The Needle is Mightier than the Sword: Markets instead of Prohibition for Prison Tattoos

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Abstract

Performing and receiving tattoos are typically forbidden in American prisons. What are the intentions of this prohibition? How well does the policy meet its intentions? How well 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 inline with the intentions of prison management than does the current prohibition policy.

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1 Introduction

Correctional institutions in the United States prohibit giving and receiving tattoos amongst inmates.\(^1\) According to most correctional code of conduct manuals, tattooing is formally a “minor violation” of inmate disciplinary codes.\(^2\) When inmates violate these rules they are subject to a wide variety of informal punishments; they loose recreation time, visitation privileges, the tattoo equipment is confiscated and destroyed, and these charges count against parole possibilities in the future. De facto punishment for tattooing can be more severe, specifically when the tattooing is considered gang related. If authorities judge an inmate to be a gang member, the inmate’s sentence can be indefinitely served in a solitary housing facility.\(^3\) In effect, this makes tattooing more strictly prohibited than the formal and explicit regulations would lead a casual observer to assume.

What are the intentions behind the prohibition and enforcement against tattooing? The mission statements and inmate codes of conduct for state correction agencies do not specifically state the intentions behind prohibiting tattoos.\(^4\) Instead, inmate code of conduct manuals de-
scribe the protocol of tattoo prohibition as explained above, correctional department mission statements list the broad intentions of prisons in general, and many correctional management agencies, health researchers, and crime experts point out the negative consequences of prison tattoos. Explicit prohibition and enforcement against tattooing is the default policy stemming from the established perspective that tattooing has harmful consequences. Given these various sources, one can infer certain intentions behind prohibition. Current policies and enforcements are meant to be in line with the general mission statements of correctional departments. For example, the *Texas Department of Criminal Justice* (2004) describes its mission, “to provide public safety, promote positive change in offender behavior, reintegrate offenders into society and assist victims of crime (ibid, p. 5).” How does the prohibition of prison tattooing attempt to fulfill these intentions? (1) Tattooing carries a risk of transmitting infectious diseases, therefore tattooing is both a health risk and financial burden to correctional institutions. Presumably prohibiting tattoos avoids those risks. (2) Prisons function because their operators and staffs maintain a strict level of control and authority over inmates. Tattoos are a communication tool used by inmates and gangs, therefore they threaten the control of prison management. Presumably tattoo prohibition counters gang power in prisons. (3) Prison tattooing is a vestige of criminal culture. Its permanent and distinctive quality inhibits released inmates from successfully rehabilitating and reentering traditional society. Presumably prohibiting tattoos assists rehabilitation efforts.

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5Braithwaite et al. (1999) describe the obvious health risks of popular body modifications but complain of a lack of research and regulatory attention. See also Winslow et al. (1998). Long (1994), Nishioka and Gyorkos (2001) have explained that tattooing can be associated with different blood born diseases. Nishioka et al. (2003) investigated subjects in Brazil and found “[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 (ibid., p. 441).”

6Bruton’s (2004) memoirs as a warden describe correctional careers as a constant strategic struggle for power between officers and inmates. Even the most menial privileges can have profound psychological implications for maintaining control and authority. The now infamous Stanford Prison Experiments demonstrated this (Milgram, 1969).

7Prison tattoos are distinguishable from professional tattoos. They are performed from makeshift tools that are less precise than their professional counterparts. Prison tattoo lines are thick and blotted, they fade and blur more than professional tattoos. Images used in prison gang tattoos are unique compared to traditional tattoo images. Symbols like spider webs, tear drops, prison bars, and gang emblems are all common.

8Demello (1993) writes, “tattoos and the process of inscription itself create the cultural body themselves,
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 explain that current prison tattoo policy actually works against these intentions. Therefore a repeal of tattoo prohibition in American prisons would help bring them closer to achieving their ends.

The remainder of this paper is organized as follows. First, the economics of prohibition is explained. A repeal of tattoo prohibition could help avoid rather than spread infectious diseases. The negative health effects of current prison tattooing are an unintended consequence of prohibition policies not inherent to the practice of tattooing. In section 3, tattoos are described as a signal device. The economics of signaling explains that tattoos communicate reputations amongst inmates. When signals are clear they help to avoid violent conflict. Less violence indirectly lowers the transmission of infectious diseases and preserves authority and peace inside prisons. Lastly, repealing tattoo prohibition can reduce recidivism rates and deter crime. Finally conclusions are presented.

2 Allowing inmate tattoos would lower the spread of infectious diseases.

Health conditions and medical costs are major concerns for managing prisons efficiently, effectively, and humanely. Tattooing is a process in which a vibrating or hand held needle injects ink under the top layer of skin to form permanent markings. Because tattooing involves puncturing the skin with needles, handling exposed blood, and treating scar tissue, thereby creating and maintaining specific social boundaries (ibid., 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 (ibid., p. 516).” See also Rosenblatt (1977).
it carries a risk of spreading infectious blood-born diseases (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 of these causes (AIDS, Septicemia, Influenza, Homicide, Viral Hepatitis, and Anemias) are relevant to the practice of tattooing because they can be transmitted through tattooing directly or influenced indirectly from the practice of tattooing.9 Summed together these causes made up 13.8 percent of the deaths inside American prisons between 2001 and 2004 (Mumola, 2007).

Inmate health conditions and their related costs are not completely captured in death rate statistics. The consequences of an ineffective policy can be felt before changes in death rates are observed. AIDS and HIV are the biggest tattoo related causes of death, but their frequency among inmates have fallen in recent years. As of 2004, over 23,000 inmates were infected with HIV and comprised almost 2 percent of the prison population mostly concentrated in the Northeast states (Maruschak, 2006). “Spending on medical care for State prisoners totaled 3.3 billion dollars, or 12 percent of operating expenditures in 2001 (Stephan, 2004).” Inmate deaths, quality of health care, and financial operating costs are influenced by the practice of tattooing in prisons.

Repealing tattoo prohibition in prisons can have a direct and indirect reduction on the spread of infectious diseases in American prisons. Directly, in a market for inmate tattoos, quality standards would rise as sellers competed with one another for customers. Indirectly, tattoos as a signaling device amongst inmates threaten retaliation against violent aggression. By raising the perceived costs of violence to challenging inmates, these signals reduce the amount of violence and rape. Less violence and rape lowers the spread of infectious diseases.

The low quality / high health risk conditions of prison tattoo practices are a result of the

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9It will be argued that homicides can be avoided through better signaling communicated through tattoos.
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 in society are commonly over stated. Any activity involving injections and scar tissue runs the risk of infection and the spread of disease, but it is important to understand the empirical context. The American Center 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, “by 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 of 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 (Genser, 2007).” Winslow et al. (1992), and Braithwaite et al. (1999) reported an increased popularity of tattooing, explained its potential health consequences, and argued for education, regulation, and licensing. Despite the logistic health risks of tattooing, no related epidemic has hit, and the popularity of tattooing continues to rise. The large amount of legitimate tattooing combined with low amounts of associated diseases concludes that the logistic health problems of tattooing have largely been solved 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 legitimate and commercial tattooing. A large portion of the research dedicated to investigating the health risks of tattooing is dominated by samples of prohibited tattooing. Charamonte et al. (1982), Martin et al. (1998), Pallas (1999), and Samuel et al. (2001) all investigate the correlations of blood born diseases in prisons with the prominence of tattooing in prisons in different national settings.

These studies conclude that prison tattooing is more dangerous than the low risks of commercial tattooing for two reasons. First, the materials used in prison tattoo processes are more likely to cause infection. Makeshift tools are more accessible, and easier to hide or
camouflage as ordinary items. Second, the available pool of prisoners is more prone to infectious diseases by nature of their close proximity, drug habits, sexual practices, and rates of violence. Tattooing gets included as a cause of infectious disease in prisons because of its injection processes, 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 serum markers with respect to age and sex-matched general population control groups...Illicit drug abuse was found to be a relevant risk factor for HBV infection among prisoners under 35 years of age, but not in the older group, whereas no correlation emerged between the presence of HBV serum markers and tattoos or admitted homosexuality (ibid., p. 53).

Martin et al. (1998) observed 46.9 percent of inmates in Spain were infected with HIV, “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 (ibid., p. 330).” Samuel et al. (2001) argue for policy to encourage “sterile tattooing” in New Mexico prisons given the coincidence between tattooing and drug use.

It appears that compared to the costs of legitimate tattoos (apparently low) the costs of prison tattoos are higher, but still relatively low compared to other behaviors in prison especially drug use. To the extent that tattooing effects the spread of disease in prisons, prohibition policy exaggerates rather than alleviates the problem. Prohibition and enforcement against tattooing means that inmates face higher costs when performing and receiving tattoos. So long as the benefits of tattoos outweigh the costs, inmates are willing to perform and receive tattoos even though the practice is officially illegal. Tattoo prohibition, like all prohibition policies, is a supply side control.

Inmates gain a high utility from having tattoos as is evidenced by their higher popularity

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10 See also Pallas (1999)
11 For a general discussion of supply side controls see Thornton (1991, p. 73 - 77).
among criminals compared to free citizens (Scutt and Gotch, 1974). Often times 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 get tattoos. They risk being punished; they accept poor quality images, and undergo unhealthy procedures in order to receive tattoos in prison. Expending high costs on apparently luxurious tattoos seems irrational until a full accounting of tattoo benefits is understood. Trying to understand religious orthodoxy, Iannaccone (1992 and 1994) has argued that apparently high sacrifices are valued against the high rewards obtained by membership in the religious community and the assumed afterlife. Prison gangs and individual inmates perceive similarly high community rewards from having tattoos.

Warden James H. Bruton of Oak Park Heights, Minnesota Correctional Facility reports. “Tattoo artists usually learn their trade outside. Inside, they are highly sought after by inmate customers. Tattoos are hot items in prison. They can be status symbols or simply inmate art (Bruton, 2004, p. 71).” High tattoo demand is responded to by inmate artists who offer services for cash and trade. Prison is an environment of extreme resource scarcity, yet the luxury of tattoos are still performed and paid for. A tattoo artist ensures himself a level of material profit and protection from violent aggression. Injuring or killing a talented tattooist or any productive person in prison is costly because it cuts off the entire market from the fruits of his labor. Inmates are eager to protect productive resources.

High demand coupled with supply side prohibitions induces changes in the production process of prison tattooing. Inmates are willing to expend costs and forgo quality to avoid being detected or caught in the act of tattooing. Thornton (1991) describes the predictable magnitude: “[t]he amount of resources devoted to the enforcement of prohibition will (with a given penalty structure) determine the degree of risk placed on market participants and therefore the effects prohibition will have on production and consumption...The consumers lose utility because of the higher price and the substitution of goods of lower value (ibid.,
Prohibition has induced consumers to substitute for low quality goods and producers more dangerous production processes in several historical cases. The phrase “back-alley abortions” refers to the unsanitary and dangerous techniques used by black-market doctors who performed abortions despite criminal consequences (Joffe, 1991 and Kissling, 1993). During the 1920’s America prohibited alcohol; consumption of beer and wine fell, but the consumption of more pungent, and easier to smuggle hard spirits such as gin and moonshine increased (Thornton, 1991, pp. 100 - 105; Warburton, 1932; and Fisher, 1927, p. 29). Similar arguments apply in today’s black market for drugs. More dangerous drugs like crack and heroin have arisen after the launch of the war on drugs. While open markets could provide for quality competition over non-addictiveness, buyers and sellers in the prohibited market value portability and stealth.

12 The same effects of prohibition can be seen in the market for prison tattoos. Rather than using traditional tattooing equipment and sterilization procedures, inmates improvise makeshift tools out of sharpened wire, sewing needles, consumer electronics, and do not sterilize their equipment. These techniques are specialized to help the buyers and sellers of prison tattoos avoid punishment but they come at the cost of lower quality. These procedural changes are cost-saving strategies induced by the higher costs of prohibition.

Bruton (2004) reports again:

The inside [of prison] is filled with unusual activity, from running inmate ‘stores’ to clandestine tattoo ‘parlors’... These entrepreneurs 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

12 Thornton (1991, pp. 89 - 110 argues this point explicitly and surveys: Rottenberg’s (1968) original work on heroin; Crawford et al. (1988), Reuter, Crawford, and Cave (1988); and Ostrowski (1989) all make more contemporary arguments concerning the potency of current black market drug trades. See Miron and Zwiebel (1995) for the economic case against drug prohibition.
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 adaptor plugged into a socket. When using an audio component, the volume control dictates the speed of the needle’s vibration. Tattoo artists sometimes obtain supplies by stealing permanent ink from hobby craft class or the education area. Whatever it takes.

Guards generally know which inmates are the tattooers, making these artists’ work tedious and time consuming as they require equally creative methods to keep staff from interfering. A lookout is essential to operating a parlor. An inmate skilled as an observer and detractor watches for any corrections officers. A signal - whether it’s noise or movement - alerts the cell serving as the parlor to stop the artwork and hide all tools.

To keep their businesses alive, tattoo artists must also be artists at ingeniously hiding their equipment from the watchful eyes of suspecting corrections officers. They break down their guns back into innocent-looking pens and audio players or stash the components inside shampoo bottles, stuff them deep within bars of soap or items of food, or temporarily hide them in their clothing (ibid., pp. 64 and 72).

Primitive equipment and stealth techniques are the tattooing trends in the prisons of several countries. Kaminski’s (2004) report of Polish inmates during the 1980s describes the prohibition of tattooing (ibid., pp. 28 and 30) and the responsive ingenuity of inmates.

Tattoos are rarely drawn freehand on a body. A picture or a calligraphic inscription is first sketched with a special pencil, imprinted on a moist cloth, and imprinted again on the skin. 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. The thread binding the needles together also holds pigment. The motif is generated by pricking the skin with the needle set and inserts the pigment under the skin (ibid., p. 118).

The higher costs born by inmates as a result of tattoo prohibition represent wealth, energy, and resources that inmates would be willing and capable of investing in higher quality tattooing at current quantity levels if prohibition policies were repealed. The repeal of tattoo prohibition would reverse incentive structures and encourage quality as a means of product
differentiation amongst competing inmate tattoo artists. Increases in health quality competition amongst tattoo providers would reduce the spread of infectious diseases to the degree that it is currently caused by tattooing and more.

3 Allowing tattoos would reduce violence in prison.

With many black-market behaviors such as drug dealing, loan sharking, and prostitution fraud persists. Prostitutes rob their clients, drug-dealers dilute their products with talcum powder, and loan sharks change the terms of their agreements at the last minute – all are the result of ineffective contracting. Without a formal administration of justice, actors in illicit trades have no recourse against fraudulent traders. The markets for prison tattoos are in a similar but not identical predicament.

Reputation, trust, and reliability are foundational to efficient markets. Without them, individuals are plagued by uncertainty and averse to potential losses so much as to not engage in trade. The output of the economy without market-preserving trust is stagnant. When formal enforcement mechanisms are absent, economists have witnessed reputational mechanisms emerge as coping mechanisms to overcome risk and uncertainty. In black markets with one-time trades, reputations may never get the opportunity of developing. Such is the case in prostitution, drug dealing, and loan sharking; violence is often the sole enforcement technique.

A small but direct effect on violence from tattoo prohibition comes from inmates engaged in the tattoo trade trying to enforce their contracts. If an inmate wants to buy or sell tattoo services, he also wants assurance over the exchange. Though the number of tattoo

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Stringham (2003) has explained how individuals without a central-state enforcement agency were capable of relying upon strong reputations to choose sound contracts and safe investments. Leeson (2007) has provided the inverse discussion. He describes the process by which outside agents are allowed entrance into trading groups. Both are surveyed in Boettke (2005).
transactions that go foul is likely low, the potential for violent contract enforcement is more present than it would be without prohibition.\textsuperscript{14}

Violent enforcement for prison tattooing is likely rare because prison is a closed environment. By the nature of their confinement, inmates repeatedly deal with one another and build relationships of trust, reciprocity, and quality reputations. 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 [inmate] professionals claim an ability to tattoo any living or inanimate pattern. One of the masters challenged by Student\textsuperscript{15} offered him for free a natural size portrait of Jacek Kuron, a famously bald Solidarity activist. After careful consideration, the offer was politely declined (ibid., pp. 118 and 119).

If emerged on margins of quality and durability in Kaminski’s environment of makeshift tools and overcrowded Polish prisons, surely other margins of competitive differentiation could develop in an open and legitimate market.

\textsuperscript{14}Levitt and Venkatesh (2000) have pointed out the strong correlation between new illicit substance trades on the one hand, and violent property enforcement over the trade channel territories on the other hand. Thornton (1991) similarly notes:

Violence is used in black markets and criminal organizations to enforce contracts, maintain market share, and defend sales territory. The crime and violence that occurred during the late 1920s and early 1930s was a major reason for the repeal of Prohibition (Kyvig, 1979, pp. 123 and 167). The nondrug criminal activity of heroin addicts has been associated with the economic effects of prohibition laws and is viewed by Erickson (1969) and others as a major cost of heroin prohibition.

\textsuperscript{15}The wording \textit{student} refers to Kaminski’s methodology as an observing participant. He explains:

The main broadly defined source of data was, naturally, my own experience as an \textit{observing participant} (OP). I define this particular research role, in contrast to \textit{participant observation}, with two conditions: (a) OP enters a community through a similar social process as its other members and is subject to similar rules; (b) OP undertakes field research \textit{as if} he or she was a researcher. An ideal OP lives through his/her social role, impassively registers randomly generated personal experience, and applies available data gathering techniques (Kaminski, 2004, p. 7).
Tattoos are used as signaling devices inside and outside of prison. They are used to communicate amongst friends and enemies. A tattooed person can signal to people outside of his community: rejection, rebellion, autonomy, or individuality. See Kang and Jones (2007, p. 45), Demello (1993), Post (1968), and Rosenblatt (1977). Amongst individuals within the same cultural community, tattoos can signal membership, solidarity, and commitment. Similar to their signaling function outside of prison, inmate tattoos send signals amidst friends and enemies simultaneously. A recognizable tattoo on an inmate can communicate to his friends and allies a signal of dedication, commitment, and reputation while warning rivals of his affiliations, level of authority, and criminal history. Demello (1993) describes his observed experience in prison. Gang membership was celebrated by new members receiving tattoos.

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. These tattoos are extremely important in prison, as they serve as a reminder of the community to which the displaced convict belongs. They also identify him as a member of a certain group which has important social ramifications when he encounters members of rival groups. Likewise, having an ethnic affiliation (‘White Power’, etc.) tattooed on one’s body is another means of identifying with a particular community as well as differentiating oneself from other groups in prison (ibid., p. 11).

To an opposing gang or individual, 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 the tattooed inmate, 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 prison-economy, or a liability that puts the social order in jeopardy. By displaying tattoos that signify gang membership,
criminal careers, or historic credentials of being incarcerated, inmates communicate what their behavior will be in future strategic situations. Small amounts of signaling have significant effects upon the outcomes of several strategic game scenarios.\textsuperscript{16} Allowing inmates to signal through tattooing can lead to equilibrium results of peace and stability rather than continual 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 quickly assigned them positions within the cell’s social structure. Bottoms (1999) has given a thorough description of complex social hierarchies inside prisons that runs in conflict to one’s first impressions of criminals as irrationally violent. More easily read and interpreted signals make the process of social order in prisons work faster, more reliably, and less prone to violence.

Tattoos achieve 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.

Jailhouse iconography is also popular among convicts, and includes [prison] bars, the scales of justice, barbed wire, and other themes which echo the prisoner’s own experiences behind bars. Perhaps the most powerful prison tattoo is the tear, tattooed just below the outside corner of the eye. The tear immediately

\textsuperscript{16}Rodrik (1989) describes how the private sector must be convinced that policy makers will actually follow through on their promises. Gibbons (1992, pp. 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 influence which bill gets through Congress. In addition to analyzing the effect of cheap talk in a fixed environment, one also can ask how to design environments to take advantage of cheap talk. In this vein, Austen-Smith (1990) shows that in some settings debate among self-interested legislators improves the social value of the eventual legislation, and Farrell and Gibbons (1991) show that in some settings unionization improves social welfare because it facilitates communication from the work force to management.
identifies an individual as a convict or ex-convict (each tear signifies a prison term served, or a man may wear a tear for each person he killed), and thus serves as a kind of self-inflicted brand, not unlike the marks which were forcibly tattooed on prisoners at one time in Japan, England, and Germany (Demello, 1993, p. 11).

The more intricate the tattoo process is, the higher the level of details and sophisticated designs that can be created. Prohibition forces the tattoo process to be crude and haphazard rather than precise. Because prison tattoos use guitar strings and razor blades instead of hypodermic needles they have thicker lines and lower quality inks that blur and fade over time. 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 additional information, threats, reputations, and general signals that could be communicated through tattoos that are currently being suppressed. Because of their malleable character, tattoos could potentially signal not only membership within a gang, but more specific ranks, histories, and alliances also.

The extent that violence would decline is proportional to the degree that current signals are being disrupted and suppressed. Evidence suggests that violence rises and falls in tandem with the existence of prohibition policies. Thornton (1991, pp. 122 - 123) points out Fisher (1928) who “notes that crime declined by 37.7 percent during” prohibition, but this was due to a decline in less serious crime, where as “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, pp. 123) continues to survey evidence of violence stemming from prohibitions:

Warburton (1932) provides evidence which indicates that homicide rates (in large cities) increased significantly from 1920 to 1933; this period the third wave of state prohibitions (1910 - 19), the Harrison Narcotics Act (1914), wartime restrictions on alcohol (1981 - 19), and Prohibition (1920 - 33). The greater number of federal prisoners provides further evidence of more serious crime during Prohibition. The
number of prisoners in federal prisons, reformatories, and camps grew from 3,889 in 1920 to 13,698 in 1932 (Wooddy, 1934, pp. 90 - 99).

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 in hand with prohibition policies.

In prison, assets are power. With high demands for drugs, violent enforcement, and sexual favors, the inmates who control these markets are the most powerful and influential. When new channels of production, distribution, and services enter the prison, these positions of authority are challenged. Tattooing is a knowledge and human capital intensive trade. Market dominance and profits is earned through investment and effort rather than monopolistic force. Larger proportions of the internal prison market devoted to tattoos instead of naturally monopolistic goods and services reduces the power and authority of those traditional markets. A market based on skill and productivity rather than violence and dependency would reduce violence and retaliation amongst inmates.

With less violence in prisons, infectious diseases are indirectly reduced because fighting and rape are additional ways that diseases are spread. Less violence in prisons means a more manageable and controllable correctional environment for officers and prison wardens. More easily controlled prison conditions means a lower general operating cost for correctional facilities and possibly a freeing up of resources to better provide the other aspects of law enforcement (police, courts, judges, etc.). Efficiency within and among the services of criminal justice results in a safer civil society.

An immediate concern arises; will not inmates steal the tattooing equipment and use them as weapons against inmates and officers? Allowing inmate tattoos aligns the incentives of tattoo artists and inmate tattoo customers to protect tattoo equipment against theft. Inmate tattoo artists make profits off of their equipment and are inclined to protect it to a
proportional amount. Secondly, evidence suggests that there are currently makeshift tattoo guns in prisons, yet they do not get used as weapons, partly because they are protected and concealed by their owners because of their high value in the tattoo trade, also because the market for weapons in prison is as similarly diverse as the black market for tattoos. Inmates use a variety of makeshift weaponry to accomplish a wide range of ends. Some weapons are used to incapacitate their victims, others are specialized to ensure death quickly, slowly, or painfully. Tattoo needles are expensive resources to use as poor weapons compared to the current alternatives.

4 Allowing markets could assist rehabilitation, lower recidivism, and deter crime.

The first punishment theories that guided penal practices were utilitarian inspired forms of rehabilitation. It was believed that enduring pain and consequences would influence the preferences and habits of criminals and change them into better people in the future (Bentham, 1830). By the 1970s rehabilitation techniques changed to psychological therapy, work training programs, and education. But amidst these subsidized and costly programs, citizens were confronted with a rising trend in violent crime and growing rates of recidivism (Ryberg, 2004, p. 3; and Martinson, 1974).

In the mid 1970s as the law and economics field modeled criminal behavior as rational and responsive to incentives (Becker, 1968), punishment theory changed to retribution techniques and justifications. Prison sentences were “deserved” punishments to be served by criminals and the role of prisons was confinement at low costs (Hart, 1969). Rehabilitation was used so far as it could lower recidivism. But theorists, correctional managers, and policy planners today are still unsure what techniques really change criminal behaviors at low financial costs.
without older forms of physical punishments.

Given the wide array of criminalized behaviors, discovering effective rehabilitation programs has become more challenging. The successful rehabilitation of a drug addict is significantly different from rehabilitating a cybercriminal. Current punishment theory and practice, relies upon meticulously engineered responses to crime. This strategy is inefficient for multiple reasons, but most simply because the costs of planning are high. Legislators, judges, police, and correctional managers must continually guide their bureaucracies to keep up with adaptive and entrepreneurial criminals.

On the other hand, there are several cases where creative wardens took laissez-faire approaches to inmates participating in market behaviors. These cases have been successful on three margins. Inmates employed and contracted with one another in peaceful and nonviolent ways instead of fighting with one another. Unused prison labor was harnessed into profitable enterprises and lowered prison operating budgets. Finally, inmates gained real work experience from making goods, trading resources, hiring one another, and forming contracts. Once released, these skills changed their opportunity costs to commit crime. Market-based relationships amongst inmates not only had good results on several specific margins, they also costed little to no effort in terms of planning and designing of inmate rehabilitation. Markets were robust mechanisms to continually align the diverse incentives of inmates to exchange peacefully with one another and society in general.

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

Inmates were given access to the prison’s shop equipment to produce novelties. Other prisons have done the same thing, but Maine’s program differed from others in some significant ways. First, there is a strong market for novelties because the prison is located on a major tourist route. Second, inmates were allowed to hire one another, thus allowing for specialization and the division of labor. The
prisoners could not use dollars for these transactions so the currency used was
canteen coupons, which could be spent in the prison’s canteen or banked in the
prison’s business office.

After Warden Richard Oliver was appointed in 1976, prisoners were allowed to
“patent” their novelty designs so they had incentives to innovate and expand
their production. More significantly, Oliver 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, with
two-thirds of the inmates participating as employers, employees, or both. Some
entrepreneurs were extremely successful. One took over the prison’s canteen
and turned it into a profit-making operation. This prisoner also had 30 to 50
employees in novelty production, and had diversified into other areas (e.g., he
owned and rented about 100 TV sets to inmates). One prison administrator
considered him to be the “most brilliant businessman I’ve ever seen.” He is now
out of prison running a novelty firm that employs former prisoners. As Shedd
concluded, “It wasn’t called that, but Maine State Prison had a rehabilitation
program that was working (Benson, 1990, p. 337).”

German correctional institutions recently experimented in the production of high-end fashion
apparel. The clothing line, Haeftling, German for “inmate,” uses prison labor to make shirts,
pants, shoes, and clothing accessories traditionally worn by inmates. Haeftling brought
these styles to European fashion markets. It was successful as a prison reform program and
a profitable fashion enterprise immediately 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
prisoners get an allowance of EUR 26 a month, but ones working on the clothing line can
earn up to EUR 12.50 a day. The cash from the sales is divided among the bankrupt city of
Berlin, the prison and the inmates (Paterson, 2003).”

Bohle [the marketing head] and his team applied market psychology to market
the Haeftling range in such a way as to snare the fashionistas: “It’s about unusual
labels; it’s about telling a story, delivering an authentic message and conveying
credibility.” By being up front about the origins of the clothing, Bohle believes
it will only be a matter of time before the Haeftling (prisoner) line takes on a
cult following. Indeed, the initial reception indicates that his instincts are spot
on (Amies, 2003).
The Financial Times listed Haeftling among many successful prison labor initiatives that lowered the tax burden of prison operations, and provided inmates with labor opportunities (Rigby, 2005).

Louisiana’s Angola prison hosts an annual rodeo where inmates ride and compete with one another to paying audiences. Inmates sell handmade crafts and souvenirs to over 5,000 attendees during full-day craft festivals. The rodeo has grown and been successful for over 40 years and has improved conditions and won awards for the once controversial Angola prison.

Finally, and most pertinent to the topic at hand, Canadian prisons have opened state-sponsored tattoo parlors for inmates (Grinberg 2007 and Weeks 2005). Before the program opened, state-research reported “45 percent of Canadian inmates acquire a tattoo while in prison (Krauss, 2005).” Coupled with a needle sharing program and high levels of inmate autonomy over their living space, the tattoo initiative was meant to alleviate the spread of infectious diseases and the high costs of treating afflicted inmates. The program only lasted a short while which did not allow for quantifiable results to be gathered.

Unlike the market programs at Maine State, Germany, or Angola, that allowed for the free exchange and production of goods and services by inmates, the Canadian tattoo program was a costly subsidy operating at 100,000 dollars a year per prison. To expand the program to all Canadian prisons would have cost 5.8 million dollars plus 2.6 million in start up. Political leaders have since ended the program, but continued 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 an unfeasibility to allow inmates to tattoo. It failed because of its unnecessary costs and subsidies. In contrast, the only policy suggestion

\[\text{For more information on the Angola Prison Rodeo its charter and history can be read on its homepage at: http://www.angolarodeo.com.}\]
of this paper is that the current prohibition and enforcement against tattooing in prisons be repealed to reverse the incentive arrangements that encourage the spread of disease and violent interactions of inmates. Allowing a functioning market in prison tattoos to emerge could mimic the observed market microcosms in other prison cases. Inmates would be inclined to enhance their skills of tattooing, signal high quality services, invest in better equipment, compete with each other for services, and peacefully coexist with one another.

Other market products would likely emerge as inmates sought ways to offer payment for tattoos. Using their time in jail to invest in their 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 influences that prison policy has on criminal behavior. 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) surveys these effects:

The rehabilitation effect acknowledges that a convicted offender’s proclivity for crime may decrease as a result of the incarceration experience, as well as by virtue of the fact that age has an independent impact on criminality. The school-for-crime syndrome, criminal stigmatization, and the natural depreciation of human capital while offenders are incarcerated – all pull in the opposite direction. Thus, the rehabilitation effect may more properly be labeled a “training” effect, which from a social standpoint may be either positive or negative. Insofar as potential offenders forecast this effect, the actual discounted expected costs of engaging in current crime may increase or decrease (ibid., p. 12).

On the outside, tattoo artists participate in years of apprenticeship before obtaining a cer-
tified position as a tattoo artist. Inmates have a unique comparative advantage at fulfilling this requirement. Once they learn the trade, they have access to a large inmate demand for their services. Tattoo artists build their skills and abilities over lifetimes of practice. They compile long and varied portfolios to demonstrate the quality of their work. With a high tattoo demand inside prison, inmate artists can build reputations that carry over to the legitimate tattoo trade.

Having a legitimate trade on the outside is a major influence on whether that inmate will commit crime again. The higher the potential rewards are for the legitimate occupation, the less likely it becomes for the criminal to be attracted by the rewards of criminal behavior. Tattooing uniquely fits the incentive structure of criminals to build a base of human capital within prison that can easily be carried with them once outside.

Prison tattoos can be used to detect and prevent crime. Criminals are entrepreneurial and adaptive to law enforcement efforts. No sooner do police investigators develop a new technique to catch criminals than do criminal actors respond through innovative evasions of police efforts. One of the key areas that police focus on to catch criminals is communication, such as wiretapping. The extent that tattoos are used as a communication device 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 and recorded by correctional staff to build evidence because they are memorable and distinguishable marks that help witnesses and victims describe their aggressors. Tattoos are permanent, unlike

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18Bushway (2003) writes,

Wilson et al. (2001) recently completed an excellent comprehensive meta-analysis of 53 experimental or quasi-experimental treatment-control comparisons based on 33 evaluations of prison education, vocation and work programs. This list includes 19 studies conducted during the 1990’s and includes all of the evaluations included in a broader review of labor market programs (Bushway and Reuter, 2002). Based on their meta-analysis, Wilson and colleagues find 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).

Tabarrok’s (2003) recent edited volume has compiled several major works comparing the efficiencies of public prison facilities with privately contracted alternatives. The text provides arguments and evidence supporting market-based approaches to prison operation. Lower recidivism is one such margin of quality.
telephone conversations, or the written word. 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 keep track of 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 individual suspects from a witnesses description of their tattoos. The database was successful in tracking a murder suspect the same year it was produced and Ricord was awarded a state cost-savers award by the state of Florida for his self-motivation (Bennet, 2004 and Ulferts, 2004).

Repealing tattoo prohibitions in American prisons would lower the costs to inmates getting tattoos therefore more inmates would obtain more tattoos. This would make databases such as officer Ricord’s easier to build and more useful when applied. Such databases and crime detection techniques would make criminal action more difficult to succeed and lower the expected rewards of criminal behavior in the minds of criminals. One would expect crime rates to fall, if only marginally.

5 Conclusions

The harmful effects of inmate tattooing in American jails are predominantly caused by the prohibition rather than the practice in general. By repealing this prohibition there stand to be improvements in health conditions and decreased rates of violence in prisons. There are more general benefits to allowing inmate tattooing including, decreased crime rates, and lower recidivism. In closing, it is clear that the benefits of repealing tattoo prohibition outweigh the alleged benefits of persisting with tattoo prohibition in American prisons.
References


