Preface

The State of Marijuana Reform

Marijuana is the Spanish name for *Cannabis sativa* L., an herbaceous plant originally native to Asia. Cultivated for more than five thousand years, marijuana has spread around the world and has had tremendous influence on the evolution of human culture. From the hundreds of industrial uses of marijuana, to the plant's ancient role as a healing herb, to the intoxicating effects that have made marijuana one of the most widely used recreational and spiritual drugs, marijuana sits alongside wheat, rice, and potatoes as one of the most influential species in our shared socio-botanical history.

During the twentieth century, marijuana became a target in the global drive to eliminate drug use and addiction. Decades of prohibition failed to reduce interest in marijuana's healing and intoxicating effects but did help to create and support the existence of a global black market drug industry. In the late twentieth and early twenty-first centuries, laws and attitudes began to change, as countries around the world decided to decriminalize marijuana for both medical and recreational consumption. The United States has been one of the epicenters of this ideological evolution, as politicians, medical professionals, and activists debate the past, present, and future of marijuana in American society.

From Prized Crop to Maligned Weed

Originally native to parts of Asia including China and Pakistan, early botanical explorers discovered that marijuana could be ground into a fiber used to make paper, clothing, rope, and a variety of other textile goods. The term *hemp,* originally another name for the plant itself, is now often used to describe the nonconsumptive, industrial uses of marijuana. Ancient human societies also discovered that consumption of marijuana produced an intoxicating effect due to the presence of psychotropic chemicals called cannabinoids in the plant. Because of the myriad physiological effects of cannabinoid consumption, by 3000 BCE, Chinese physicians were prescribing marijuana to reduce pain and inflammation and to treat maladies that included asthma, epilepsy, and insomnia. As a medicinal herb, marijuana spread from Asia through India and Africa, and eventually to ancient Greece and Rome.

Marijuana was a highly valued agricultural crop in the early American settlements and some of the Founding Fathers, including Thomas Jefferson, grew hemp for industrial use. In the mid-1800s, the medicinal use of marijuana was introduced to Europe and the United States and the herb became a valuable addition to the American pharmacological arsenal into the early 1900s. Marijuana's reclassification as a potentially dangerous drug was tied to a wave of opium addiction that spread through America in the early twentieth century and resulted in a movement to control drug abuse and addiction. Early supporters of marijuana prohibition also believed that marijuana use had been introduced to America through Mexican immigrants who

came to the United States following the Mexican Revolution in 1910, and this led to a confluence between the antimarijuana and anti-immigration movements.

Marijuana prohibition was part of the broader attempt to enhance public welfare by eliminating drug use, the same movement that resulted in the disastrous attempt to prohibit alcohol consumption between 1920 and 1933. The antimarijuana propaganda campaign that emerged in the 1930s lacked scientific data (as research on the effects of marijuana was scarce at the time) and was based largely on anecdotal, racially and socioeconomically biased, and highly inflammatory claims about the dangers of marijuana. The 1936 film *Reefer Madness* represents the culmination of marijuana misinformation and panic, equating marijuana with rising levels of violent crime. While states across the nation had been introducing laws to regulate or ban the growth and consumption of marijuana since 1911, it was not until 1937 that the federal government passed the Marijuana Tax Act, officially making marijuana use illegal across the United States.

The Road to Legalization

In 1938, New York Mayor Fiorello La Guardia directed the New York Academy of Medicine to study the effects of marijuana use. The committee found no evidence that marijuana increased crime rates or the use of other drugs like morphine and heroin. The committee's official position was that public concern about the effects of marijuana seemed to be largely unfounded or exaggerated. The LaGuardia study was the first of numerous studies to refute the belief that marijuana functioned as a "gateway drug," leading to the use of other drugs, which is one of the most common justifications for marijuana prohibition.

Over the decades, the public perception of marijuana shifted in consort with other social movements. Marijuana use was high among the youth culture of the 1960s, while legal penalties were reduced. Then, in 1970, Congress voted to classify marijuana as a "Schedule I" substance, a category designated for substances that have a high potential for abuse, no current or accepted medical use, and no accepted standards for safe use. Drugs listed on the Schedule I list are the only substances that cannot be prescribed by a physician. Despite a 1972 report from the National Commission on Marihuana and Drug Abuse that recommended marijuana be taken off the Schedule I list and decriminalized, the administration of President Richard Nixon bowed to the pressure of the conservative lobby that favored a hard line on the substance, equating it with morphine and opium in terms of health and safety concerns.

From the 1970s to the end of the Reagan Era in the 1980s, America's War on Drugs led to increasingly severe penalties for marijuana production and possession. According to a PEW Research study released in 2013, the War on Drugs resulted in increased public support for marijuana prohibition, with more than 78 percent of Americans agreeing that marijuana should be illegal in the late 1980s.

During the 1990s, a growing body of evidence suggested that marijuana was effective in treating a number of serious medical issues, including the side effects from HIV and cancer treatment, glaucoma, multiple sclerosis, and chronic pain.

Bolstered by these studies, the lobby to legalize medical marijuana gained prominence. In 1996, California voters passed Proposition 215, becoming the first state to legalize medical marijuana. By 2014, twenty-three states and the District of Columbia had legalized medical marijuana with increasing support from the medical community. A 2013 poll of doctors published in the *New England Journal of Medicine*, for instance, indicated that 76 percent of physicians polled supported medical marijuana legalization.

Studies released in 2013 and 2014 suggested that marijuana is effective in treating epileptic seizures. This led to the passage of a 2014 bill in Illinois to legalize non-smokable marijuana treatment for children suffering from epilepsy. In July 2014, Pennsylvania Representative Scott Perry introduced H.R. 5226: Charlotte's Web Medical Hemp Act of 2014 to legalize non-smokable marijuana oil for the treatment of seizures and epilepsy to the US House. This was the first attempt to legalize marijuana use at the federal level, with significant potential reverberations for marijuana laws across the nation.

The legalization of medical marijuana was a major factor in changing public opinions regarding marijuana use on a broader level. Coupled with generational changes in political power, polls began to show growing support for the legalization of marijuana for recreation. A 2013 PEW research study found that 52 percent of Americans polled in 2012 and 2013 supported the complete legalization of marijuana, both for medical and recreational use.

In 2013, Washington and Colorado became the first states to legalize marijuana for recreational use. The status of state legalization remains in question, however, as the substance is still illegal on the federal level. In August 2013, the US Department of Justice released a statement claiming that it would challenge any state-level legalization efforts at the current time, though the government reserved its right to intervene in the future. Though many states continue to oppose complete legalization, a number of states passed addendums to state laws in 2013 and 2014 to reduce fines and penalties for marijuana use. Maryland, Missouri, and the District of Columbia, for instance, instituted reforms that replaced incarceration with fines for marijuana possession. By the end of 2014, Alaska and Oregon will become the next states to vote on legalizing recreational marijuana at the state level.

In May 2014, the *New York Times* reported on statistics from the first five months of legal marijuana sales and use in Colorado. According to police numbers, marijuana intoxication accounted for about 12.5 percent of DUI (driving under the influence) incidents reported in that period. Supporters of the law have pointed to reduced crime rates across Colorado as a sign that the law is having positive benefits. Analysts warn that definitive conclusions about the effect of legalization will not be clear for several years, and thus Colorado's experiment in legalization remains the subject of intense scrutiny for those on both sides of the issue.

Reclassification and Taxation

In addition to the national debate regarding marijuana legalization, a more limited and nuanced lobby has been working to have marijuana removed from the Schedule

I list of controlled substances, thus allowing doctors to prescribe marijuana and opening the door to additional research. The reclassification lobby has been working toward this goal since 1972, though the issue has gained new life in light of the broader legalization debate. In April 2014, President Barack Obama made national news when he stated his intention to support a congressional effort to remove marijuana from the Schedule I list.

Another facet of the marijuana debate is the issue of whether marijuana should be decriminalized—which means removing the legal penalties for possession, production, and use—or fully legalized, which means passing laws that grant the right to use marijuana, but might also restrict and regulate use and production.

One of the primary differences between decriminalization and legalization concerns the financial status of marijuana as a crop. If marijuana is legalized, governments can collect sales tax on marijuana sales and can potentially develop specific tax laws to regulate marijuana production and distribution.

In Colorado and Washington, where marijuana has been officially legalized for recreational use, politicians have begun debating instituting specialized taxes, similar to taxes levied on alcohol. Reports in May and June 2014 on the effect of legal marijuana sales in Colorado indicated that the state had seen more than $50 million in legal recreational marijuana sales, translating to $7.3 million in tax revenues, with an additional $12.6 million in state earnings from medical marijuana. Issues related to the taxation of marijuana include the potential to use marijuana taxes to fund addiction and drug abuse education and research, and the potential to use taxation to reduce or discourage the use of marijuana, similar to the "sin taxes" levied on alcohol or tobacco.

Legal Intoxication

A 2014 *New England Journal of Medicine* article describing the known medical risks of marijuana included increased risk of bronchitis and pulmonary disorders as one of the chief medical concerns of marijuana use. The authors noted that these risks do not apply to nonsmokable forms of consumption. In addition, the report cited reduced motor coordination and altered judgment as potential risks, which could lead to increased automobile accidents and other safety concerns. Despite these risks, the authors supported medical marijuana legalization and argued that more research was needed to estimate the risk of marijuana use effectively.

Marijuana is not the only intoxicant legally used in the United States, and the decriminalization of marijuana would place the plant on par with nicotine and alcohol. Toward this end, there has been interest in how marijuana compares with these other substances. A 2007 research study in *The Lancet*, indicated that marijuana was the least dangerous of the three most common social drugs—marijuana, tobacco, and alcohol—both in terms of physical risks and the potential for addiction and dependence. In an interview with the *New Yorker* in January 2014, President Obama stated his belief that marijuana is not more dangerous than alcohol, an opinion supported by decades of research and echoed by the vast majority of physicians in the United States.

While marijuana may be safer than the other legal intoxicants, marijuana use carries physical risks and poses a potential safety hazard that must be addressed as the legalization debate continues. From an ancient medicinal and industrial crop, to the subject of a modern American revolution, marijuana has been an influential part of human culture for millennia. Those participating in the modern public debate are therefore players in a far more ancient pattern of social evolution regarding the right and ethics of intoxication, the use and abuse of natural resources, and the always-evolving relationship between public safety and personal freedom.

—Micah Issitt

Editor's Note: Due to the quickly changing nature of this topic, we encourage you to visit the sites listed in our Websites listing at the end of this book for the most current information regarding state legislation and related topics.

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Marijuana Policy Reform:
The "Tipping Point"

Co-owner Troy Moore weighs marijuana at the Oregon's Finest medical marijuana dispensary in Portland, Oregon, in April 2014.

Reform—The Marijuana Legalization Debate

As more US states legalize the medical and recreational use of marijuana, advocates turn their attention toward federal drug policy. As of 2014, it remains a federal crime to possess, grow, or sell marijuana for any purpose, regardless of any state laws to the contrary. Individuals who use marijuana in states where it is legal can still be subject to federal prosecution, which creates a confusing and politically charged legal landscape. In order to achieve true marijuana policy reform, federal law must change.

This leads to an important question: should the federal government legalize or decriminalize marijuana possession and sale? Numerous arguments exist on both sides. Those who argue against reform believe that legalizing marijuana would encourage its use and lead to increased public health and safety issues. Those who favor reform believe that legalizing marijuana would decrease crime by removing black market demand, and would free up public resources to assist people with substance abuse problems more effectively.

Public opinion on marijuana legalization has changed significantly in the past few decades, and more mainstream public figures now advocate in favor of legalization. With medical use permitted in nearly half of US states (as of August 2014)—plus several states decriminalizing recreational use—the weight of economic and health research combined with public opinion may soon reach a tipping point favoring federal reform. Experts still disagree on many important issues, however, including economic impact, public health concerns, and safety implications.

Economic Impact

Experts disagree on the economic impact of marijuana legalization in the United States. One argument favoring legalization is that the government could raise revenue by regulating and taxing marijuana sales, similar to alcohol and tobacco. However, it is unclear what economic benefit could actually be realized through taxation. A 2006 report stated that marijuana was the largest cash crop in the United States, with an estimated value of $35.8 billion per year—greater than the combined value of corn ($23.3 billion) and wheat ($7.5 billion). This figure was calculated by Jon Gettman, the director of the Coalition for Rescheduling Cannabis, by multiplying the approximately 10,000 metric tons of marijuana produced annually in the United States, with an estimated production value of $1,600 per pound.

This number was criticized on several grounds. Because of the high (and highly variable) price per pound, the relative cash value of marijuana says little about the actual quantity bought and sold. The amount of marijuana produced in the United

States was actually closer to that of beans—a much smaller crop by weight than corn or wheat. Additionally, the cash value of marijuana is likely to drop significantly if no black market exists to drive up the price. For comparison, the production value of tobacco was approximately two dollars per pound in 2007. Because of these factors, the relatively small volume of marijuana bought and sold in the United States might not generate nearly as much tax revenue as hoped. With this amount of uncertainty, some analysts worry that any potential financial benefit would be too small to outweigh the cost of additional public harm caused by increased usage.

Black Market Drug Trade

Critics of the long-running War on Drugs—the US government's campaign of more than four decades to curtail the production and sale of illegal drugs—suspect that criminalization of minor drug offenses actually increases crime, especially organized crime, and contributes to dangerous black markets. The lack of legal availability drives up prices, and, as of 2014, United Nations experts valued the worldwide black market drug trade at more than $300 billion. However, experts disagree whether legalizing marijuana alone would seriously impact the organized crime system supported by the black market drug trade, and whether it would have a significant effect on public safety and global stability.

This issue grows in importance as enforcement efforts in many Latin American countries lead to casualties, police and government corruption, and economic problems. Because marijuana is the most popular recreational drug in the United States, some believe that legalizing its use and sale would keep the increasingly deadly trafficking activities away from the US border. At a recent Organization of American States (OAS) summit, Latin American leaders discussed the future evolution of drug enforcement policy. Marijuana legalization was among the approaches suggested to encourage political and economic stability in the region.

There is disagreement, however, about whether legalizing marijuana alone would significantly impact the revenue of drug cartels. For example, the US Office of National Drug Control Policy (ONDCP) estimated that 61 percent of Mexican drug cartel revenue comes from marijuana; by contrast, the independent research organization RAND Corporation determined that only about 16 percent of cartel income comes from marijuana. The balance, according to RAND, comes from other illegal activities, including the manufacture and sale of harder drugs such as cocaine, heroin, and methamphetamine; trafficking undocumented immigrants and sex workers; ransoming kidnap victims; extorting small businesses; and bribing politicians. Experts debate whether legalizing marijuana would decrease cartel-related violence by lowering the cash flow needed to fund other illicit activity, or simply push the cartels to engage in more illegal activities of a different kind to maintain their revenue.

Curbing Drug Abuse

Similar levels of disagreement exist on the domestic front, with experts weighing in on the potential public health impacts of marijuana legalization. Some argue that

punishing users as criminals is ineffective in reducing abuse, and instead wastes public money on searching out, arresting, prosecuting, and incarcerating even the most casual users. Others argue that the potential harm caused by marijuana is not yet fully understood, and it would be imprudent to pursue legalization before being fully prepared for the consequences.

Regardless, many question whether criminalizing drug use really achieves its alleged purpose—namely, curbing drug abuse. According to the Federal Bureau of Prisons, in 2014 almost exactly half of all federal inmates are incarcerated for drug-related offenses. Some economists suggest that the money spent on enforcing criminal penalties would be better spent improving public health infrastructure to provide more effective treatment for individuals with drug abuse problems.

Similarly, pro-legalization activists such as Ethan Nadelmann, executive director of the Drug Policy Alliance, argue that, in their zeal to enforce existing laws, prosecutors and district attorneys ignore the harmful effects of practices like mandatory minimum sentencing and criminal penalties for pregnant women who test positive for drugs. Ultimately, he believes that decriminalization will do more to reduce the harms caused by drug use and abuse, because it will shift the focus from incarceration to rehabilitation.

Public Health

While most marijuana users are unlikely to become drug addicts, questions remain regarding the safety of marijuana for regular or occasional use. Many people consider marijuana to be safe—possibly even more so than alcohol and tobacco—but some studies show potential long-term consequences among young, heavy marijuana users. National Institutes of Health director Francis Collins highlighted studies showing that prolonged marijuana use among teenagers may cause a permanent decrease in cognitive abilities. The potential of marijuana smoke to cause lung cancer is still unknown, and other studies suggest a possible connection between marijuana use and elevated risks of testicular cancer.

Nora Volkow, director of the National Institute on Drug Abuse (NIDA), has noted that one must consider the differing impacts of tobacco, alcohol, and marijuana, rather than grouping them together for discussion purposes. For example, unlike tobacco, alcohol and marijuana impair the brain's cognitive abilities. Numerous studies show that alcohol impairs one's ability to operate a motor vehicle safely, and drivers with even a slightly elevated blood alcohol level have an increased risk of accident. Few studies have evaluated the effects of marijuana on driving, but so far results show similar increases in accident rates because of levels of cognitive decline.

Studies also show increased rates of schizophrenia among marijuana smokers, but they have not proven that marijuana use actually causes schizophrenia. Marijuana use may accelerate the development of symptoms in those who are predisposed to schizophrenia, as the active ingredients in marijuana, including delta-9 tetrahydrocannabinol (9-THC) and cannabidiol (CBD), can trigger paranoia even in a person without predisposition if consumed in sufficiently high doses. These

effects are usually temporary, but it could trigger a permanent change for individuals prone to schizophrenia.

Medical Exceptions

Despite these health concerns, marijuana shows potential for a variety of medical applications. Patients report that using marijuana helps alleviate pain, reduce nausea, and stimulate appetite without the side-effects of traditional medication. This makes marijuana a potentially useful treatment for several illnesses, including chronic pain, cancer, HIV/AIDS, glaucoma, epilepsy, and multiple sclerosis. As of July 2014, nearly half of US states have legalized marijuana for medical use, provided that it is administered under the supervision of a doctor or approved caregiver.

However, many states' approval processes are widely criticized, as people question who qualifies as a "caregiver" and under what circumstances an individual can receive a license to use. Additionally, the ailments most likely to benefit from medical marijuana use—such as chronic pain—cannot be tested objectively. Critics observe that recreational users can easily obtain a medical license to use: for example, public health experts in Colorado estimate that only about 20 percent of sales under the state's medical marijuana laws are to individuals with a legitimate medical condition. To combat this, some places like Washington, DC, removed chronic pain from the list of ailments that qualify for medical marijuana use. Unfortunately, this rules out a potentially valuable treatment option for individuals who really do suffer from chronic pain. This leads to an ideological split between those who support legalizing marijuana for medical purposes only and those who support full legalization.

Increased Access

A common argument against legalization is that easier access will lead to increased use, and therefore increased harm. Once again, experts disagree on how much use would increase if marijuana were legal and more widely available. Multiple surveys conducted in the United States show that young people (under twenty-one) report that it is easier to purchase marijuana than alcohol. This suggests that prohibition laws are ineffective at preventing people from accessing drugs. And indeed, experts such as Dr. Benedikt Fischer of Simon Fraser University in British Columbia, Canada, point out that people who want to use drugs are largely already using, despite their illegality.

By contrast, Nora Volkow of NIDA is concerned that legalizing marijuana sale means that corporations will profit from increased sales. This creates an incentive for corporations to develop and market marijuana products to increase sales and enlarge their customer base. Thus, she expects legalization will result in more public health and safety issues, simply because easier access means that more people will be using it, and more frequently.

Aside from access to marijuana itself, many worry about its alleged role as a "gateway" to harder drug use. NIDA suggests that marijuana users are much more likely to use other drugs as well, but this does not necessarily mean that marijuana

causes other drug use: it simply means the two occur together. Other correlating behaviors exist with hard drug users, such as underage drinking and smoking, so it is equally likely that any of these—or none of these—could be the cause. Interestingly, research suggests that when marijuana is legal, such as in the Netherlands, its market is separate from that of other drugs: marijuana dealers rarely carry other kinds of drugs, and users rarely seek out other drugs. By contrast, in the United States, marijuana dealers may carry other kinds of drugs because they are all equally illegal, which might provide marijuana users with easier access to other drugs.

Conclusion

The public's perception of the dangers of marijuana use has changed over time, and the percentage of Americans who believe it should be legalized has changed as well: when the Gallup polling organization surveyed Americans in 1969, only 12 percent of respondents favored legalizing marijuana. By October 2011, 50 percent of respondents favored legalization.

Similarly, opinion polls show that the public considers marijuana separately from other drugs, particularly when it comes to questions of legalization. While public support for marijuana legalization has increased over the past few decades, support with regard to other drugs remains around 10 to 15 percent favoring legality. This holds true even in the Netherlands, where marijuana is legal, and where there is similarly little public support for legalizing other drugs.

As states continue to pass their own laws with respect to medical and recreational marijuana use, the debate over federal law and policy grows more significant. The confusion created when a federal offense is legalized by a state must be resolved; the question remains whether it will lead to federal legalization, or revocation of state marijuana laws.

—Tracey M. DiLascio

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