around 1913, particularly by cocaine users feeling growing legal pressure, but the practice, owing perhaps to an unsure and limited supply, did not become widespread. In 1922 C. Edouard Sandoz, Medical Director of the Boston Municipal Court, stated, "Heroin sniffing is much more frequent among addicts of the underworld in certain cities, New York in particular,
than in Boston where we rarely see a case of heroinism.... Cases of cocainism, pure and simple, are relatively rare. It is generally an accompaniment of morphinism." Yet the backgrounds of the morphine addicts Sandoz described were very much like the "heroinists" of New York, mainly young or middle-aged men who had learned to inject morphine in "bad company." In contrast to the classic nineteenth century iatrogenic addict, who generally used but one drug, this new type made free use of other euphoric agents, notably cocaine, when they were available. Another obvious contrast is sex; among the new, non-therapeutic morphine addicts, males rather than females predominated.

To relate a statistical anomaly noted in Chapter 2, it may well be that the higher percentage of males recorded in the 1915 Cleveland and 1923 Shreveport studies of morphine addicts was due largely to the increasing prevalence of this new euphoric type. As "sporting" morphine addicts were recruited in areas outside of New York City, and as older iatrogenic female addicts died off, the shift in sex became more pronounced; a nationwide study of morphine addicts reported for violation of the narcotic laws between July 1, 1929, and October 31, 1929, showed that fully 824 out of 1054 cases (78.2 percent) were male.

This state of affairs -- heroin sniffers in and around New York City, morphine addicts elsewhere -- might have persisted were it not for yet another change in the legal
status of the opiates and opiate addiction. The source of this change was the 1914 Harrison Narcotic Act. As good, scholarly accounts of the origin, passage, and interpretation of the Harrison Act are available, I will confine myself to a brief review of its legislative and judicial history.

When Hamilton Wright returned from the 1909 Shanghai Opium Commission, he had two basic goals in mind: the convening of an international opium conference (which, unlike a commission, would have treaty-drafting powers), and the passage of comprehensive domestic anti-narcotic legislation. He achieved the first objective but not the second. Wright was eventually able to persuade Secretary of State Philander C. Knox of the value of an international opium conference and, on September 1, 1909, formal invitations and a tentative agenda were sent out to the nations which had participated in the Shanghai meeting. The response, however, was less than enthusiastic; many nations had a vested interest in the opium traffic and were reluctant to see international control imposed. After considerable delay the conference convened at the Hague on December 1, 1911.

Wright, meanwhile, continued to push for more stringent domestic narcotic laws. His main efforts were devoted to the Foster bill, an elaborate measure which, like earlier smoking opium legislation, aimed at indirect control of the traffic through the long-recognized taxing and commerce powers. The Foster bill required those who
dealt in narcotics to register and pay a tax, and carefully record all transactions, even of minute amounts. Drug containers, like liquor bottles, would bear a tax stamp, and persons who were not registered were barred from shipping narcotics across state lines. Penalties for violation were stiff: up to $5,000.00 and 5 years in prison. Further, state and local boards of pharmacy and law enforcement agencies would have access to the records. They could thus ascertain who sold how much of which drug to whom, information which could prove embarrassing to those doctors and druggists who were little more than narcotics purveyors, and lead to the better enforcement of existing narcotic laws. Wright also argued that the registration and record keeping provisions would soon drive disreputable dealers (saloon keepers, peddlers) out of interstate commerce, where they secured the bulk of their supplies. But legitimate manufacturers and dealers countered that the elaborate regulations would effectively hamstring their trade, and for this reason they strongly opposed the bill. As related in Chapter 1, Wright's attempt to bluff the bill through in the face of this opposition was a failure.

So Wright set sail for the Hague without exemplary new narcotic legislation. He tried to put the best face on things; in a memorandum to the conference he explained that passage had been postponed "until all those affected shall have been heard. Besides this, there has been such a press
of business before the Congress since the question of inter-
state control of cocaine, etc., was actively brought before
it that action has been delayed."112 The polite talk about
delay fooled no one. The German delegate, Delbrück, asked
Wright point-blank what guarantee he could give that Con-
gress would pass the necessary legislation to put the pro-
visions of the treaty into force. This was twisting the
knife in the wound, for Wright had done everything in his
power to get the Foster bill through, and had failed.
Mortified, Wright nevertheless managed a lofty and digni-
fied reply: "The good faith of the United States ought to
be a sufficient guarantee that the government would carry out
all that it had agreed to."113

Such incidents did not divert the conference for long,
however, and by January 23, 1912, agreement was reached.
The Hague Opium Convention touched on many aspects of the
international traffic. Chapter III, however, was the section
most relevant to the American situation: it pledged the
contracting powers to promulgate and enforce laws to con-
trol the manufacture and sale of medicinal opium, morphine,
heroin, and cocaine, and to restrict their consumption to
"medical and legitimate uses only." Although some powers
delayed signing the Convention and it did not actually go
into effect until 1914, Wright now believed that Congress
had a moral and diplomatic obligation to honor the Con-
vention by regulating the domestic narcotic market.
The campaign was renewed in the summer of 1912. A bill virtually identical to that proposed by Foster was introduced by Representative Francis Burton Harrison on June 10, 1912. Harrison, a genteel New Yorker (Yale, '95) who was later to gain fame as Governor-General of the Philippines, agreed to take charge of the bills after the untimely death of Foster on March 21, 1912. Again the bill failed to get beyond the House Ways and Means Committee, primarily because Wright refused to incorporate changes demanded by the drug trades.

Harrison eventually convinced Wright that he would have to negotiate directly with the National Drug Trade Conference, an ad hoc lobby charged with keeping careful watch on narcotic legislation. The legitimate organizations which the NDTC represented, such as the National Wholesale Druggists' Association, were not opposed in principle to government regulation of the narcotic market. Rather, they sought to eliminate the provisions of the Harrison bill they considered too stringent. The negotiations began inauspiciously; Wright became so incensed during the first session that he walked out of the meeting. He soon cooled off, however, and discussions resumed. Eventually they were broadened to include officials of the State and Treasury Departments, as well as representatives of individual drug companies. By May, 1913, a compromise bill had been hammered out and NDTC representatives John C. Wallace and Charles N. Woodruff signed a statement declaring
that the new version had their "thorough support and approval."\textsuperscript{116} The concessions won by the drug trades and medical profession can be summarized as follows: chloral and cannabis were dropped from the list of controlled drugs, leaving opium and cocaine, their derivatives and salts; the amount of the proposed tax was reduced to a nominal $1.00; record-keeping procedures were standardized and simplified; physicians in attendance upon a patient could dispense narcotics without making a record; and preparations containing small amounts of narcotics were exempted from the provisions of the bill. The basic scheme of the original Foster bill remained intact, however. All those who dealt in narcotic drugs were to register with and pay a small tax to their district internal revenue officer, and keep accurate records of their transactions.

On June 23, 1913, one month after agreement with the NDTC was reached, Harrison introduced the compromise bill. It took this version less than a week to pass the House. On June 24, the day after it was introduced, it was reported back favorably from the Ways and Means Committee. The report bore witness to Wright's influence: his dramatic statistics were repeated, as well as his argument that "this Government is bound to enact legislation to carry out its humanitarian, moral, and international obligations."\textsuperscript{117} During the floor debate Harrison emphasized that the measure had at last received the imprimatur of the drug
interests. Even so, the measure came in for some sharp criticism, particularly of Section 6, which exempted nostrums containing small amounts of narcotics. Representative James R. Mann acknowledged the criticism and allowed that narcotic patent medicines "probably ought to be abolished." But then he added candidly, 

Unfortunately I am forced to believe that if we should attempt in this way to attack all the proprietary medicines which contain opium, the bill would have a rocky road to travel, and would be consigned to oblivion. That may not be a very good excuse, but, after all, it is practical. 

Mann was likely anticipating the bill's fate in the Senate when he uttered those words. As the measure made its none-too-rapid progress through the upper chamber, a variety of special interest amendments were tacked on. Typical of these was an amendment raising the Section 6 heroin limit from 1/12 grain per ounce to 1/4 grain per ounce. The House objected, a conference committee was appointed, and by late October, 1914, a compromise had been worked out. The bill was finally signed into law on December 17, 1914. 

In many respects the Harrison Act was a classic piece of Progressive legislation: reform effort (restrict the sale of narcotics) met business self-interest (rationalize the narcotic market) to produce a compromise measure. Large pharmaceutical firms were perfectly willing to see small-time, unregistered peddlers prosecuted; enlightened
pharmacists agreed to the need to restrict sale to those possessing a prescription; and nostrum makers could go on merchandising their wares, provided they contained no more than the allowable amount of narcotics.

There was, however, one issue which could not be compromised, and that was maintenance. Either opiate addicts could obtain their supply legally, or they could not. The law was silent on this crucial point -- the words "addict" or "addiction" appear nowhere in the statute -- and there is frustratingly little in any of the hearings, floor debates, and committee reports to indicate Congressional intent. Nevertheless, the agency first charged with enforcing the law, the Internal Revenue Bureau of the Treasury Department, assumed an aggressive anti-maintenance stance. Alleging that a physician who issued a prescription to an addict for the sole purpose of maintenance was not acting "in good faith" as required by Section 8 of the Harrison Act, the Bureau brought a number of indictments against doctors, druggists, and addicts for conspiracy to violate the law. At first the Bureau's efforts, notably in United States v. Jin Fuey Moy (1916), were unsuccessful; in that case Justice Oliver Wendell Holmes, Jr., speaking for the 7 man majority, rebuked the government for construing a revenue statute as a sweeping prohibition. However in the 1919 Webb case, discussed in Chapter 1, the government managed to reverse the earlier decision and obtain a ruling favorable to its anti-maintenance policy.
These laws and decisions had a marked impact on the addict in the street, and on the kinds of drugs he used. After the Harrison Act went into effect addicts, as unregistered persons, had to obtain a prescription for their drugs.122 (This was already a provision of many state laws, but these were not always vigorously enforced.) Typically these prescriptions were written by "dope doctors," licensed physicians who would for a fee provide the necessary service. During a single month one New York City doctor "wrote scrip" for 68,282 grains of heroin, 54,097 grains of morphine, and 30,280 grains of cocaine.123 The income of these doctors was lucrative, but, although the addict might grumble at being gouged, the only alternative was the black market. Black market prices were up sharply, though, since unregistered dealers ran significant risks of prosecution and since it was now much more difficult to obtain sizable shipments from legitimate manufacturers.124

The situation deteriorated even further during 1919-1920, in the wake of the Webb decision and the closure of many of the hastily organized narcotic clinics. As I will argue later, some addicts, particularly those in rural areas and those suffering from chronic and incurable diseases, were still able to obtain opiates on a legal or quasi-legal basis, but many others were now forced to resort to illegal sources of supply.

To relate these developments to the spread of heroin,
the growing popularity of that drug during the 1920s and 1930s was due to what might be termed its black market virtues. From the point of view of the user, heroin was cheaper than morphine, and more readily available. Sociologist Bingham Dai observed that in Chicago heroin overtook morphine as the opiate of choice around 1935. "One reason given to us by the addicts...," he explained, was "the exacting price of morphine [$90.00-100.00 per ounce] compared with that of heroin [$38.00-40.00]."125 Terry and Pellens concurred, noting that there "have been times in New York when morphin sold on the street as high as $80.00 an ounce while heroin was selling at a much lower figure."126 Heroin's attractiveness was enhanced by the fact that it produces a stronger feeling of euphoria, and produces it more rapidly, than morphine or other opiates, when administered in a comparable manner.127 It can also be sniffed or injected, the former method appealing to many potential new users.128

From the point of view of the peddler, heroin's principal virtue was the ease with which it could be adulterated. Profits could be doubled or quadrupled by cutting pure heroin with milk sugar, or some similar substance. "I have known of instances," wrote one New York official, "where the addict had paid at the rate of a dollar a grain and would get six-tenths of a grain, and many more instances where he would be sold nothing but pure sugar of milk."129 By 1938
heroin sold in the United States was on average only 27.54 percent pure. The fact that heroin, prior to adulteration, is a powerful yet compact substance also made it an ideal item for smuggling. This advantage was especially important after 1924, when Congress effectively outlawed the use of heroin for therapeutic as well as non-therapeutic purposes, and all supplies had to be smuggled into the country.

Seizures made by the Bureau of Narcotics illustrate heroin's growing importance. In 1932 3.4 pounds of heroin for every 1 pound of morphine were seized under federal internal revenue narcotic laws; by 1938 the ratio was 7.7 to 1. Commented the Bureau in its 1932 annual report, *Traffic in Opium and Other Dangerous Drugs*, "Heroin has supplanted morphine to a considerable degree as the drug of addiction in every part of the United States except on the Pacific Coast." That generalization is perhaps too sweeping; there were, as I shall later argue, many Southern addicts who continued to use morphine well into the 1930s.

Paralleling the growing importance of heroin as a black market opiate was the diffusion of the hypodermic technique among heroin addicts; those who had begun sniffing the drug in 1910-1915 were by 1920-1925 mainly injecting it. One reason for this change was that continuous heroin sniffing will seriously damage the nasal septum, particularly if it is taken with cocaine. Hence alternative
routes must eventually be sought. Addicts were also drawn to the hypodermic as a more convenient way of administering increasingly large doses, and as a way of enhancing the drug's effect. The quickest and most euphorogenic route of all is the intravenous, and sometime in the early 1920s addicts learned to inject heroin directly into their veins. This technique probably began accidentally, when an addict hit a vein and, after his initial fright wore off, discovered that this method was even more pleasurable than subcutaneous or intramuscular injection. He might then pass on this information to his addict friends. Another motive for intravenous use was the steadily declining purity of street heroin. In order to derive the maximum satisfaction from the adulterated product, users began resorting to the most drastic and direct route. As one addict, who turned to intravenous use around 1932, succinctly put it, "you didn't need no vein until they cut it." This user, described only as a white man from New York City, has a particularly interesting history, for he exemplifies the changes the non-therapeutic opiate addict underwent in the early twentieth century. He learned to smoke opium fairly late, in 1912, at the age of 16. In 1914 he shifted briefly to oral use, then began to sniff heroin and cocaine in 1915. In 1922 he and his companions turned to subcutaneous injection, and then, 10 years later, to intravenous. The drug injected was heroin, or heroin with cocaine.134
Good statistics are available to illustrate the change in route. Of 37 heroin users studied in 1918 at Camp Upton, New York, 24 used a hypodermic, 8 sniffed the drug, and 5 used both routes.\textsuperscript{135} A thorough study of 318 institutionalized addicts conducted in New York City in 1928-1929 showed that, of 263 heroin cases, 251 used the drug subcutaneously, 11 intravenously, and 1 orally. Only 2 instances of sniffing were reported, even though sniffing was the most common manner in which the addict first used the drug.\textsuperscript{136} A 1929 study of addicts in Philadelphia General Hospital's narcotic wards yielded similar findings: 80 percent of the patients used heroin prior to admission, the majority hypodermically, except for "several cases of sniffing and ... two in which self-intravenous administration was employed."\textsuperscript{137} The intravenous route continued to gain in popularity during the 1930s; by 1940 a majority of addicts admitted to the Lexington Hospital had a prior history of intravenous use.\textsuperscript{138}

The gradual transformation of the underworld addict from opium smoker to heroin mainliner, it should be added, was effected at tremendous cost to the user. Not only did the heroin addict have to pay more for a drug of dubious strength and purity, but the risks involved in intravenous heroin injection, compared to opium smoking, were considerable. Overdose, bacterial endocarditis, pulmonary emboli, tetanus, and hepatitis were some of the serious
medical complications which plagued and continue to plague heroin addicts. 139

Conclusion

Heroin addiction was originally iatrogenic in nature, the unwanted and unexpected byproduct of treatment for respiratory disease. Although doctors gradually abandoned use of the drug, it became popular after 1910 as a euphoric agent. Legal pressure on smoking opium and cocaine were important factors behind this early, non-medical use. Later, when the majority of addicts had been effectively denied access to opiates, heroin use spread, principally because it was the opiate most suitable for black market distribution. In addition to a change in the geographic distribution of heroin addicts, from the New York City area to cities scattered throughout the country, there was a change in the method of administration: sniffing gave way to subcutaneous or intramuscular injection, which in turn gave way to intravenous. By 1940 the heroin mainliner had emerged as the dominant underworld addict type.
NOTES TO CHAPTER 4

1 Heroin was first produced in 1874, but, like morphine and cocaine before it, did not come into general use until some years after its discovery. The most important early proponent of heroin was H. Dreser, "Pharmakologisches über einige Morphinderivate," Therapeutische Monatshefte, 12 (1898), 509-512, and "Über die Wirkung einiger Derivate des Morphins auf die Atmung," Archiv für die Gesammte Physiologie des Menschen und der Tiere, 72 (1898), 485-520. English language summaries of Dreser's and others' work on heroin soon appeared in American and British journals. See also "History of Heroin," Bulletin on Narcotics, 5 (1953), 3-6; David F. Musto, "Early History of Heroin in the United States," in Addiction, Peter G. Bourne, ed. (New York: Academic Press, 1974), 175.

2 Terry, Annual Report, 57.


4 Hubbard, "New York City Narcotic Clinic," 44-45.

5 Drysdale, 354-357, records average age at treatment for those who used heroin as 25 years, 4 months, and average length of addiction as 3 years, 2 months, yielding an average beginning age of 22 years, 2 months. Similarly, Leahy, 260, 256, gives the age of the patients as 20, the length of the habit as "about one year," yielding an approximate beginning age of 19 years.

6 Bloedorn, Chart No. 8, 314.

7 Charles F. Stokes, "The Problem of Narcotic Addiction of Today," Medical Record, 93 (1918), 756.
12. Terry, Annual Report, 57; Drysdale, 354-357; Leahy, 260; McPherson and Cohen, 637.
14. McPherson and Cohen, 638. Overall 10 of the 100 cases they studied were foreign born, although this would include some non-heroin users (p. 637).
15. Leahy, 260. Drysdale, 354-357, indicates that there were several (10 of 30) "Hebrew" heroin users, but he does not indicate their country of birth.
21. Sources which refer to heroin addicts concentrating in Tenderloin districts and/or large cities include: Phillips, 2147; Brown, "Enforcement," 332; Farr, 893; Bloedorn, 309; McPherson and Cohen, 637; and MacMartin, 112.
e.g.; Leahy, 256-257. The gangs are discussed more fully below.


Descriptions of heroin addicts' appearance and behavior are found in Stokes, "Problem of Addiction," 756, and Hubbard, "New York City Narcotic Clinic," 36-39. "In our opinion," wrote Hubbard, "drug addiction is simply a degrading, debasing habit, and it is not necessary to consider this indulgence in any other light than an anti-social one" (p. 39). McIver and Price, 478, refer to heroin addiction spreading among "the dissipated and vicious -- words strikingly similar to those applied to opium smokers.


Ibid., 756; Leahy, 257; McPherson and Cohen, 637.

The most thorough list of occupations is found in Hubbard, "New York City Narcotic Clinic," 46-47. There is, however, a drawback: it is impossible to tell whether or not the addicts in a given category used opium or morphine. Another problem is that some of these figures are at variance with those given in New York, Second Annual Report, 19. See also Phillips, 2147; Drysdale, 354-357; McGuire and Lichtenstein, 189; and Stokes, "Problem of Addiction," 756.

Paul K. Sellew, "Heroinism," Maine Medical Journal, 4 (1914), 1673-1674 (Cases 5-9); McIver and Price, 477, "notorious crooks and thieves." Note, however, that not all of McIver and Price's cases used heroin. They are very vague about the kinds of opiates used. It is certain, however, that a minority (38 of 147) used morphine exclusively.

Leahy, 257; McIver and Price, 477.

McGuire and Lichtenstein, 189; Hubbard, "New York City Narcotic Clinic," 46. Presumably some of the female heroin addicts were housewives. Drysdale, 354-357, lists the occupation of the 3 female heroin users in his sample as "housework," "wife," and "prostitute." Leahy states that 3 of 7 females in his sample were married, but does not specify their occupation (p. 260). The majority of the male heroin addicts were single, separated, or divorced (Ibid., 260).

Ibid., 256.

Opium Problem, 76-86, 484.

Ibid., 85. Brown, "Enforcement," 332, reached a similar conclusion.

Bailey, "Heroin Habit," 315.

Sellew, 1670-1678; Drysdale, 354-357. 1912 may be too early a date to say that iatrogenic heroin addicts were in a minority, however. See Kebler, "Present Status," 15, for evidence that they were still in the majority in 1911. (The swing to heroin in urban slums was only then getting underway.)

Bernard Lazarus, "A Contribution to the Therapeutic Action of Heroin," BMSJ, 143 (1900), 600-602. The neuralgia case is interesting because the following year Stewart, 88, stated, "My results with heroin in several cases of neuralgia ... have been negative." Both cases of addiction reported in Harlow Brooks and H. R. Mixwell, "Two Cases of Heroin Habituation," New York State Journal of Medicine, 11 (1911), 386-387, involve heroin for cough. Significantly, the two physicians also commented on the "by no means infrequent" euphoric use of heroin then spreading "on the extreme east and west sides of [New York City]" (p. 386). For an unusual case of tuberculosis phobia leading to addiction, see C. M. Fauntleroy, "A Case of Heroinism," New York Medical Journal, 86 (1907), 930.

"Heroin Hydrochloride," JAMA, 47 (1906), 1303.


"Treatment," 770.


Though not exclusively; Phillips, 2146, for example, recounts a case in which heroin was first given as an analgesic. However in the text of his article Phillips stresses its frequent use in cough, as does Edward Stieren, "Blindness from Heroin in the Nostrum Habitina," JAMA, 54 (1910), 870. Musto, "Early History," 175-176 also emphasizes the drug's use as a cough suppressant. It is also noteworthy that Lawrence Kolb, "Drug Addiction: A Study of Some Medical Cases," Archives of Neurology and Psychiatry 20 (1928), 171, found only 1 heroin user in a sample of 119 addicts whose condition resulted from medication. Others dissent from this view, but without good evidence. The claim in Alfred W. McCoy, et al., The Politics of Heroin in Southeast Asia (New York: Harper & Row, 1972), 4,
"Hailed as a 'miracle drug' by medical experts around the globe, heroin was widely prescribed as a non-addicting cure-all for whatever ails you, and soon became one of the most popular patent medicines on the market," is undocumented, as is the statement in Charles Barber, "Drugs: A Study in Politics, Law and Bureaucracy," ALSA Forum, 3 (1978), 26, that heroin was "touted as 'great for children'." Finally there is the remark in "History of Heroin," 3, that heroin was "[p]rescribed for almost all illnesses in which codeine and morphine had been found." This inference is unfounded, in view of the fact that every medical source cited in the article discusses only respiratory disease in connection with heroin.

47 See, for example, the advertisements in the December 2, 1899, February 2, 1901, April 12, 1902, and April 19, 1902 issues of JAMA (advertising sections, pp. 47, 25 and 31, 36, and 34, respectively.)

48 Lang, 19; Coblentz, 70; JAMA ads cited above.

49 Though it was sometimes injected when given as an analgesic. Brown and Tompkins, 520.

50 Ibid., 520; F. C. Floeckinger, "Clinical Observations on Heroin and Heroin Hydrochloride as Compared with Codein and Morphin," New Orleans Medical and Surgical Journal, 52 (1900), 644; Daly, 190. See also Floret, 512. Claims about heroin's safety led some to try the drug who otherwise might not have, e.g., Case No. 1 in Sellew, 1671.

51 Wood, "Newer Substitutes," 90. Wood's exact words were, "Of course, it is hardly possible to say as yet whether these remedies [dionin and heroin] are likely to cause drug-habits." Morris Manges, "A Second Report on the Therapeutics of Heroin," New York Medical Journal, 71 (1900), 32. There is at least ambivalence in Stewart, 88. Although he claims that heroin "does not tend to produce habit," in the following sentence he hedges, saying "It is very unwise to place this drug in the hands of your patients for their indiscriminate use as it will likely be abused, and may lead to toxic symptoms."


53 "Heroin Hydrochloride," 1303.

54 e.g., "Heroin and the Results of Its Abuse as a Drug," epitome section of the British Medical Journal (1902), 91. Another and ruder type of warning was the lawsuit brought by an outraged patient. See "Defective Complaint in Action for Malpractice in Prescribing Heroin," JAMA, 58 (1912), 1969.


57 A. Eulenberg, "Ueber subcutane Injectionem von Heroinum muriaticum," Deutsche Medicinische Wochenschrift, 25 (1899), 187; Lazarus, 600. See also Maurice B. Ahlborn, "Heroin in the Morphine Habit," New York Medical Journal, 74 (1901), 325-236. One historian of heroin, John C. Kramer, "Introduction to the Problem of Heroin Addiction in America," Journal of Psychedelic Drugs, 4 (1971), 18, comments as follows: "Though the story has been told often, and has even been dignified by appearing in print, I have found no evidence for the contention that heroin was introduced as a cure for the morphine habit." The key word is "introduced." True, heroin was not intended primarily or even secondarily for use in morphine addiction, nor was it advertised as such; Eulenberg's and the others' point was simply that here was another, unanticipated benefit of the drug.

58 Pettey, "Heroin Habit," 176. Heroin was also the active ingredient in at least one habit cure, "Habitina." Stieren, 869-870.

59 Of 151 physicians surveyed in 1911 none recommended heroin to "remove the craving and cure addiction." (Keebler, "Present Status," 22.) Note, however, that the use of heroin to treat morphine addiction was not an isolated episode; other habit forming drugs, such as cocaine and dionin (ethylmorphine hydrochloride) were also tried. Cocaine in morphine addiction is discussed below; for dionin see A. Fromme, "Dionin und seine Anwendung bei der Abstinenzkut des chronischen Morphinismus," Berliner Klinische Wochenschrift, 36 (1899), 302. Fromme's article was abstracted as "Dionin in Chronic Morphinism," JAMA, 32 (1899), 1400. Several advertisements (e.g., JAMA, April 19, 1902, pp. 14, 34, advertising section) also recommended the use of this drug in morphine addiction.

60 CR, 60th Congress, 2nd Session (1909), 1683.

61 Bailey, "Heroin Habit," 314. Bailey's dating of the problem to 1910 is corroborated by Bloedorn, Chart No. 6, 312. Farr, 893, gives the date for the first case treated at Philadelphia General Hospital as 1911, with a sharp increase in admissions beginning in 1913. McIver and Price, 478, suggest 1912 as the date underworld heroin use began.
McIver and Price, 478.

Ibid., 478. See also Sellew, 1674, for anonymous but typical cases.

Freud's work on cocaine has been conveniently collected in an annotated volume, Cocaine Papers, Robert Byck and Anna Freud, eds. (New York: Stonehill, 1974).


Stockwell, 403; "Coca Erythroxylon and its Derivatives," op. cit., 133; Musto, American Disease, 7.

Of 17 cases in Mattison, "Cocainism," 10 involve physicians. William S. Halsted and Ernst von Fleischl-Marxow are other famous examples.

Ernest Jones, The Life and Work of Sigmund Freud, Lionel Trilling and Steven Marcus, eds. (New York: Basic Books, 1961), 64; Cocaine Papers, xxxii. One of the more trenchant American critics of cocaine in morphine addiction was J. B. Mattison, who took up the cause in 1887. See Mattison, "Cocainism," Medical Record, 42 (1892), 474. See also Meylert, 51-52.

e.g., W. Scheppegrell, "The Abuse and Dangers of Cocaine," Medical News, 73 (1898), 421.

By 1910 Herbert Challice Crouch could report in "Anaesthesia," Encyclopaedia Britannica, 1 (Cambridge: Cambridge University Press, 1910), 909, "Eucaaine has now largely taken [cocaine's] place ..." Later eucaaine was itself replaced by such drugs as benzocaine and procaine. See also Musto, American Disease, 8.


74 Whittaker, 148. See also Stockwell, 401.

75 "The Cocaine Habit Among Negroes," 1729.


77 Edward Huntington Williams, "The Drug-Habit Menace in the South," Medical Record, 85 (1914), 247-249; [Louis] Werner, "The Illegal Sale of Cocaine," International Association of Chiefs of Police, Proceedings of the Sixteenth Annual Session (Grand Rapids: West Michigan Printing Co., 1909), 84-85; and Wright, Report, 48-50., all mention violent crimes by black cocaine users, performed with unusual strength and desperation. Williams and Werner seem more concerned about assault and murder, Wright about the rape of white women. Although Wright, as pointed out in Chapter 1, had ulterior motives for recounting these stories, Williams and Werner apparently had none. Moreover both Williams and Werner provide detailed accounts of alleged violent incidents.

Musto, American Disease, 7, followed by Ashley, Cocaine, 67-72, and others debunk stories of black cocaine rampages. To quote Musto, "These fantasies characterized white fear, not the reality of cocaine's effects, and gave one more reason for the repression of blacks." Ashley's rebuke is even sharper, "Of course all these fearmongering fantasies were just that, fantasies and nothing more."

The truth probably lies between these two extremes. While Williams, Werner, Wright, and others undoubtedly embellished the facts, it seems likely that there were some violent incidents around which the legend was built. It is not difficult to imagine how a "hitherto inoffensive, law-abiding negro," as Williams described him, chafing under accumulated slurs and outrages, might, under the influence of cocaine, vent his rage on a white woman or policeman. Such an attack might represent genuine cocaine psychosis, or simply relaxed inhibitions combining with long standing grievances. Whatever the case, a few such incidents would be more than enough material from which to fashion a
"drug-habit menace in the South." The fear of cocaineized blacks was not unlike the fear of slave rebellion which swept the South after Nat Turner's short-lived foray; both were exaggerated (and revealing) reactions to potently symbolic deeds. The point is that the stereotype of the cocaineized black was not pure fantasy, but fantasy grown around a grain of historical truth.

78 The only data on which an estimate of black cocaine use can be based are those found in Terry, Annual Report, 57. Terry found 135 "habitual" black cocaine users, along with 17 who used cocaine in conjunction with an opiate, out of a total black population of 34,211. Assuming some 8,800,000 Southern blacks (based on interpolation of census data), and extrapolating Jacksonville's rate (4.44 per thousand), yields a total of approximately 39,100 regular Southern black cocaine users in 1913. This figure, by Terry's definitions, would not include occasional users.

Musto, American Disease, 8, cites a contrary article by E. M. Green, "Psychoses Among Negroes -- A Comparative Study," Journal of Nervous and Mental Disease, 41 (1914), 702, to the effect that cocaine was a factor in only 2 of 2,119 black cases admitted to the Georgia State Sanitarium between January 1, 1909 and January 1, 1914. Green thought cocaine sufficiently expensive and disruptive of working ability [?] that few blacks could afford its habitual use, hence few psychoses resulted.

It is difficult to reconcile these accounts, published but a year apart. It may be that Jacksonville was unique. Or, if Terry was correct, and habitual use was common, then one must conclude that such use seldom resulted in psychosis and institutionalization. (Note also that a cocaine psychosis resulting in a violent attack on a white would more than likely terminate in prison or at the end of a rope, than in an asylum.) Or it may be that there was an income differential in the two samples. If Terry was examining black prostitutes and longshoremen, for example, they would be much more likely to afford regular indulgence than Georgia field hands. In "The Cocaine Habit Among Negroes," cited above, it is mentioned that New Orleans longshoremen earned $150.00 a month -- more than enough to afford a regular supply of cocaine at 5 cents a "snort." All of this is speculation, however; the exact proportion of regular to intermittent black cocaine users for these years will probably never be known.

79 "Cocaine Alley," 337-338; "The Cocaine Habit," JAMA, 36 (1900), 339. Werner, 84, notes that "illiterate and troublesome" whites, as well as blacks, began use of the drug in Richmond after 1904-1905. Statistics appearing in Reports of the President's Homes Commission, 254, hint at
the growing link between cocaine and criminals; 15 of 175 prisoners studied in the Washington workhouse "had intimate knowledge of use of cocaine." Compare this rate (85.7 per thousand) with the rates observed in Jacksonville or at the Georgia asylum, above. Unfortunately I have been unable to determine the exact date the survey was made, or the nature of the charges against these prisoners, or their race. "The Growing Menace of the Use of Cocaine," *New York Times*, August 2, 1908, Part 5, 1, notes the growing infatuation of the "human dregs" of cities with cocaine, but does not clearly state when this trend began.

80 As suggested by Eberle, *et al.*, 476.


82 Chase, *et al.*, 18; Eberle, *et al.*, 476; Meister, 345; *Traffic in Narcotic Drugs*, 23.

83 G. C. Biondi, "A Few Remarks on Cocainism," *American Medicine*, n.s. 6 (1911), 466. Biondi's observations are corroborated by Scheppegrell, 421; W. D. Owens, "Signs and Symptoms Presented by Those Addicted to Cocain," *JAMA*, 58 (1912), 329; Meister, 346; Drysdale, 354-357; and Reynolds, 62. However, Charles J. Douglas, "Cocainism," *Medical News*, 35 (1904), 115, reports that among his patients the hypodermic route was more common. This was probably due to the fact that he was dealing with morphine addicts who had turned to cocaine in an attempt at cure, only to become addicted to both drugs. This type of user, of course, was already familiar with the hypodermic method.


85 Wilbert, "Efforts to Curb Misuse," 901-923.


87 Cocaine is not addicting in the same way the opiates are, that is, there are no physical withdrawal symptoms. However, cessation can bring on a train of psychological symptoms, including marked depression and craving for the drug.


Stokes, "Problem of Narcotic Addiction," 756. Farr, 893, mentions that heroin and cocaine were sometimes sniffed together.


Leahy, 256-257.


e.g., the student addicts mentioned by Alexander Lambert in Importation and Use of Opium, 144.

Earle, et. al., 475. Vehemently (and unconvincingly) denied by Wright, "Report from the United States," 20. See also Musto, American Disease, 33.

Bailey, "Nervous and Mental Disease," 195.

Note 16, above. McIver and Price, 478, and Farr, 893-894, on Philadelphia's heroin problem. Wilmington, Delaware, a city not far distant from Philadelphia, also had a high incidence of heroin addiction, judging from case summaries in McPherson and Cohen, 638-639.

Importation and Use of Opium, 70, 136; Farr, 894; note 86, above.

By analogy, Canton and the Canton area had the highest incidence of addiction when that city was the sole port of entry for smoking opium in China.


Report of the Special Commission to Investigate the Extent of the Use of Habit-Forming Drugs, 10.

Blanchard, 142; Chase, et al., 9.

Sandoz, 12.

Ibid., 35-37. Terry, "Drug Addictions," 30, remarked, apropos Jacksonville, that "those using the combined drugs are the most depraved class of whites...," in contrast to the straight opium or morphine users, most of whose addiction was medically related. This generalization would seem to hold up elsewhere, with the exception of opium and morphine addicts who were treated with cocaine in the 1880s, only to form a "twin habit."

Treadway, "Further Observations," 550. It should be noted, however, that this percentage is somewhat biased, as surviving female morphine addicts with chronic diseases were not likely to be arrested by narcotic agents. The term "sporting" is Sandoz's.

Notably Taylor, American Diplomacy, 82-132, and Musto, American Disease, 37-65, 121-132.

Foreign Relations, 1909, 107-111.

Wright, Report, 60. The text of the Foster bill is appended to this document.
111 Importation and Use of Opium, esp. 109-164.

112 Hamilton Wright, "Memoranda on the manufacture of and traffic in morphine and cocaine in the United States and the Philippine Islands, with statement as to opium, in continuation of Senate Document No. 377, Sixty-first Congress, Second Session," Conference Internationale de L'Opium, Actes et Documents, 2, 12.

113 Ibid., Vol. 1, 184-185.

114 CR, 62nd Congress, 2nd Session (1912), 7947. A draft of what I take to be the revised bill (which does not appear in CR or any committee report) is appended to Wright, "Memorandum on the manufacture...," op. cit., 29-30.

115 Musto, American Disease, 55.


117 Registration of Producers and Importers, 1-2.

118 CR, 63rd Congress, 1st Session (1913), 2201.

119 Ibid., 2210.

120 Traffic in Opium, House Report No. 1196, 63rd Congress, 2nd Session (1914).

121 Though the government lost some later cases, notably Linder v. United States, 268 U.S. 5. Linder was a reputable physician who gave 1 tablet of morphine and 3 tablets of cocaine to an addict. The Court unanimously reversed his conviction. Convictions in which defendants had indiscriminately issued prescriptions for large quantities of drugs (e.g., Webb, Jin Fuy Moy v. United States, 254 U.S. 189, and United States v. Behrman, 258 U.S. 280), were upheld, however, and Treasury Department regulations continued to refer to Webb as the basic ruling affecting the situation.

122 Excepting places like Tennessee where some form of maintenance was made available.

Phillips, 2147, notes that a bottle of 100 heroin
tables (1/12 grain) could be obtained for 60 cents in 1912.
By March 16, 1915, the price of that same bottle was
$1.25 to $1.50; by April 1, 1915, $4.50. (Farr, 893;
Drysdale, 361.) See also Bailey, 315.

Dai, 61.

Terry and Pellens, Opium Problem, 485.

Ibid., 484; Platt and Labate, 52.


[Walter R. Herrick,] New York, Second Annual Report,
14.


H. R. 7079; Public No. 274; approved June 7, 1924.
The measure amended the 1909 Smoking Opium Exclusion Act to
prohibit the importation of crude opium for the manufacture
of heroin. See Prohibiting the Importation of Crude Opium
for the Manufacture of Heroin, House Report No. 525, 68th
Congress, 1st Session (1924), and Musto, "Early History,"
181-184. Concern for the youth and alleged violent behavior
of heroin users were the main motives behind this legisla-
tion, as well as a desire to set an international precedent
for a ban on heroin.

United States, Treasury Department, Bureau of
Narcotics, Traffic in Opium and Other Dangerous Drugs for
the Year Ended December 31, 1932 (Washington: G.P.O.,
1933), 59, 11; Ibid. for year ended December 31, 1938, 80.

Phillips, 1147; McGuire and Lichtenstein, 186.

"History of Heroin," 7; John A. O'Donnell and
Judith P. Jones, "Diffusion of the Intravenous Technique
Among Narcotic Addicts," Epidemiology of Opiate Addiction,
Ball and Chambers, eds., 155-161.

McPherson and Cohen, 638-639.

Lambert, et. al., 470-471. These figures total to
more than 263, indicating that some addicts used more than
one route. It is also interesting to note that many of
these cases had a prior history of opium smoking or
cocaine sniffing.

O'Donnell and Jones, 150.

Platt and Labate, 80-96.
CHAPTER 5

THE TRANSFORMATION OF THE AMERICAN OPIATE ADDICT

During the nineteenth century the dominant addict type was a middle-aged, middle- or upper-class female, the most commonly used drugs were morphine and opium, and the majority of cases were iatrogenic in origin. By 1940, however, the dominant addict type was a young, lower-class male, the most commonly used drugs were heroin and morphine, and the majority of cases were non-therapeutic in origin. In this chapter I will summarize the causes and discuss some of the consequences of this transformation.

The principal cause of the transformation was the decline in iatrogenic opiate addiction. Reluctance to prescribe opiates to all but the incurably or terminally ill continued and even intensified after the passage of national narcotic laws.¹ The Harrison Act, by tightening the controls on opiates, also helped to make addiction through self-medication or unauthorized refill of a prescription more difficult. At the same time the majority of iatrogenic addicts, addicted in middle age during 1860-1895, were aging; a 30-year-old woman addicted in 1880 would have been 70 in 1920. Medical addicts, in
short, were dying off faster than new ones were being created, resulting in an absolute decline in their number and a sharp drop in their per capita rate.2

Meanwhile the number of non-therapeutic addicts was increasing, not in absolute terms, but relative to the total number of opiate addicts. Although the number of opium smokers declined in the early twentieth century, new types of users, notably of heroin or morphine, were recruited to take their places. Moreover many former opium smokers continued as active opiate addicts, only using a different form of the drug. As a result, there was no marked reduction in the number of non-therapeutic addicts between 1895 and 1915, as there was of medical addicts. After 1915 the number of non-therapeutic addicts continued to increase relative to the total, due to the youth of this type of user, plus the fact that euphoric users continued to be recruited.3

Figure 7 illustrates this transformation. It is a heuristic device only, and the size of the areas represented should not be taken to correspond to exact numbers of addicts. In the late nineteenth century, medical addicts (outer circle), defined as those who could trace their condition to medication or self-medication with opiates, outnumbered euphoric addicts (inner circle) by at least 2 to 1, and probably more.4 Medical addicts used opium and
FIGURE 7: Schematic Representation of the Transformation

1895
medical addicts using opium and morphine

euphoric addicts, mainly using smoking opium

1915
medical addicts using opium and morphine

euphoric addicts, using heroin (in the East), smoking opium (Chinese), or morphine, alone or in combination with cocaine

1940
medical addicts mainly using morphine, a few using heroin
euphoric addicts, mainly using heroin

aAreas represented do not correspond to exact numbers of opiate addicts.
morphine; euphoric addicts, broadly defined as those who began using opiates for non-therapeutic purposes (thrill, curiosity, bravado, peer pressure, and so forth), were mainly opium smokers. By 1915, however, new patterns of euphoric use had evolved, notably heroin in Eastern cities and morphine, or morphine with cocaine, elsewhere. Only the Chinese remained steadfast opium smokers. Meanwhile the total number of opiate addicts had declined, with the result that the euphoric type now made up a proportionately larger share. This trend continued through the 1920s and 1930s, as the generation of medical addicts created in 1860-1895 succumbed to old age. "The proportion of the delinquent type of addict is gradually increasing," noted Kolb and DuMez in 1924. "This is apparently not due to an increase in the number of this type, but to a gradual elimination of normal [medical] types." At the same time heroin, owing to its black market virtues, was replacing smoking opium and morphine as the underworld opiate of choice.

The transformation of the American opiate addict involved changes in sex, class, age, and geographic distribution, as well as changes in proportion and the kinds of drugs used. By the 1930s the modal addict was a lower-class, urban male who began experimenting with opiates at a relatively early age. Conversely, fewer upper- and middle-class addicts of the type described in Chapter 2
were in evidence. Philadelphia physician Francis X.
Dercum, one of the first to note this trend, explained
that the transition began "long before the Harrison Act
was passed." Dercum's analysis is acute, and worth
quoting at length:

Years ago it was quite a common experience
to see patients in the middle walk of life
who were addicted to the use of morphin or
to the taking of laudanum. Gradually, how-
ever, the number of these cases diminished
until at present they are quite infrequent ....
The gradual diminution in the use of
drugs has been due, I believe, largely to
the influence of physicians and to the
spread through the community of the know-
ledge of their baneful effects.
...[P]hysicians a generation ago were, I
think, more prone to resort to hypodermic
injections of morphin for the relief of
symptoms than are physicians of the present
day. It has long been recognized that the
diagnoses of affections attended by attacks
of pain are usually made much more obscure
by ... morphin.... Physicians at the pre-
sent day, it may be truthfully claimed, are
on the whole exceedingly careful and con-
scientious in the use of morphin and opiates
generally. 8

New Haven police chief Phillip T. Smith, a man with an
entirely different perspective on the drug problem, neverthe-
less arrived at a similar conclusion. In June, 1914, Smith
remarked, "Like everything else the style changes in
drugs, and while years ago ... [addicts] used opium,
cocaine and morphine, usually acquiring the habit from
having had these drugs prescribed for them during sick-
ness,... nowadays drugs have become a regular diet with
harlots and their pimps, and criminally inclined persons of
all kinds." 7
Physicians in large cities were also apt to comment on the changing pattern. Bloedorn, writing in 1917, argued that, although there was "a large aggregate" of medical addicts, this type comprised but a "relatively small percentage of the total." Analyzing cases admitted to New York's Bellevue hospital, he concluded that association with other addicts, not medication, was the most important factor. 8 Thomas F. Joyce, Resident Physician in Charge at New York's Riverside Hospital, agreed that underworld users who acquired the habit through association were now "overwhelmingly in the majority." 9 Authorities made similar statements about addicts in Philadelphia, Chicago, and other large cities. 10

The transformation did not proceed at the same pace in all parts of the country. In Iowa, a rural state largely untroubled by opium smokers and heroin snuffers, medical causes still accounted for the majority of opiate addicts in 1919, 11 and probably for some years thereafter. The same was true of the South, although changes in the background of addicts from that region gradually became apparent in the 1920s and 1930s. John A. O'Donnell, in a lengthy study of narcotic addiction in Kentucky, noted that during 1914-1940 cases of new addiction were most common among males who took opiates for pleasure or as a means of sobering up after alcoholic sprees. Morphine remained the opiate of choice, however, principally because it could still be
obtained, at least in Kentucky, from physicians.\textsuperscript{12} Michael J. Pescor's study of addicts admitted to the Lexington Hospital during fiscal 1936 revealed a similar pattern. The patients, among whom Southerners were heavily over-represented,\textsuperscript{13} were for the most part younger men addicted as a consequence of curiosity and association with other users. Relief of hangover, as well as treatment or self-treatment of venereal disease, were other etiological factors. A bare majority (50.7 percent) still used morphine,\textsuperscript{14} a preference which reflects the Southern bias of the sample.

Regional differences aside, at what point in time did the euphoric user emerge as the dominant type of American opiate addict? No definite answer can be given, but there is one suggestive study. W. L. Treadway, Chief of the Narcotics Division of the United States Public Health Service, examined the records of 1,660 addicts reported for violation of the drug laws nationwide between July 1, 1929, and October 31, 1929. He found 573 cases deriving from the treatment or self-treatment of disease or emotional distress, 713 deriving from association or curiosity, and 374 of unknown etiology.\textsuperscript{15} These figures indicate that the national "tipping point" had been reached by 1929, but there is one important qualifier: medical addicts who had obtained the co-operation of a physician in maintaining a supply were the least likely to be detected. Hence there
is some unknown amount of bias in Treadway's data, and it is possible that euphoric addicts did not comprise a majority until sometime later, in the early 1930s.

The Impact of the Transformation on Medical Theory and Practice.

The changing characteristics of the addict population had important consequences for physicians' conception and treatment of opiate addiction. As the euphoric addict emerged as the dominant type, an increasing number of doctors and public health officials came to view addiction as symptomatic of a serious, underlying personality disorder, to support mandatory institutionalization of addicts, and to refuse to supply addicts, especially the euphoric type, with drugs.

Theory. Virtually every aspect of opiate addiction has at one time or another been the subject of spirited controversy. Whether opiate addiction was a habit or a disease, whether treatment should be predicated on abrupt or gradual withdrawal, and which drugs (if any) should be administered to ease withdrawal distress were typical of the issues debated in the pages of nineteenth and early twentieth century medical journals. But perhaps the most difficult and divisive issue of all, about which controversy
has raged to our own time, was the role of personality in the etiology of opiate addiction.

During 1870-1914 there were basically two schools of thought. The first contended that personality was of little significance in the formation of addiction.

"Morphinism is possible under any condition," wrote J. B. Mattison, "I do not believe the person lives who, under certain circumstances, can stand up against the power of morphine." 16 Another addiction specialist, C. C. Wholey, agreed that anyone could become addicted. "The majority of my cases," he observed, "represent the average individual with the average heredity and environment. These persons have generally acquired their habit accidentally. It is, therefore, fallacious and unjust to refer without qualification to drug users as a class inherently neurotic and degenerate." 17

The second and opposing viewpoint was that opiate addicts were neurasthenic. Neurasthenia, a concept first described by George M. Beard in 1869, was the widely-held belief that nervous exhaustion was responsible for a variety of psychic and somatic ills, from hysteria to hay fever. Those who had inherited an inadequate nervous system (the so-called "nervous diathesis") were especially prone to neurasthenia, but environmental factors also played a role. In particular "brain workers," entrepreneurs, and others caught up in the hectic pace of nineteenth century
civilization were most likely to overtax their nervous systems. Beard himself mentioned the connection between neurasthenia and opiate addiction, but it fell to others to elaborate this aspect of his theory. The most important and influential of these was T. D. Crothers, who published numerous works on inebriacy and addiction.

Any person, Crothers explained, who used morphine to relieve pain received "a pathologic impression," the intensity and permanency of which varied with the individual. If the patient had inherited a "predisposition to seek relief from every pain and discomfort," or suffered from neurasthenia or some other nervous ailment, the pathologic impression was likely to be "more or less permanent," and repeated administration would intensify the impression into a "morbid craving."19

Crothers and like-minded theorists supported their position by noting certain characteristics of the addict population. Were not the majority of morphine addicts from the upper and middle classes, that is, those classes subjected to the greatest nervous strain? Did not brain workers, especially physicians, suffer an inordinately high rate of addiction? Blacks, on the other hand, had a low incidence of addiction because they lacked "the same delicate nervous organization" as whites.20 Moreover many cases of addiction began in the course of treatment for a particular nervous disorder, such as neuralgia, which,
as Beard had taught, was but a physical manifestation of nervous exhaustion. Neurasthenics, in short, were prone to addiction because opiates soothed their frazzled nerves and relieved their somatic symptoms.

The number of authors espousing neurasthenic theories of addiction diminished sharply after 1914. Not only was Beard's speculative etiology coming under increasing attack, but the character of the addict population was changing. One could plausibly argue that the harassed society matron or fagged clerk who took to opium was simply the highly strung personality overwrought, but the young tough snorting heroin on the street corner or the prostitute injecting morphine in a brothel hardly qualified as classic neurasthenic types. The stage was set for new and more radical personality theories of addiction.

The new theories did not always employ the same terminology, but were similar in that they posited a serious personality disorder or disorders as the root of addiction. Lawrence Kolb, a prolific and influential addiction specialist, divided addicts into the following categories: normal persons addicted accidentally; unstable pleasure-seeking individuals; neurotics; psychopathic criminals; and inebriate personalities. "Drug addicts in the United States," he reported, "are recruited almost exclusively from among persons who are neurotic or who have some form of twisted personality." There might be some normal
personalities among medical addicts, but the "dissipators" [euphoric types] were "all abnormal." Others described addicts as "moral and mental degenerates," "feeble minded," and "constitutionally inferior," or as possessing "inadequate personalities." Sándor Radó, a prominent New York psychotherapist, postulated that opiates served to relieve the addict from tension and anxiety stemming from ego impairment. Perhaps the most widely-held view was that addicts were essentially psychopaths, that is, unstable, amoral, and asocial individuals prone to impulsive, perverse, and often criminal behavior. Drysdale, for example, concluded that "Morphinists, cocainists and heroinists ... are all psychopaths;" Leahy reported that all but 2 of his cases "were of either inferior or psychopathic make-up;" and Dr. John H. W. Rhein of Philadelphia contended that the drug addict "is a psychopath before he acquires the habit." The Mayor's Committee on Drug Addiction in New York (1928-1929) found that nearly 90% of the addicts to-day are psychopathic personalities..., while Pescor classified the majority of the Lexington patients as manifesting psychopathic personalities or "psychopathic diathesis."

There were some authorities who disputed the new personality theories, notably Terry, George E. Pettey, and Ernest S. Bishop. Terry believed that personality disorders, when they were present at all, were merely
consequences of the harried life style of the addict, not preconditions for addiction. Pettey and Bishop had formulated physiological hypotheses of addiction, and were committed to the position that opiate addiction was a disease which anyone, regardless of personality, could contract. These hypotheses, which explained addiction in terms of morphine toxins and antitoxins, were later discredited, however, resulting in a temporary setback for the anti-personality school.

The very terms of the debate --- neurasthenia versus normality in the nineteenth century, psychopathy versus normality in the twentieth --- were profoundly influenced by the make-up of the addict population. Neurasthenic theorists could point to numerous addicted brain workers, "nervous ladies," and the like, but when the upper-class and professional addicts were replaced by lower-class, euphoric types, other personality disorders had to be postulated. Since many of the new addicts were observed to engage in other forms of socially unacceptable behavior, such as crime, delinquency, gambling, prostitution, and sexual perversion, it seemed to follow that addiction was but one manifestation of a sick and irresponsible personality, i.e., the addict was a psychopath. Significantly, many of the new personality theorists lived in New York, Philadelphia, or other large Eastern cities, then the principal loci of heroin addiction; they were thus exposed to
many cases of the euphoric type. Conversely, elements of the neurasthenic theory lingered in the writings of Southern authors, who lived in a region where the transformation was more gradual.

**Mandatory Institutionalization.** During the nineteenth century the decision whether or not to seek treatment was left to the addict and his family. Numerous asylums such as the Walnut Lodge Hospital in Hartford, Connecticut, specialized in addiction, but these were of a voluntary nature. By 1920, however, a majority of physicians and public health officials had come to support mandatory institutionalization and treatment of addicts, particularly of the euphoric type. A primary reason for this change was the growing conviction that any form of ambulatory treatment was ineffective. The New York City narcotic clinic, which was designed to cure its patients through gradual reduction, was a widely-publicized failure. When their allotted dose became too small, addicts simply supplemented the clinic's supply by purchasing from peddlers or obtaining a prescription from a dope doctor. It was also charged that addicts taking reduction cures under the supervision of private physicians secured additional supplies when their dose became too low. The obvious solution was confinement in an institution where all access to drugs could be carefully controlled.
Institutional confinement had other advantages. If it was true that the majority of addicts suffered from personality disorders and social maladjustment, then some form of extended care and rehabilitation was in order. A committee appointed by the American Institute of Criminal Law and Criminology, comprised of physicians and law enforcement officials, recommended in 1917 that addicts "... must be cut off from old surroundings, removed from the temptations to which they succumbed, and this separation must be maintained for a long period of time, under strict discipline at first, relaxed afterwards by degrees as they regain self-control...." 31 Lichtenstein concurred, arguing that, after the addict had been withdrawn from the drug, "he should be sent away for at least one year, either to a farm or some institution out of the city. He should be well fed and made to work. This is the only positive way to cure a fiend. If you allow him to go free at the end of two weeks' treatment as cured, he will seek the first 'hop joint' that he can find and make up for lost time." 32 But even after the addict had been built up physically and mentally, and returned to society, control had to be maintained. "...[S]pecial supervision must necessarily be exerted over him for a time until he has learned to resist temptation in periods of illness or depression," concluded a 1920 New York report, "... the patient should be treated as if on probation." 33 As for the intractable, criminally inclined addict, institutionalization could be maintained
indefinitely. Observed New York physician S. Adolphus Knopf, "It is true that there are many criminals who easily became [sic] drug addicts because of being physically inferior and mentally defective, and if they have become chronic criminals and chronic narcotic addicts, they should be chronically confined where they can no longer be a menace to society."

Even physicians and public health officials who held liberal views on addiction were not opposed to the incarceration of such addicts. The 1920 report of the American Public Health Association's Committee on Habit Forming Drugs, dominated by such pro-maintenance figures as Terry, Bishop, and Brown, argued against mandatory institutionalization and treatment, particularly for "innocent contractors of the addiction-disease." But the committee also allowed that "[v]icious, degenerate and criminal types should be handled on a basis of vice, degeneracy or criminality and treated for their addiction-disease in places suitable to their personal and class characteristics."

By 1920 a consensus on the proper course of treatment for addiction was emerging which closely resembled contemporary penological theory: institutionalization, rehabilitation, and parole, except for dangerous recidivists who were to be confined indefinitely. The changing views were linked to the changing pattern of addiction; 20 years earlier it would have been unthinkable for the medical
profession to support the incarceration of an addict population dominated by medical types, most of whom could trace their plight to a physician's prescription.

Maintenance. After the closure of the narcotic clinics in 1920, the only remaining legal source of opiates was the physician. Physicians, however, were increasingly reluctant to prescribe, not only because they risked prosecution under the Webb ruling, but because they had little sympathy for the average street addict who walked into their office asking for a "fix." This was particularly true of the heroin addict, whom physicians regarded as the lowliest sort of dissipate. Summing up the profession's attitude, one physician remarked, "The morphinist has guts, while the heroinist has only bowels."37

If physicians were unwilling to prescribe for euphoric addicts, they were equally unwilling to support public programs that did. Reflecting the growing dissatisfaction with the clinics and the newfound conviction that withdrawal under institutional conditions was the only course, the American Medical Association in 1920 passed a resolution condemning all forms of ambulatory treatment.38

A different attitude prevailed, however, when the physician was dealing with a medical addict. If the patient was diagnosed as suffering a painful and terminal disease, the course was clear: medical tradition and common humanity
demanded maintenance until death. The same A. M. A. report which condemned ambulatory treatment emphasized that "all those who suffer from a disease or ailment requiring the used [sic] of narcotic drugs, such as cancer, and other painful and distressing diseases ... are legitimate medical cases." Unfortunately this proviso left uncertain the status of an addict with a chronic but non-terminal disease, such as arthritis, or of one addicted long ago in the course of treatment for some minor and transitory ailment, but now a confirmed addict. It appears, however, that most of these patients were able to obtain opiates legally. Studies conducted in Sioux City, Iowa, Montgomery, Alabama, Tacoma, Washington, Gary, Indiana, Elmira, New York, El Paso, Texas, and Detroit, Michigan, in 1923-1927 showed that at least 1,019 addicts residing in those cities continued to be supplied by prescription, and an analysis of the prescription records indicated that many cases involved non-terminal diseases. There is also evidence that some physicians in Kentucky and other Southern states practiced maintenance until the late 1930s. However one also finds documented cases of medical addicts who were unable to secure a legal supply, and were forced to turn to the black market. Precisely how often this occurred is impossible to say.

In summary, the transformation of the opiate addict population brought about important changes in medical
attitudes toward addiction. By 1930 the average practitioner perceived the addict as a social misfit, an irresponsible or even criminal type whose addiction was attributable to his own wanton behavior. This view found support in a growing body of expert opinion, which held that most addicts were psychopathic or suffered from some form of twisted personality. Maintenance, except in the case of the increasingly rare medical addict, was contra-indicated; commitment to a specialized institution was the best course of action, and even then the prognosis was bleak. Moreover the physician who consented to supply opiates was liable to harassment from narcotic agents, as well as from the addict, who could be counted on to badger the physician daily for more drugs. "...[W]ith few exceptions," concluded O'Donnell, the physician's "basic attitude is summed up in the description many used; the addict is simply 'a damn nuisance'."\textsuperscript{43}

The Law, the Transformation, and the Behavior and Characteristics of Addicts

As mentioned earlier, the anti-maintenance policy which prevailed in this country from 1920 until relatively recently has been the subject of controversy. At the heart of the debate is the relationship between drug addiction and crime. Many have argued that the high incidence of crime among addicts is a function of the law and has nothing to
do with users' alleged criminal tendencies. Two arguments are advanced: first, the law makes possession of the drug itself a crime, so the user is a criminal by definition rather than by act; and, second, when the user does commit crimes such as theft, it is solely to obtain cash to pay for his drug, the price of which the law has driven beyond honest means. 44

Those involved in enacting and enforcing Federal narcotic laws, on the other hand, have tended to emphasize addicts' criminal behavior prior to addiction, as a kind of implicit justification for a hard-line policy. This tradition dates back to Wright and his 1910 Report, in which he claimed that 45.48 percent of "the general criminal population" was addicted, a rate more than 250 times that of the general adult population. 45 The Bureau of Narcotics, under the direction of Harry J. Anslinger, pursued a similar line. Commented the Bureau in its 1938 annual report, "The overwhelming majority of narcotic drug addicts which have come to the attention of the authorities recently in the United States belong to the criminal element ... [a recent study of 225 cases showed that] every criminal among them had committed crime before the use of narcotics was begun." 46 The objectivity of the Bureau's findings has been challenged, however, and other studies cited to the effect that only a minority of addicts had records before addiction. 47

The use of police records to establish, one way or
the other, an index of criminality prior to addiction is a technique fraught with peril. It is entirely possible that an addict may have committed unapprehended crimes before using opiates. Or it may be that crimes recorded prior to first arrest for violation of the narcotic laws were drug-related, although mistakenly classified as "committed before addiction." Add to this the difficulty of verifying addicts' statements about their pasts, and collating scattered police files, and it becomes apparent that not too much reliance should be placed on this type of data.

It is nevertheless possible to describe, in a general way, what the transformation meant in relation to the addicts' criminality. First, the historical evidence supports the contention that the anti-maintenance policy increased the amount of addict crime. Setting aside for a moment the issue of prior criminal activity, the fact remained that the street addict, once he had become physically dependent, had to commit illegal acts on an almost daily basis to support his habit. Contemporaries often observed that addicts without legal sources tended to commit more crimes, particularly the type designed to raise cash quickly, such as theft or prostitution. As Sandoz remarked in 1922, "Logically, criminality is bound to begin ... the moment the economic margin above living expenses is not sufficient to cover the purchase of the habitual amount of the drug."48
There is, however, another aspect of the problem, generally ignored or obscured by the narcotic law critics. Even before the anti-maintenance decisions were handed down, the composition of the opiate addict population was undergoing a profound change: addiction was moving from the upperworld to the underworld, and the principal forces behind the shift were medical and demographic, rather than legal.\textsuperscript{49} To state the argument another way, I believe that, even if the government had failed to establish a restrictive policy (if, for example, a single justice had switched his vote in the crucial \textit{Webb} decision), the typical opiate addict in 1940 would not have differed much from the one observed in historical actuality. He would have been a lower-class, white\textsuperscript{50} male, living in a decaying urban area. He would have had a history of vice (gambling, excessive drinking, or consorting with prostitutes), and may have committed more serious criminal acts. He would have been introduced to drugs by associates of similar background, rather than through a physician. The most important difference -- and here the critique of the narcotic laws becomes relevant -- is that the hypothetical addict would not have been compelled to commit as much crime; maintenance would have meant cheaper drugs. It is also likely that fewer addicts would have used adulterated heroin, the leading black market opiate.

To put the matter another way, it is possible to distinguish between the characteristics and the behavior of
addicts. The characteristics of the addict population were bound to change, given therapeutic reform, attrition in the ranks of older, medical addicts, and continuing recruitment of euphoric users. The behavior of addicts, however, was very much influenced by the law. Legal changes had a direct or indirect bearing on the type of drug used and the method of administration — from morphine to heroin, for example, from subcutaneous to intravenous injection. They also influenced the amount and type of crime committed by addicts, particularly those who could not secure a legal supply. A daily round of petty theft, "ripping and running" in the addict's parlance, became the norm. The law did not create the underworld addict, but it undoubtedly aggravated his behavior.

**Conclusion**

By 1940 the opiate addict population had undergone a marked transformation: the secretive, female morphine addict had given way to the hustling, mainlining male junkie. Medical addiction did not cease completely; a few patients continued to be addicted unnecessarily, and physicians themselves continued to suffer a high rate of addiction. Most new users, however, were of the euphoric type.

Judgment of the emerging euphoric majority was harsh.
Psychiatrists held that they were mentally defective; doctors refused to have anything to do with them; and law enforcement officials confined them in institutions. More liberal views, influenced by the presence of large numbers of medical addicts, had prevailed in the nineteenth century, but these were abandoned as the pattern of addiction shifted.

Finally, it may be said that the anti-maintenance policy succeeded in making a bad situation worse: criminal activity was at least in part a function of black market prices. Changes in the legal status of opiates were not solely or even primarily responsible for the larger transformation of the addict population, however. That process had begun decades before, when the first, unknown physician thoughtfully laid aside his hypodermic syringe.
NOTES TO CHAPTER 5


2In addition to those who died, some small, undetermined number managed to quit and remain abstinent, thereby dropping from the ranks of active medical addicts. See note 131, Chapter 2. Another factor was that older doctors were also dying off, and were being replaced by younger and presumably more conservative practitioners -- conservative at least with respect to opiates.

3Police and medical records indicate the ongoing recruitment of young addicts throughout the 1920s and 1930s. Age data in Treadway, "Further Observations," 543-544, 549, Lambert, et al., 467-468, and California, Senate, Interim Narcotic Committee, Report on Drug Addiction in California (Sacramento: California State Printing Office, 1936), 74, indicate that most addicts were in their late 20s or early 30s at time of arrest or treatment. To arrive at the actual age of addiction, however, one must estimate the "lag" between addiction and arrest/treatment. According to ms records in Box 6 of the Lawrence Kolb Papers, National Library of Medicine, Bethesda, Maryland, the difference was about 6 years, 6 months for heroin addicts and 6 years, 11 months for non-therapeutic morphine addicts (n = 41, 38, respectively.) This would fix the time of addiction sometime in the 20 to 25 age bracket. For more on the continued recruitment of young, non-therapeutic addicts, see Dai, 64-66, and Walter L. Treadway, "Drug Addiction and Measures for Its Prevention in the United States," JAMA, 99 (1932), 372, 374. Apparently narcotic education did little to check recruitment. "Propaganda about the evils of drug addiction not only spreads a knowledge of its existence," complained Public Health Service official Michael J. Pescor, "but may backfire, arousing curiosity in place of dread." "A Statistical Analysis of the Clinical Records of Hospitalized Drug Addicts," Public Health Reports, Supplement No. 143 (1938), 2.

4The 2 to 1 ratio is based on the analysis of the maximum number of addicts respective levels of medicinal and smoking opium imports could support, Chapter 1, above.
However, as the calculated maximum for smoking opium was very liberal (note 51, Chapter 1), it seems likely that the true ratio of medical to euphoric addicts in 1895 was higher. Kane, *Opium-Smoking*, 19, estimated that there were only 26,000 opium smokers in 1882, yielding a ratio closer to 10 to 1. The number of opium smokers had increased by 1895, of course, and allowance must also be made for the fact that some opium and morphine addicts (e.g., prostitutes) should be classed as euphoric types.

5Kolb and Dumez, 1203. See also Kolb, "Drug Addiction: Some Medical Cases," 171.


8Bloedorn, 309-310.


12John A. O'Donnell, *Narcotic Addicts in Kentucky*, Public Health Service Publication No. 1881 (Washington: G.P.O., 1969), 240-243. O'Donnell is not explicit about what percentage of alcoholics-turned-morphine-addicts first received the drug from their physician, but suggests that association with other morphine users was an important factor (pp. 136-137).
Although a number of authors have treated Pescor's study as if it represented a national cross section (an error Pescor did little to avert), a closer look at the patients reveals a distinct regional bias. For example, New York and California, states which had serious addiction problems, contributed to Lexington in fiscal 1936 only 1.46 and 1.04 patients per 100,000 males 21 years of age or older. By comparison Louisiana had 13.9, Texas 8.2, Kentucky, 8.0, District of Columbia 7.0, Oklahoma, 5.2, Georgia, 4.5, Tennessee, 4.2, Arkansas, 3.9, Florida, 3.6, Missouri, 3.6, South Carolina, 3.3, and Alabama, 3.1. (Pescor, Table 2, 26; 1940 Census; John C. Ball, "Two Patterns of Opiate Addiction," *Epidemiology of Opiate Addiction*, Ball and Chambers, eds., 89 n. 18.) Granted the South had a higher rate of opiate addiction, but the difference was closer to 61.9 percent (Chapter 2), than the several hundred percentage points suggested by the figures above. The bias is almost certainly due to the fact that the Lexington Hospital, located in Kentucky, drew most heavily from the Southern region, at least during the first years of its operation.

Pescor, 3-4, 15, Table 1, 24.

Treadway, "Further Observations," 552. Treadway also remarks, in "Some Epidemiological Features of Drug Addiction," *British Journal of Inebriety*, 28 (1930), 50, "that 80 per cent. of the present-day addiction occurs in the land of 'Hobohemia,' or the underworld." There is a similar study with similar conclusions in United States, Treasury Department, Bureau of Narcotics, *Traffic in Opium and Other Dangerous Drugs for the Year Ended December 31, 1935* (Washington: G.P.O., 1936), 3-4; Chart 16, 82.

J. B. Mattison, "Morphinism in Women," *American Medico-Surgical Bulletin*, 8 (1895), 1400. Mattison did not deny the role of personality in all cases, but he generally discounted it, emphasizing instead the excessive prescription of opiates for painful symptoms.

Wholey, 721. See also F.0. Marsh, "Morphinism," *Cincinnati Lancet-Clinic*, n.s. 33 (1894), 461.

Crothers, *Morphinism and Narcomania*, 48-49. Others explaining addiction in terms of neurasthenia, nervous diathesis, or similar concepts included Morris, 65-70; Brown, *Opium Cure*, 13-14; Phenix, 206; Robertson, 226-229; Happel, 409; "Modern Life and Sedatives," *Littell’s Living Age*, 238 (1903), 572; Sterne, 610; G. P. Sprague, "Some Essential Points in the Etiology, Pathology, and Treatment of Morphine Addiction," *Cincinnati Lancet-Clinic*, 98 (1907), 585; and Griffin, 1584. Sigfried Block, "Drug Habitués," *New York Medical Journal*, 101 (1915), 406, thought there were some addicts "whose trouble is like a neurasthenia, if there is such a sickness," but that the majority had a "definite hysteria." The earliest attempt to link addiction to nervous stress which I have found, antedating even Beard, is [Horace B. Day, ed.], *The Opium Habit, with Suggestions as to the Remedy* (New York: Harper & Brothers, Publishers, 1868), 7.

Roberts, 207.


Drysdale, 363-364. He added, "Many of them show evidence of congenital defects, which may be observed in cranial stigmata, such as misshapen heads, or facial characteristics, inert, stupid faces, projecting ears, with dull, expressionless features and deep-seated, shiftly eyes" (p. 363). Leahy, 258-259; Symposium on 'The Doctor and the Drug Addict'," 1589. See also V. V. Anderson, "Drug Users in Court," *BMSJ*, 176 (1917), 756-757.

diagnoses of psychopathic or inadequate personalities do not match the written test data (p. 339), suggesting that such diagnoses were at least in part self-fulfilling prophecies.

26 Terry, "Recent Experiments," 41. See also Sceleth, "Rational Treatment," 862.


28 The major exception to this rule was Bishop, who treated institutionalized addicts in New York City, but nevertheless came to reject prevailing personality theories of addiction.


31 Francis Fisher Kane, et al., 506.


33 New York, Second Annual Report, 36.

34 Knopf, 138. See also remarks by Joyce in Report on Drug Addiction in California, 49-51.


36 Excepting Shreveport and a few other cities.

37 Hubbard, "Some Fallacies," 1439. Blair, "Some Statistics," 608, also remarks that most physicians refused to treat cases of "pure" (i.e., euphoric) addiction. The major exception to this rule, of course, was the dope doctor, who risked legal difficulties in exchange for exhorbitant prescription fees.
38. Upham, et al., 1328. See also Emerson, et al., 1671.

39. Upham, et al., 1326. See also Report on Drug Addiction in California, 11. Kolb, "Drug Addiction: Some Medical Cases," 181-182, advised withdrawal in some long-standing medical cases, but hedged his statement with so many qualifiers that it is difficult to know precisely what types of addicts he had in mind.


42. e.g., Case 3, Dai, 103-105. Terry and Pellens, Opium Problem, 485, mentions "a not inconsiderable number" of medical opium and morphine addicts being forced to turn to black market heroin, and Clyde Langston Eddy, "One Million Drug Addicts in the United States," Current History, 18 (1923), 641, alludes (without documentation) to "thousands" of such unfortunates.

43. O'Donnell, 229.


45. Wright, Report, 47. Wright also noted that 6 percent of those "who entered our large jails and state prisons" were addicted. The discrepancy between the figures -- 45.48 and 6 percent -- is puzzling, to say the
least, since one would expect the prison population to be fairly representative of "the general criminal population."


48 Sandoz, 42, original in italics. See also Stanley, "Morphinism and Crime," 756; Edward Huntington Williams, _Opiate Addiction: Its Handling and Treatment_ (New York: The MacMillan Company, 1922), ix; and Dai, 188. For a critique by a contemporary drug user, see Aleister Crowley, _Cocaine_ (San Francisco: Level Press, 1973), passim. Crowley's essay was first published in 1917.

49 It is necessary to anticipate an objection here. Alfred R. Lindesmith and John H. Gagnon, "Anomie and Drug Addiction," _Anomie and Deviant Behavior_, Marshall B. Clinard, ed. (New York: Free Press, 1964), 166-169, claim that underworld opiate use was essentially a consequence of the Harrison Act. Their argument is that the law caused an illicit traffic to spring up, a traffic run by underworld figures and centered in large cities, and that those groups "having connections with the clandestine traffic, ... delinquents, criminals, and dwellers in the urban slums," suffered a high rate of addiction.

The problem with this argument is that it ignores the heavy use of opiates by the underworld prior to 1914, when the pattern of distribution allegedly shifted. Opiate addiction, as shown in Chapters 3 and 4, was well established in tenderloin districts before regulation. (The statement made by Lindesmith and Gagnon in Table 1 [p. 169] that drug use by "white criminals and delinquents ... up to 1914" was "low" is completely at variance with the facts.) It is true that exposure to opiates has a great deal to do with the incidence of addiction in a given group; but the point is that delinquents, criminals, and slum dwellers were well-exposed prior to the Harrison Act, and that their high incidence of addiction was not simply a concomitant of that law.
The description of the typical addict as white requires qualification. Although whites still made up the majority of addicts in 1940, minority groups, particularly blacks, were becoming increasingly involved with opiates. See, for example, Dai, 46, and Report on Drug Addiction in California, 75. This trend intensified after the Second World War until, in 1966, over half of the addicts treated at the Lexington Hospital were black, Puerto Rican, or Mexican-American. (Epidemiology of Opiate Addiction, Ball and Chambers, eds., 312-313.)
### ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
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<tr>
<td>BMSJ</td>
<td><em>Boston Medical and Surgical Journal</em></td>
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<td>CR</td>
<td><em>Congressional Record</em></td>
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<tr>
<td>G.P.O.</td>
<td><em>Government Printing Office</em></td>
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<td>JAMA</td>
<td><em>Journal of the American Medical Association</em></td>
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<tr>
<td>JSC</td>
<td><em>Report of the Joint Special Committee to Investigate Chinese Immigration</em></td>
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<tr>
<td>RMML</td>
<td><em>Rudolph Matas Medical Library, Tulane University School of Medicine</em></td>
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BIBLIOGRAPHY

Knowing how to read the literature on opiate addiction is as important as knowing where to find it. A great deal of confusion can be avoided if careful note is made of the date, the background of the author, the background of the cases presented, and, above all, the type of opiate addiction being discussed. Otherwise no account can be given of apparently contradictory findings.


The sources cited in this study are divided into the following categories: manuscripts, government documents, unpublished Ph.D. dissertations, and books and articles. All are organized alphabetically, with the exception of manuscripts, listed alphabetically under the library in which they are housed.

A. Manuscripts.

Eugene C. Barker Research Center, University of Texas, Austin, Texas:

Bennet, Miles S. Diary.

Bowers, Harry. Note book on Practice of Medicine, Materia Medica.

Nott, Thomas H. Notes, Long Island Col. Hosp. Brooklyn, N.Y.
Historical Pharmacy Museum, New Orleans, Louisiana:
Brand, Erich. Prescription Record Book.

History of Medicine Division, National Library of Medicine, Bethesda, Maryland:
Lawrence Kolb Papers.

Howard-Tilton Memorial Library, Tulane University, New Orleans, Louisiana:
Mitchell Family Papers.

Rosenberg Library Archives Division, Galveston, Texas:
Ballinger, William Pitt. Diary.
Dr. Nicholas D. Labadie Papers.

Rudolph Matas Medical Library, Tulane University School of Medicine, New Orleans, Louisiana:
Anon. Notes on Dudley's Lectures Taken in 1830.
Austin, John. Notes on the Lectures of Benjamin Rush by John Austin.
Bemiss, Samuel Merrifield. Clinical Lectures, Charity Hospital, 1882-83.

_Record of Cases Attended at Charity Hospital, New Orleans, October 1868 - February 1875._

Feldner, George D. Prescription Record Book.

Fitch, Jacob Everett. Case Records, Charity Hospital, New Orleans.

Kennon, Charles E. Notes on the Lectures of Drs. Chaille, Nott, Jones and Stone on Obstetrics, Pharmacology, and Therapeutics, Medical College, University of Louisiana, New Orleans, January 15, 1866 - February 6, 1866.

Musser, Benjamin. Principles and Practice of Medicine, Notes on Lectures of Dr. John Kearsley Mitchell, 1843-1844, Jefferson Medical School.
Schuppert, Charles. Notes, Case Records and Observations, Charity Hospital Medical College.

Scranton, G. W. Case Book, Case Sessions, 1873-1874, Charity Hospital.

Vandegriff, John B. Dosimetric Medication arranged by Jno. B. Vandegriff, M. D., Graduate of La University at New Orleans.

Pharmaceutical Preparations and Select Prescriptions.

University of Alabama, Tuscaloosa, Alabama:

Jefferson Davis Papers

Woodson Research Center, Fondren Library, Rice University, Houston, Texas:


B. Government Documents.


. Importation and Use of Opium: Hearings Before the Committee on Ways and Means. 61st Congress, 3rd Session (1910-1911).


. The Opium Traffic: Message from the President of the United States Transmitting Report of the Secretary of State Relative to the Control of the Opium Traffic. Senate Document No. 736, 61st Congress, 3rd Session (1911).


. Reports of the President's Commissions, Senate Document No. 644, 60th Congress, 2nd Session (1909).


C. Unpublished Ph.D. Dissertations.


D. Books and Articles.


Anderson, V. V. "Drug Users in Court." *BMSJ*, 176 (1917), 757-757.


______  "Nervous and Mental Disease in United States Troops."  Medical Progress, 36 (1920), 193-197.


Black, J. R. "Advantages of Substituting the Morphia Habit for the Incurably Alcoholic." *Cincinnati Lancet-Clinic*, n.s. 22 (1889), 537-541.

Blair, Thomas S. "The Dope Doctor and Other City Cousins of the Moonshiner." *Survey*, 44 (1920), 16-20, 55.


____. "The Relative Usage of Narcotic Drugs in Hospital Service and Private Practice." *JAMA*, 75 (1920), 1630-1632.


Boynton, S. S. "Tales of a Smuggler." Overland Monthly, 22 (1893), 511-516.

Brooks, Harlow, and Mixwell, H. R. "Two Cases of Heroin Habituation." New York State Journal of Medicine, 11 (1911), 386-387.


Butler, Willis P. "How One American City is Meeting the Public Health Problems of Narcotic Drug Addiction." American Medicine, 28 (1922), 154-162.


Chaille, Stanford E. "The Opium Habit, and 'Opium-Mania Cures.' With Chemical Analysis of Dr. Beck's 'Opiumania Cure,'" by J. Johnson." Reprint from *New Orleans Medical and Surgical Journal* (May, 1876), RMML.


"Cocaine Alley." *American Druggist and Pharmaceutical Record*, 37 (1900), 337-338.

"The Cocaine Habit." *JAMA*, 34 (1900), 1637; 36 (1900), 330.


Condit, Ira M. *The Chinaman as We See Him and Fifty Years of Work for Him*. Chicago: Fleming H. Revell Company, 1900.


____. "Morphinism Among Physicians." *Medical Record*, 56 (1899), 784-786.


____. *Morphinism and Narcomanias from Other Drugs: Their Etiology, Treatment, and Medicolegal Relations.* Philadelphia: W. B. Saunders & Co., 1902.

____. "New Sources of Danger in the Use of Opium." *JAMA*, 35 (1900), 338-342.


_____. "Morphinism." *Medical Record,* 72 (1907), 435-437.


_____. "Über die Wirkung einiger Derivate des Morphins auf die Atemhungr." *Archiv fuer die Gesammte Physiologie des Menschen und der Tiere,* 72 (1898), 485-520.


Drysdale, H. H. "Some of the Effects of the Harrison Anti-Narcotic Law in Cleveland. (Analysis of Cases of Drug Addiction Treated in the Observation Department of the Cleveland City Hospital)." Cleveland Medical Journal, 14 (1915), 353-364.


"Effects of Opium Eating." BMSJ, 6 (1832), 128-131.

"8,000 Lads in City are Drug Addicts." New York Times, April 15, 1919, 24.


Floecckinger, F. C. "Clinical Observations on Heroin and Heroin Hydrochloride, as Compared with Codein and Morphin." New Orleans Medical and Surgical Journal, 52 (1900), 636-646.
Floret, ____. "Klinische Versuche über die Wirkung und Andwendung des Heroins." Therapeutische Monatshefte, 12 (1898), 512.

Fox, A. C. "Morphinism." Alkaloidal Clinic, 4 (1897), 701-702.


Handy, Hasting[s]. *An Inaugural Dissertation on Opium*. Philadelphia: T. Lang, 1791.


"Heroin and the Results of Its Abuse as a Drug." British Medical Journal, (1902), Epitome Section, 91.

"Heroin Hydrochloride." JAMA, 47 (1906), 1303.


Huse, Edward C. "Coca-Erythoxylon--A New Cure for the Opium Habit." Therapeutic Gazette, n.s. 1 (1880), 256-257.


"Hypodermic Use of Opium." Probe, 1 (1869), 7-9.


Josselyn, Eli E. "An Analysis of Twelve Cases of the Morphia Habit." Medical Register, 1 (1887), 195-198.


Kane, H. H. *Drugs that Enslave: The Opium, Morphine, Chloral and Hashisch Habits.* Philadelphia: Presley Blakiston, 1881.


Lang, Charles J. "Heroin." Medical Times and Register, 37 (1899), 79-80.


Macht, David I. "The History of Intravenous and Subcutaneous Administration of Drugs." JAMA, 66 (1916), 856-860.

"The History of Opium and Some of Its Preparations and Alkaloids." JAMA, 64 (1915), 477-481.


Mason, Lewis D. "Patent and Proprietary Medicines as the Cause of the Alcohol and Opium Habit or Other Forms of Narcomania--with Some Suggestions as to How the Evil May Be Remedied." Quarterly Journal of Inebriety, 25 (1903), 1-13.


---. "Cocainism." Medical Record, 42 (1892), 474-477; 43 (1893), 34-36.

---. "The Ethics of Opium Habitues." Medical and Surgical Reporter, 59 (1888), 296-298.


---. "Morphinism in Medical Men." JAMA, 23 (1894), 186-188.


---. "Opium Addiction in Medical Men." Medical Record, 23 (1883), 621-623.


"Modern Life and Sedatives." Littell's Living Age, 238 (1903), 571-574.


"The Narcotics We Indulge In-Part II." Blackwood's Edinburgh Magazine, 74 (1853), 605-628.


"'Opiokapnism' or Opium Smoking." JAMA, 18 (1892), 719-720.

"Opium Habit in Infant from Kopp's Baby's Friend." JAMA, 46 (1906), 1540.


"Opium in Fevers." JAMA, 8 (1887), 265-266.


"Opium Smoking." JAMA, 34 (1900), 306, 376.

"Opium Smoking as a Therapeutic Means." JAMA, 3 (1884), 100-101.

"Opium Smuggling on Our Northern Border." JAMA, 11 (1888), 885.


Papin, T. L. "Morphia and the Morphia Habit." St. Louis Courier of Medicine, 9 (1883), 18-23.


Patterson, C. E. "Morphine and Other Drug Habits." Medical Summary, 22 (1900), 165-167.

Pearson, C. B. "Is Morphine 'Happy Dust' to the Addict?" Medical Council, 23 (1918), 919-922; 24 (1919), 38-40.


Perry, M. S. "Autopsy of an Opium Eater." BMSJ, 13 (1835), 319-320.


"The Prevalence of the Morphin and Cocain Habits." JAMA, 60 (1913), 1363-1364.

Quinones, Mark A. "Drug Abuse During the Civil War (1861-1865)." International Journal of the Addictions, 10 (1975), 1007-1020.

"R." "On the Use of Opium." BMSJ, 6 (1832), 156-157.


Robb, Hunter. "The Use of Morphia and Other Strong Analgesics in Gynecological Practice." JAMA, 18 (1892), 680.


Roundtree, W. C. "The Opium Fiend." Texas State Journal of Medicine, 8 (1913), 305-308.


Sce leth, Charles E. "A Rational Treatment of the Morphine Habit." JAMA, 66 (1916), 862.


Scheppenegrell, W. "The Abuse and Dangers of Cocain." Medical News, 73 (1898), 417-422.


Seeger, C. L. "Opium Eating." *BMSJ,* 9 (1833), 117-120.


Sewall, J. G. "Opium-Eating and Hypodermic Injection." *Medical Record,* 5 (1870), 137.


Sharkey, Seymour J. "Morphinomania." *Nineteenth Century,* 22 (1887), 335-342.

Shoemaker, John V. "The Abuse of Drugs." *JAMA,* 42 (1904), 1405-1408.


Sterne, Albert E. "Have Drug Addictions a Pathological Basis?" JAMA, 44 (1905), 609-612.

Stevens, Enos. "Opium." BMSJ, 41 (1850), 119-121.


Stockard, C. C. "Morphinism." Atlanta Journal-Record of Medicine, 1 (1900), 865-871.


_____. "The Problem of Narcotic Addiction of Today." Medical Record, 93 (1918), 755-760.


"Symposium on 'The Doctor and the Drug Addict'." JAMA, 75 (1920), 1589-1591.


"Use of Opium in the United States." BMJ, 72 (1865), 476.


Whittaker, J. T. "Cocaine in the Treatment of the Opium Habit." Medical News, 47 (1885), 144-149.


Wilbert, Martin I. "Efforts to Curb the Misuse of Narcotic Drugs: A Comparative Analysis of the Federal and State Laws Designed to Restrict or to Regulate the Distribution and Use of Opium, Coca, and Other Narcotic or Habit-Forming Drugs." Public Health Reports, 30 (1915), 893-923.


