

# Tattoo Prohibition Behind Bars: The Case for Repeal

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## Abstract

Performing or receiving tattoos is forbidden in American prisons. What are the intentions behind this prohibition? Does the policy meet its intentions? Does it promote the broader ends of prison institutions: to protect justice, provide efficient correctional services, rehabilitate criminals, and deter crime? I argue that repealing the prohibition of inmate tattooing would achieve outcomes more in line with the intentions of prison management than does the current prohibition policy.

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## I. Introduction

Correctional institutions in the United States prohibit inmates from giving and receiving tattoos.<sup>1</sup> According to most correctional code of conduct manuals, tattooing is formally a “minor violation.”<sup>2</sup>

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<sup>1</sup> I found no evidence that legitimate tattoo artists have tried to tattoo inmates in the U.S. This practice is not explicitly forbidden in visitation policy codes (like inmate tattooing is), but the equipment and disposal procedures necessary would not be allowed because they are potentially dangerous weapons (needles) and produce hazardous medical waste.

<sup>2</sup> As a representative sample, The *Texas Offender Orientation Handbook* (2004, p.20) defines contraband as “[a]ny item not allowed when the offender came to the TDCJ [Texas Department of Correctional Justice], not given or assigned to an offender by the TDCJ, and not bought by an offender for his use from the commissary.” The *Florida Criminal Punishment Code* (2006, p.33) lists the possession of contraband as a “3rd degree felony.” Together these two states house a significant portion of the inmates in the U.S. Other states, such as Alaska, explicitly list tattoos as violations of inmate conduct (Pugh, 1997).

When inmates violate these rules, they are subject to informal punishments. They lose recreation time and visitation privileges, the tattoo equipment is confiscated and destroyed, and charges count against parole possibilities in the future. De facto punishment for tattooing can be more severe when tattooing is considered “gang-related.” If authorities judge an inmate to be a gang member, the inmate’s sentence can be converted to a solitary housing facility.<sup>3</sup> In effect, tattooing is more strictly prohibited than the explicit regulations would lead a casual observer to infer.

The mission statements and inmate codes of conduct for state correction agencies do not specifically explain the intentions behind tattoo prohibitions.<sup>4</sup> Instead, inmate code of conduct manuals describe the protocol of tattoo prohibition, correctional department mission statements list the broad intentions of prisons, and correctional managers, health researchers, and crime experts point out the negative consequences of prison tattoos. Prohibition and enforcement against tattooing is the default policy from the established perspective that tattooing is harmful.

Current policies and enforcements are meant to be in line with the general mission statements of correctional departments. The Texas Department of Criminal Justice describes its mission thus: “to provide public safety, promote positive change in offender behavior, reintegrate offenders into society and assist victims of crime” (2004, p.5). The Michigan Department of Corrections (2008), another high prison population state, states on its website that its goal is “to provide the greatest amount of public protection while making the most efficient use of the State’s resources.” How does the

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<sup>3</sup> Security Housing Units (SHUs) are a new technique to combat prison gangs. A panel of investigators reviews an inmate, similar to a parole board. If they deem the inmate to be a gang member, then he has an opportunity to inform the board of other gang members of whom he is aware. If he complies, he can be sent back to his traditional facility. Gangs self-enforce against defections with violence. The rational choice for the suspect is often to accept solitary confinement (sometimes for the duration of his sentence). These sentences can carry irreversible psychological damage (Tachiki, 1995).

<sup>4</sup> The Texas Department of Corrections mentions tattoos in several of its publications on HIV and AIDS. The Florida Department of Corrections (2006) repeatedly references tattoos as indicators of gang related activities. In addition, the California Department of Juvenile Justice (2008) sponsors a tattoo removal program that describes as its objective “to enhance employment and educational opportunities for at-risk youth.”

prohibition on prison tattooing aim to comply with these intentions?<sup>5</sup> (1) Tattooing carries a risk of transmitting infectious diseases.<sup>5</sup> Presumably, prohibiting tattoos avoids health risks. (2) Prisons function by maintaining a strict level of control and authority over inmates.<sup>6</sup> Tattoos are a communication tool used by inmates and gangs. Presumably, prohibiting tattoos counters gang power in prisons. (3) Tattooing is a vestige of criminal culture. Its permanent and recognizable qualities<sup>7</sup> inhibit released inmates from rehabilitating and reentering traditional society.<sup>8</sup> Presumably, prohibiting tattoos assists rehabilitation efforts.

The purpose of this paper is to challenge each of the presumptions in the previous paragraph. Is tattoo prohibition in line with the broad intentions of prison management: to avoid the spread of infectious diseases, to maintain authority inside of prisons, and to promote the rehabilitation of inmates? The economics of prohibition and signaling suggest that current prison tattoo policy works against these intentions. A repeal of tattoo prohibition in American prisons would be more in line with the ends of the criminal justice system.

The remainder of this paper is organized as follows. In Section II, the economics of prohibition are explained. A repeal of tattoo prohibition could help avoid rather than spread infectious diseases.

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<sup>5</sup> Braithwaite et al. (1999) described the obvious health risks of body modifications but complained of a lack of research and regulatory attention. See also Winslow et al. (1998). Long (1994) and Nishioka and Gyorkos (2001) explained that tattooing is associated with different blood-borne diseases. Nishioka et al. (2003) investigated subjects in Brazil and found that “[h]aving a tattoo was associated with HCV [hepatitis C virus]...[but] [n]o statistically significant associations were found between tattooing and HBV [hepatitis B virus] or HIV infection, syphilis or Chagas’ disease” (p.441).

<sup>6</sup> Bruton (2004) described his career as a prison warden as a constant struggle for power over inmates. Even the most menial actions have profound psychological implications for maintaining authority. The now infamous Stanford Prison Experiments also demonstrated this (Milgram, 1969).

<sup>7</sup> Prison tattoo artists use makeshift tools that are less precise than those of professionals. Prison tattoo lines are thick and fade more over time. Images in prison tattoos are unique as well. Spider webs, tear drops, prison bars, and gang emblems are all common.

<sup>8</sup> Demello (1993) writes, “tattoos and the process of inscription itself create the cultural body themselves, thereby creating and maintaining specific social boundaries” (p.10). Post (1968) argues that “the presence of a tattoo, or tattoos can serve to indicate the presence of a personality disorder which could lead to, or is characterized by, behavior which deviates from contemporary social norms” (p.516). See also Rosenblatt (1977).

The negative health effects of prison tattooing are an unintended consequence of prohibition policies and not inherent to the practice of tattooing. In Section III, tattoos are explained as a signal device. The economics of signaling means that tattoos communicate reputations amongst inmates to avoid violent conflict. Less violence indirectly lowers the transmission of infectious diseases and the management costs of prisons. Section IV discusses how repealing tattoo prohibition can reduce recidivism and deter crime. Prison conditions are well-suited for tattooing to be a profitable enterprise, so inmate artists can increase their human capital. Finally, Section V presents conclusions.

## **II. Allowing Inmate Tattoos Would Reduce the Spread of Infectious Diseases**

Health conditions and medical costs are major concerns for prison management. Tattooing uses a vibrating or hand-held needle to inject ink under the top layer of skin to create permanent markings. Because tattooing involves puncturing the skin with needles, handling exposed blood, and treating scar tissue, it carries a risk of spreading infectious diseases (See Winslow, 1998; Braithwaite et al., 1999; Long, 1994; Nishioka and Gyorkos, 2001; and Nishioka et al., 2003). The Bureau of Justice Statistics tracks the top 23 medical causes of death amongst inmates. Six (AIDS, septicemia, influenza, homicide, viral hepatitis, and anemias) relate to tattooing because they can be transmitted through tattooing or influenced indirectly by the practice of tattooing.<sup>9</sup> These causes made up 13.8 percent of the deaths inside American prisons between 2001 and 2004 (Mumola, 2007).

Inmate health conditions and their costs are not completely captured in death statistics. The consequences of an ineffective policy are felt before deaths are observed. AIDS and HIV are the biggest tattoo-related causes of death, but their frequency among inmates has fallen recently. As of 2004, more than 23,000 inmates were infected with HIV, almost 2 percent of the prison population, concentrated in the Northeast (Maruschak, 2006). "Spending on medical care for State prisoners totaled 3.3 billion dollars, or 12 percent of operating expenditures in 2001" (Stephan, 2004, p.1). Because prison populations hold disproportionately high amounts of infectious

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<sup>9</sup> Homicides can be avoided through tattoo signaling; see Section III.

diseases, inappropriate tattoo techniques carry more serious consequences than on the outside. Inmate deaths, the quality of health care, and the financial costs of prisons are influenced by tattooing policy.

Repealing tattoo prohibition in prisons can directly and indirectly reduce the spread of infectious diseases in American prisons. In a market, quality tattoo standards could rise as sellers competed with one another for customers by devoting resources currently used to evade punishment to enhance the health conditions of tattoo processes. When tattoos serve as a signaling device they threaten retaliation against violent conflict. By raising the perceived costs of violence to inmates, signals reduce the amount of violence. Less violence indirectly lowers the spread of infectious diseases.

The low quality/high health risks of prison tattooing are a result of the prohibition rather than an inherent quality of tattooing. Tattoos in prison carry greater health risks than ordinary tattooing in legitimate society. The health risks for legitimate tattooing are commonly overstated. Any activity involving injections and scar tissue risks infection, but it is important to understand those risks in an empirical context. The U.S. Centers for Disease Control has been tracking tattoo-related disease data in the private sector since 1985 and has not documented a single case of HIV transmission; “[b]y comparison there have been 7 cases of HIV transmission associated with dentists and dental workers.” Similarly, “[o]f the 13,387 annual cases of hepatitis, only 12 are associated with tattoo studios. By comparison, 43 cases...are associated with dentists” (tattooartists.com). The recent surge in tattooing puts these figures in further perspective. According to the *Harris Poll National Survey* (Server, 2003), “36 percent of Americans aged 25–29 had at least one body tattoo by 2003” (qtd. in Genser, 2007). Winslow et al. (1992) and Braithwaite et al. (1999) reported increased tattoo popularity, explained potential health consequences, and argued for education, regulation, and licensing. Despite the health risks of tattooing, no epidemic has been observed, and popularity continues to rise. The large amount of legitimate tattooing and small amount of associated diseases implies that the health problems of tattooing have been solved in and by the private sector. It is frequently noted, but not elaborated upon, that the health consequences associated with tattooing usually come from amateur, makeshift, and prohibited tattooing rather than from legitimate and commercial tattooing.

A large portion of the research investigating the health risks of tattooing focuses on prison tattooing. Charamonte et al. (1982), Martin et al. (1998), Pallas (1999), and Samuel et al. (2001) all find correlations between blood-borne diseases and tattooing in prisons in different settings. They show that prison tattooing is more dangerous than commercial tattooing for two reasons. First, the materials used are more likely to cause infection. Second, the available pool of prisoners is more prone to infection by nature of their proximity, drug habits, sexual practices, and violence. Tattooing is included as a cause of infectious disease in prisons because of its injection process, but it gains most of its harmful effects from the prohibition policy. Charamonte et al. (1982) reported, "prisoners and wardens showed an increased prevalence of HBV... Illicit drug abuse was found to be a relevant risk factor for HBV infection among prisoners under 35 years of age... whereas no correlation emerged between the presence of HBV serum markers and tattoos" (p.53). Martin et al. (1998) observed that 46.9 percent of inmates in Spain were infected with HIV, and "while tattoos were associated with HIV among prisoners, other authors have found that this either disappears or is greatly modified when stratifying by intravenous drug use" (p.330).<sup>10</sup> Samuel et al. (2001) argue for policies that encourage "sterile tattooing" in New Mexico prisons, given the coincidence between tattooing and drug use.

Compared to the costs of legitimate tattoos, the costs of prison tattoos are high, but still relatively low compared to other behaviors in prison, especially drug use. To the extent that tattooing affects the spread of disease in prisons, the prohibition policy exaggerates the problem. Prohibition and enforcement against tattooing means that inmates face higher costs when performing and receiving tattoos. But as long as the benefits of tattooing outweigh the costs, inmates are willing to do it. Tattoo prohibition, like all prohibitions, is a supply side control.<sup>11</sup>

Inmates gain a high utility from having tattoos, hence their popularity among criminals (Scutt and Gotch, 1974). Tattoos and criminality go hand and hand as cultural images, partly because gangs use tattoos to identify their members (Demello, 1993 and Belsky, 1981). Inmates spend high prices in money, trade, and risk to obtain

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<sup>10</sup> See also Pallas (1999).

<sup>11</sup> For a general discussion of supply side controls, see Thornton (1991, p.73-77).

tattoos. They risk being punished, accept poor quality, and undergo unhealthy procedures. Expending such high costs seems irrational until the full benefits are understood. On religious orthodoxy, Iannaccone (1992, 1994) argued that high sacrifices are weighed against the even higher rewards of membership in the religious community. Prison gangs and inmates perceive similarly high rewards from having tattoos.

Bruton (2004) reports, “[t]attoo artists usually learn their trade outside. Inside, they are highly sought after by inmate customers. Tats are hot items in prison. They can be status symbols or simply inmate art” (p. 71). Inmate artists respond to this high demand by offering services for cash and trade. Prison is an environment of extreme resource scarcity, yet tattoos are still performed. A tattoo artist ensures himself profit and protection. Harming a tattooist or any productive person cuts off the market from the fruits of his labor. Inmates are eager to protect productive resources.

High demand and supply-side prohibitions induce changes in the tattooing process. Inmates are willing to expend costs and forgo quality to avoid being detected or caught in the act. Thornton (1991) describes the predictable magnitude: “[t]he amount of resources devoted to the enforcement of prohibition will determine the degree of risk placed on market participants and therefore the effects prohibition will have on production and consumption” (p.73).

Prohibition makes consumers substitute for low quality goods, and producers have opted for more dangerous production processes in several historical cases. The phrase “back-alley abortions” refers to the unsanitary and dangerous techniques used by doctors who performed abortions on the black market (Joffe, 1991 and Kissling, 1993). During the 1920s America prohibited alcohol; consumption of beer and wine fell, but the consumption of more pungent and easier to smuggle hard spirits increased (Thornton, 1991, p.100–105; Warburton, 1932; and Fisher, 1927, p.29). Similar arguments apply to drugs today. More dangerous drugs like crack and heroin arose after the launch of the war on drugs. While open markets could provide for quality competition over non-addictiveness, buyers and sellers in the black market value portability and stealth.<sup>12</sup>

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<sup>12</sup> Thornton (1991, p.89–110) argues this and surveys Rottenberg’s (1968) work on heroin. Crawford et al. (1988), Reuter et al. (1988), and Ostrowski (1989) make more contemporary arguments concerning the potency of drug trades. Miron and Zwiebel (1995) explain the economic case against drug prohibition.

The same effects of prohibition affect prison tattoos. Rather than using traditional tattoo equipment and sterilization procedures, inmates improvise makeshift tools from sharpened wire, sewing needles, and consumer electronics. They also do not sterilize the equipment. These techniques help tattooers avoid punishment, but they sacrifice quality. Bruton (2004) reports again:

[e]ntrepreneurs make tattoo guns in all sorts of creative fashion. A gun can be built using a thin guitar string as the needle that is mounted in a plastic ballpoint pen shaft with a rubber band or Pink Pearl eraser, masking tape, and a toothbrush to link the needle to a motor. These motors are taken from electric razors, cassette-tape recorders, or CD players. Power comes from either batteries or an AC/DC adapter plugged into a socket. When using an audio component, the volume control dictates the speed of the needle's vibration... To keep their businesses alive, tattoo artists must also be artists at ingeniously hiding their equipment... They break down their guns back into innocent-looking pens and audio players or stash the components inside shampoo bottles (p.72).

Primitive equipment and stealth techniques are trends in prisons in several countries. Kaminski's (2004) report on Polish inmates during the 1980s describes the prohibition of tattooing (p.28, p.30) and the ingenuity of inmates:

A set of three or more needles is bound together with thin thread. The best black pigment is usually made from the burned sole of a shoe, while the lower quality black, blue, or red one is made from the ink of a ballpoint pen. (p.118).

The costs borne by inmates as a result of tattoo prohibition represent wealth, energy, and resources they would be willing and capable of investing in higher quality processes at current quantity levels. Repeal would reverse incentive structures and encourage product differentiation among competing tattoo artists. Increases in health quality competition amongst tattoo providers would reduce the spread of infection to the degree that it is currently caused by tattooing and more.

### III. Allowing Tattoos Would Reduce Violence in Prison

With many black-market behaviors, fraud persists. Prostitutes rob their clients, drug dealers dilute their products, and loan sharks change the terms of their agreements. All these result from ineffective contracting. Without a formal administration of justice, black market traders have no recourse against fraud. Traders for prison tattoos are in a similar, but not identical, predicament.

Reputation, trust, and reliability are foundational to functioning markets. Without these, individuals are averse to potential losses and do not engage in trade. The output of the economy without trust is stagnant. When formal enforcement mechanisms are absent, economists have witnessed reputation mechanisms emerge to overcome risk and uncertainty.<sup>13</sup> In black markets with one-time trades, reputations may never develop. Such is the case in prostitution, drug dealing, and loan sharking; violence is the sole enforcement technique. A small but direct effect on violence from tattoo prohibition comes from inmates trying to enforce their contracts. If an inmate wants to buy or sell tattoo services, he also wants assurance over the exchange. Although the number of tattoo transactions that go foul is likely low, the potential for violent contract enforcement is more present than it would be without prohibition.<sup>14</sup>

Violent enforcement for prison tattooing is rare because prison is a closed environment. Inmates repeatedly deal with one another and build reputations of trust and reciprocity. Kaminski (2004) described how thick tattoo markets led to quality competition among Polish inmates:

The best illustrators offered catalogs of pictures and bon mots, as well as multiple colors. A customary limited warranty against suppuration [puss] that could convert a lovely picture into a monstrous daub gave clients the right to a free correction.... Prison professionals claim an ability to tattoo any living or inanimate pattern (p.118–119).

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<sup>13</sup> Stringham (2003) explains how individuals without state enforcement used reputations to develop stock markets. Leeson (2007) describes how outsiders are allowed entrance into trading groups.

<sup>14</sup> Levitt and Venkatesh (2000) pointed out the strong correlation between new illicit substance trades and violent enforcement. Thornton (1991, p.89) similarly refers to Kyvig (1979, p.123, p.167) and Erickson (1969).

If quality competition emerged in Polish prisons, surely competitive differentiation could develop in an open and legitimate market elsewhere.

Tattoos are used as signaling devices inside and outside of prison. A tattooed person signals to people outside of his community rejection, rebellion, autonomy, or individuality (Kang and Jones, 2007, p.45; Demello, 1993; Post, 1968; and Rosenblatt, 1977). For individuals within the same cultural community, tattoos signal membership, solidarity, and commitment. Similar to open society, prison tattoos send signals among friends and enemies simultaneously. A recognizable tattoo can communicate dedication, commitment, and reputation to a person's allies while warning rivals of his affiliations, level of authority, and criminal history. Demello (1993) describes his prison experience, in which gang membership was celebrated by receiving a tattoo:

The type of imagery that a convict will choose for a tattoo is based both on where the convict came from and on his present situation in prison. One of the most popular tattoos in prison is the *loca*, which gives the name of the convict's neighborhood of origin, or else his gang affiliation... They also identify him as a member of a certain group which has important social ramifications when he encounters members of rival groups (p.11).

To an opposing inmate, a tattoo serves as a warning. It signals the high costs of conflicting with the tattooed inmate. A violent encounter with a tattooed gang member is, in effect, a conflict with an entire gang. If a challenger sees a tattoo and interprets the signal as a higher cost to fighting, then the challenger is less likely to fight.

Inmates face uncertainty in their dealings with other inmates. A new inmate can be a weak exploitable resource, a productive contributor to the closed economy, or a liability that jeopardizes the social order. By displaying tattoos, inmates communicate what their behavior will be in future strategic situations. Small amounts of signaling have significant effects upon the outcomes of strategic scenarios.<sup>15</sup> Allowing inmates to signal through tattooing can

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<sup>15</sup> Gibbons (1992, p.210-211) surveys several case studies: "Stein (1989) shows that policy announcements by the Federal Reserve can be informative but cannot be too precise, and Mathews (1989) studies how a veto threat by the president can

promote peace and stability rather than violence and retaliation.

Kaminski (2004) described his experience in the Polish prison hierarchy as a constant trial of physical strength, mental ingenuity, and creative humor. To preserve order in the prison's environment of uncertainty and resource scarcity, inmates challenged newcomers and assigned them positions within the cell's social hierarchy. Bottoms (1999) gave a thorough description of social orders inside prisons that contrasts with the traditional impression of criminals as irrationally violent. Easily interpreted signals make the process of social order in prisons work faster, more reliably, and be less prone to violence.

Tattoos serve a signaling function for individuals as well as gang members. The content and amount of tattoos on an inmate, can tell others how long he has been in jail, where he is from on the outside, and even the specifics of his crimes. The more intricate the tattoo process is, the more details that can be signaled. Prohibition forces the tattoo process to be crude rather than precise. With high levels of demand, the tattooing process would be more capital intensive without prohibition. The extent that the production process would adopt more sophisticated techniques is proportional to the extent of signals that are currently being suppressed. The extent that violence would decline is proportional to the degree that current signals are being disrupted.

Whether criminalizing a given behavior lowers the marginal costs of committing additional crime, or because physical force carries an explicitly useful function in black markets, violent crime goes hand and hand with prohibition policies.<sup>16</sup> In prison, assets are power. With high demand for drugs, violent enforcement, and sexual favors, inmates who control these markets are powerful and influential. When new products and services enter the prison market, these authorities are challenged. Tattooing is knowledge and human capital intensive. Profits are earned through investment and effort rather

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influence which bill gets through Congress.”

<sup>16</sup> Evidence suggests that violence rises and falls in tandem with the existence of prohibition. Thornton (1991, p.122-123) discusses Fisher (1928) who “notes that crime declined by 37.7 percent during” prohibition, but this was due to a decline in less serious crime, whereas “violence or theft of property increased by 13.2 percent. Homicide increased by 16.1 percent and robbery by 83.3 percent over the period.” Thornton (1991) surveys violence from prohibitions found in Warburton (1932), the Harrison Narcotics Act (1914) and Woody (1934, p.90-99).

than monopolistic force. When larger proportions of the prison market are devoted to tattoos instead of to naturally monopolistic goods, the power and authority of those markets is reduced.

With less violence in prisons, infectious diseases are indirectly reduced because fighting is an additional way diseases are spread. Less violence in prisons means a more manageable correctional environment and a freeing up of resources to better provide other aspects of law enforcement (e.g., police, courts, judges, etc.). Efficiency within and among the services of criminal justice results in a safer civil society.

An immediate concern arises: will inmates steal tattooing equipment and use it as weapons? Allowing inmate tattoos aligns the incentives of tattoo artists and customers to protect equipment against theft. Artists make profits off their equipment and are inclined to protect it to a proportional amount. Evidence suggests that prisons currently contain makeshift tattoo guns, yet they do not get used as weapons, in part because the market for weapons in prison is as similarly diverse as the market for tattoos. Inmates use a variety of makeshift weaponry to accomplish many ends. Some weapons incapacitate their victims; others ensure death quickly, slowly, or painfully. Tattoo needles are expensive resources to use as poor substitutes compared to current alternatives.

#### **IV. Allowing Markets Could Assist Rehabilitation, Lower Recidivism, and Deter Crime**

The early punishment theories that guided penal practices were utilitarian inspired forms of rehabilitation. People believed that enduring pain and consequences would influence the preferences and habits of criminals, changing them into better people (Bentham, 1830). By the 1970s rehabilitation techniques changed to psychological therapy, work training programs, and education. But amidst these costly programs were rising trends in violent crime and growing recidivism (Ryberg, 2004, p.3, and Martinson, 1974).

In the mid-1970s the law and economics school modeled criminal behavior as rational and responsive to incentives (Becker, 1968), and punishment theory changed to retribution techniques and deontological justifications. Prison sentences were “deserved” punishments; the goal of prisons was maximum confinement at low costs (Hart, 1969). Rehabilitation was used so far as it could lower recidivism, but theorists, correctional managers, and policy makers

are still unsure what techniques really change criminal behaviors.<sup>17</sup>

Given more criminalized behaviors, discovering effective rehabilitation programs has become more challenging. The successful rehabilitation of a drug addict is different from rehabilitating a cyber-criminal. Current punishment theory and practice relies on meticulously engineered responses. The costs of planning are high. Legislators, judges, police, and correctional managers must continually guide their bureaucracies to keep up with entrepreneurial criminals.

On the other hand, there are several cases in which creative wardens took laissez-faire approaches to inmates participating in market behaviors. These cases have been successful on three margins. Inmates exchanged with one another in peaceful and nonviolent ways. Unused prison labor was harnessed into profitable enterprises and lowered prison budgets. Inmates gained real work experience. Once released, these skills changed criminals' opportunity costs to commit crime. Market-based relationships amongst inmates had good results on several specific margins, they also cost little to no effort in terms of planning.

Benson (1990) described a dense market microcosm at Maine State Prison that attracted attention from *Reason* magazine in 1982 (Shedd, 1982).

[The warden] lifted the limit on inmates' economic activity, and by 1978, the cap of 5,000 dollars and 5 novelty patterns that existed in 1976 was tripled. A "miniature economy" developed inside the prison... Some entrepreneurs were extremely successful... [One inmate] now out of prison running a novelty firm that employs former prisoners... It wasn't called that, but Maine State Prison had a rehabilitation program that was working (Benson, 1990, p.337).

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<sup>17</sup> Avio (2003) surveys the prison economics literature. On the margins of escape rates, physical health, counseling, recreation facilities, recidivism, and other proxies, Hatry et al. (1993) found that private prisons are at least as good and maybe better than public prisons. Lanza-Kaduce et al. (1999) supports the claim that private institutions reduce recidivism better than public ones. Despite incentive arrangements that would encourage private firms to cut quality and save on costs, contract specificity proves to be a better way to monitor quality standards amongst private firms compared to the public sector. As Tabarrok (2003) says, "you get what you contract for" (p.1).

German correctional institutions recently experimented in the production of high-end fashion apparel. The clothing line, Haefltling, German for “inmate,” uses prison labor to make clothing traditionally worn by inmates and sells it to European fashion markets. It was successful as a prison work program and a profitable fashion enterprise after its debut. “With 40 per cent of Tegel’s prisoners unemployed, the Internet project has come as a welcome boost to the jail... The cash from the sales is divided among the bankrupt city of Berlin, the prison and the inmates” (Paterson, 2003). *The Financial Times* listed Haefltling among successful prison initiatives that lowered tax burdens and provided inmates with labor opportunities (Rigby, 2005).

Louisiana’s Angola prison hosts a rodeo where inmates perform to paying audiences. Inmates sell handmade crafts to more than 5,000 attendees during full-day festivals.<sup>18</sup> The rodeo has been successful for more than 40 years, and has improved conditions and won awards for the once controversial prison. Finally, and most pertinent to the topic at hand, Canadian prisons opened state-sponsored tattoo parlors for inmates (Grinberg, 2007, and Weeks, 2005). Before the program opened, state research reported that “45 percent of Canadian inmates acquire a tattoo while in prison” (Krauss, 2005). Coupled with a needle sharing program and inmate autonomy, the tattoo initiative was meant to alleviate the spread of infections and associated high medical costs. The program only lasted a short while, however, which did not allow for quantifiable results.

Unlike the market programs at Maine State, Germany, or Angola, which allowed for free exchange and production of goods and services, the Canadian tattoo program was a costly subsidy operating at \$100,000 per year per prison. To expand the program to all Canadian prisons would have cost \$5.8 million plus \$2.6 million in start up costs. Political leaders ended the program, but continue alternative programs that attempt to combat the spread of HIV and hepatitis (CanWest, 2006, and CBC News, 2006). The Canadian program failed not because of any unfeasibility in allowing tattooing but because of its unnecessary costs and subsidies. In contrast, the only policy suggestion of this paper is that current prohibitions and enforcements be repealed to reverse the incentive arrangements that

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<sup>18</sup> The charter and history of the Angola Prison Rodeo are available at: <http://www.angolarodeo.com>.

encourage the spread of disease and violent conflicts. Allowing a functioning market in prison tattoos to emerge could mimic the observed market microcosms in other cases. Inmates would be inclined to enhance their skills, signal high quality services, invest in better equipment, compete with each other, and peacefully coexist.

Other market products would likely emerge as inmates sought ways to offer payment for tattoos. Using their time in jail to invest in human capital would produce tacit knowledge and job training that could be carried into legitimate society. With more skills in hand, released inmates would face a higher opportunity cost of committing crime.

Recidivism is a major concern of correctional policy. In recent years empirical research has exposed several counteracting forces. When the rewards of criminal behavior outweigh the costs of being captured and the rewards from other legitimate behavior, an individual commits crime (Becker, 1968). After a stay in prison, this cost-benefit calculation changes. An experienced criminal knows first hand the costs of crime, he has had the opportunity to learn new criminal skills from veteran criminals, and he has access to a network of criminals met inside. Avio (2003, p.12) summarizes the interaction of these effects.

On the outside, tattoo artists endure years of apprenticeship before obtaining certified positions. Inmates have a comparative advantage at fulfilling this requirement. Inmates can build their skills during sentences and compile long portfolios to demonstrate the quality of their work. Having a job on the outside is a major influence on whether an inmate will commit crime again.<sup>19</sup> The higher the rewards for legitimate work, the less likely the criminal is to be attracted by the rewards of crime.

Prison tattoos can be used to detect and prevent crime. Criminals are entrepreneurial and adaptive to law enforcement. No sooner do police investigators develop a new technique to catch criminals than do criminal actors respond through innovative evasions. One of the key areas that police focus on to catch criminals is communication. The extent that tattoos communicate amongst criminals is a fraction of the potential that recording and remembering criminal tattoos can yield for police investigation. Tattoos on inmates can be remembered

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<sup>19</sup> Wilson et al. (2001) wrote a comprehensive analysis of prison work programs and concluded "that participants in the work programs are less likely to recidivate than those who do not participate in a treatment program" (Bushway, 2003, p.2).

and recorded by correctional staff to build evidence because they are distinguishable marks that help witnesses describe their aggressors. Tattoos are permanent, unlike telephone conversations or the written word, and they can be used to trace a lineage of authority amongst secretive gangs.

In 2004 Ed Ricord, a Florida correctional officer, created a searchable database to track tattoos on Florida inmates. The database recorded 372,644 tattoos on current and former state prisoners along with height, hair color, eye color, and age. With a few keystrokes, investigators can narrow down a suspect from a witness's description. The database was successful in catching a murderer the same year it was produced, and Florida awarded Ricord a state cost-savers award for his self-motivation (Bennet, 2004, and Ulferts, 2004).

Repealing tattoo prohibitions in American prisons would lower the costs of inmates obtaining tattoos, and so more inmates would obtain more tattoos. This would make databases such as Ricord's easier to build and more useful when applied. Such databases and crime detection techniques would make crime more difficult to succeed and lower the expected rewards. One would expect crime rates to fall, if only marginally.

## V. Conclusions

The harmful effects of inmate tattooing in American jails are predominantly caused by prohibition rather than by practice. By repealing this prohibition, improvements in health conditions and decreased rates of violence should occur. More general benefits to allowing inmate tattooing include decreased crime rates and lower recidivism. In closing, the benefits of repealing tattoo prohibition clearly outweigh the alleged benefits of persisting with tattoo prohibition in American prisons.

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