In this essay, I explore two developments in the criminal process separated by 300 years. The first is transportation of convicted felons from England and Ireland to North America in the 17th and 18th centuries. The second is electronic monitoring of offenders and those released prior to trial, which began in the United States in the 1970s and expanded in the 1980s and 1990s, but whose potential has yet to be realized. It may seem strange to connect such disparate practices, which occurred more than three centuries apart, but I hope to convince you that there are some parallels in their nature and function that link them. Together, I suggest that they reveal valuable insights about sources of innovation in the criminal justice systems in England and the United States, two “weak states” that stand in sharp contrast to developments in their continental counterparts (Damaska, 1981). In fact, I suspect that those parallels suggest that the innovations of two centuries apart may be connected and that we can learn from the progress we have made in the intervening period.

Both of these developments were innovative in their own time, but they were also significant in the history of the justice system. The first was a radical innovation that redirected the justice system from the civil to the criminal realm. It was a shift from a system that was primarily concerned with the welfare of the community to one that was primarily concerned with the punishment of the individual. The second was a revolution in the way that justice was administered, from a system that relied on the use of force to one that relied on the use of technology. Both of these innovations were significant in their own time, and both were significant in the history of the justice system.

The first innovation was the transportation of convicts from England and Ireland to North America. This practice began in the early 17th century and continued until the American Revolution. The convicts were sent to North America as a form of punishment, and they were then used to build the infrastructure of the new colonies. The second innovation was the use of electronic monitoring. This technology was developed in the United States in the 1970s and expanded in the 1980s and 1990s. It was a revolution in the way that justice was administered, from a system that relied on the use of force to one that relied on the use of technology. Both of these innovations were significant in their own time, and both were significant in the history of the justice system.

Taken together, along with important developments in between that I will touch on toward the end of this essay, these two innovations constitute significant, but neglected, chapters in the development of the modern Anglo-American criminal justice system. They reveal the role that entrepreneurs in commercial enterprises have played in introducing innovations into the criminal process.

To explore this thesis, this essay is divided into three parts. The first part recounts the practice of sending convicts to North America beginning in the early 17th century and continuing until the practice ended abruptly with the American Revolution. The second part deals with the contemporary development of electronic monitoring, from its
experimental phases in the 1960s and 1970s, to its embrace in the 1980s and its expansion since then. My conclusion identifies still other innovations that may follow a similar pattern of development and makes the case that the modern Anglo-American criminal justice system has been shaped in considerable part by private contractors. It concludes with a discussion about what we miss when we characterize these developments as privately administered “alternatives” rather than significant innovations and expansions of social control.

Transportation

The Origins and Development of Transportation

Although the history of Australian transportation is well-known (Hughes, 1986; Neal, 1991), the history of transportation to North America remains obscure (exceptions are Oldham, 1933; Smith, 1947; 1965; Eskirch, 1987; Beattie, 1986). Yet, in respect to the history of criminal justice, the earlier form of transportation to North America is more important because it was the world’s first effective and efficient form of mass punishment short of execution. Until then, severe punishments consisted of either executions (which, in fact, were fairly rare), some form of corporal punishment, or a short period of confinement. In 18th century England, it is estimated that only one in 10 people sentenced to death were in fact hanged—the others escaped death by any one of several well-used alternatives, or other forms of imprisonment or mutilation. Once transportation was embraced, England had, for the first time, a regular, reliable, and socially acceptable form of substantial punishment. It quickly became an indispensable intermediate alternative between capital punishment, and short stays in the workhouse or stockade or whippings. As such, it transformed the way punishment was understood in English criminal justice, and, as I will show, dramatically expanded the state’s capacity to impose substantial sanctions. Below, I explore how it was developed and how it operated, and then turn to an examination of whom it affected.

Banishment is an ancient response to crime. Anthropologists have noted its ubiquity in archaic societies (Hoebel, 1956). The Bible describes banishment and cities of refuge where wrong-doers could flee and live safely if they did not return home. Roman law provided for exile of the upper class. In early modern Europe, banishment (or its functional equivalents) took on other, somewhat less lethal, forms. France and Italy commissioned galleys to ply the Mediterranean and filled them with convicts sentenced to a life of rowing, which often meant a short life. In the 16th century, Spaniards sent some criminals to the frontiers and North Africa to construct and maintain highways and presidios. France had its Devil's Island in the 19th century. Russia, and later the Soviet Union, had Siberia. Elsewhere in Europe, criminals were put to work in coal and iron mines. In many ways, banishment blended into forced labor—convicts were employed to work in the mines, to build highways, and to work on other public projects (see Rusche & Kirchheimer, 1939/1968; Sellin, 1976; Melossi & Pavarini, 1981).

But English transportation was distinct. Apart from Russia’s longstanding reliance on banishment to Siberia, these other forms of punishment were almost always ad hoc and remained somewhat idiosyncratic. In contrast, as British transportation emerged, it constituted a rationalized and deeply institutionalized national policy, despite the fact that it was largely organized and operated by private merchants. (For some standard histories of punishments before the prison, see Rusche & Kirchheimer, 1939/1968; Melossi & Pavarini, 1981; Sellin, 1976; Pike, 1983; Spierenburg, 1984.)

Transportation developed inauspiciously in the early 1600s, but by century’s end, was the major form of severe sanction, and it remained so for close to 150 years. Its origins are obscured in the distant past. Queen Elizabeth’s government imported the idea of galley service into England from Italy and France, but North Sea waters were too rough, and the effort was abandoned. Perhaps the first proposal to send convicted felons to the colonies was in 1584, when the Queen’s advisor, Richard Hakluyt, recommended that criminals who “for trifles may otherwise be devoured by the gallows’ should be employed as a labor source for overseas settlement” (Meyer, 2011, p. 4). Four years later in 1598, Parliament adopted “An Act for Punishment of Rogues, Vagabonds and Surly Beggars” that authorized dangerous offenders either to be sent to houses of correction or to be “banished out of this Realm and all other Dominions thereof, and . . . [to] be conveyed . . . beyond the Seas” (Meyer, 2011, p. 5). In 1615, Thomas Smith, the leader of the hapless land company, The Virginia Settlement, petitioned the Privy Council to issue a warrant granting clemency to 17 offenders who had been sentenced to death and instead send them to the settlement where they could be put to work. Three years later, in 1618, 100 homeless children were rounded up on London’s streets and sent to the settlement (Meyer, 2011).

It was from this unpromising beginning that the idea of transporting criminals to the colonies took root. Even before transportation emerged as an option, judges, reluctant to hang offenders for “trifles,” had transformed benefit of clergy from a
fact-based form of pleading into a legal fiction that was tantamount to a suspended sentence for first time offenders (Beattie, 1986). They also supported unconditional pardons in unprecedented numbers and often imposed fines and short terms in the workhouse, as well as whippings and time in the pillories, in lieu of executions. Similarly, juries were loath to convict for certain types of offenses, which, while technically felonies and thus punishable by death, were nevertheless not perceived as major offenses. Indeed, in a system of private prosecution, victims had a double set of reasons not to bring a prosecution. They had to bear the cost of bringing a case, even though if they prevailed, they gained nothing tangible. And often, like others, they felt that the price of conviction was too high and thus refused to bring charges. In addition, inflation increased the value of goods, thus transforming many misdemeanors into felonies. While few thought that crimes should go unpunished, the absence of a system of graded and proportionate punishments deterred many people from bringing prosecutions and many juries from convicting.

The standard account of English criminal justice history is that transportation emerged to mitigate such problems, that transporting convicts abroad was an alternative to the harshness of a criminal justice system that insisted on capital punishment for all felony convictions. As we will see shortly, this was not the case. Rather, the presence of other intermediate policies undermines this projected chain of causality.

But transportation of convicts to the American colonies did emerge in the early 17th century. It began as an occasional and ad hoc arrangement, and by mid-century, a few hundred non-violent felons had been pardoned upon condition that they go abroad. Learning of the need for workers in the colonies, offenders and their families would scrape together some money, find a shipper willing to take the offender, and petition the trial judge who had just imposed the death sentence to in turn petition the Crown for a pardon on condition that the felon “abjure the realm” at his own expense. As these numbers grew, so too did the attractiveness of the alternative, both to shippers who sensed a ripening new market and to public officials who faced a continuing crisis of law and order. By the 1660s, transportation had become a recognized and acceptable form of punishment; a working understanding of who might be transported had developed among judges, and judicial recommendations for pardon and transportation were routinely granted by the crown. Colonial planters desperate for cheap labor clamored for convicts. By the 1660s, a rudimentary market in convicts had been established (Grubb, 2000), and by the 1680s, transportation had become a well-recognized form of punishment for serious offenses (Beattie, 1986; Eskirch, 1990; Smith, 1947).

However, throughout this period, obtaining and arranging transportation remained an informal and cumbersome affair. The offender or his family had to make a successful request to the judge, the judge had to accede, the Crown had to grant the pardon, and the offender had to pay the cost of transportation. Even when all these steps were taken successfully, things could go wrong. In the early 1700s, William Thompson, a prominent lawyer active in The Old Bailey, and a group of judges and others sought to simplify this process, which, by then, had become routine but remained cumbersome. They pressed Parliament to grant judges authority to bypass the petition and pardon process and sentence certain types of offenders directly to transportation. In 1718, the Parliament obliged. The Transportation Act of 1718 allowed judges to sentence offenders directly to transportation and slightly expanded the scope of transportation from its previous informally defined limits. With this Act, the government also became deeply involved in the process of overseeing transportation for the hundreds of people who would be transported to the North American colonies every year. This included specifying who was eligible, setting out conditions of confinement pending transportation, outlining procedures for transferring convicts from the county gaol to the nearest port, and establishing the constraints under which offenders were to be held until they were safely handed over to their masters in the New World. After adoption, transportation took off (see Figure 1).

Like most innovations, convict transportation and labor was not brand new. It drew on the experiences of related enterprises, and once institutionalized under the 1718 Act, it changed substantially. Familiar with the lucrative practice of the slave trade but without resources to enter into it, less well-capitalized merchants were attracted to the emerging trade in indentured servants (Grubb, 2001). These were free English people who, hoping for a better life for themselves, agreed to serve a period of bondage in exchange for free transportation to the colonies. A great many of them arrived in the colonies during the 18th century, and they are often confused with transported convicts. This is not surprising, as the process of transporting and disposing of them was much the same. Because the distance was much shorter, it was far cheaper to ship indentured servants from England than slaves from Africa. In the beginning, adding convicts to the trade in indentured servants was but an incremental expansion of business, though as the trade in convicts
expanded, there was increased specialization with separate arrangements for handling and disposing of indentured servants and convicts. Eventually, since convicts required considerably more supervision while in transit than did indentured servants and were usually directed for different types of work once they arrived, separate arrangements for transportation were developed for both. At the height of convict transportation, merchants either commissioned or purchased ships to carry convicts, and arranged for agents to meet them upon arrival, auction them off, and assemble cargo for the return trip (Oldham, 1933/1990; Meyer, 2011).

The 1718 Act significantly expanded the market for convicts by rationalizing the sentencing and transportation process. At the same time, however, it increased the cost. Allowing judges to sentence offenders directly to transportation expanded its use, but the Act also required shippers to keep convicts in leg irons and under guard until they were disposed of in the colonies. Still, there was a strong demand for convict labor in the colonies; convicts were much cheaper than either slaves or indentured servants. Convicts were a bargain: They cost about two-thirds the price of an indentured servant and still less than a slave, and their period of service was seven or more years rather than the typical four or five years for an indentured servant (Grubb, 2001). The market was all the more robust because shippers had ample products for the return trip from the colonies to England. Back haul consisted of tobacco and cotton from Virginia and Maryland to take to England for processing. Indeed, business was so lucrative that in 1767, the English government was able to negotiate a subsidy to take all those who could be transported. In the past, shippers had balked at taking very young people, as well as older and sickly felons, on the grounds that they would not fetch high enough prices at auction, and subsidies had been used to sweeten the deal. But by 1767, business was brisk enough that the government was able to obtain contracts without offering subsidies. Throughout the entire period of transportation, Chesapeake Bay was the destination of choice for the convict merchants.

The Act institutionalized transportation in a way that transformed it from a private business arrangement into a government-sponsored commercial enterprise. But it was also public policy, shaped by the interests of entrepreneurs and embraced by a weak central government desperate to do something about the law and order crisis but hampereed by its own lack of institutional capacity. Traditionally, local governments bore the cost of imposing punishments, but they resisted increasing expenditures in this area. Privately administered transportation solved the problem, although throughout its history, London had to continue to badger local governments to contribute some portion of the costs. As convoluted as it was, the policy succeeded because there was a robust market for convicts. Business flourished. Almost every year from 1718 and right up to the American Revolution, the numbers transported to North America increased. By the time the War put an end to it, transportation was just hitting its stride, and probably could have expanded indefinitely for years to come.

Shippers, believing the war to be but a temporary interruption in business, turned their ships and decommissioned old naval vessels (the hulks) they bought for a song into short-term holding pens. They tried to cover their expenses by leasing convicts out to work on the embankments on the Thames in London and elsewhere, and expected to resume their North Atlantic trade at any time. Once the outcome of the war was clear, both merchants and government officials undertook a desperate, but unsuccessful, search for alternative markets, considering Nova Scotia, the Caribbean, and West Africa. Transportation was eventually resumed in 1787 (to Australia), but in a radically different form. Specifically, whereas pre-war transportation had been managed almost entirely by private contractors, Australian transportation was carried out by the Navy.

Following a long and bitter debate, the Admiralty prevailed with its proposal to solve two problems at once: Transporting felons to Australia would solve the convict problem, and it would also counter the expanding French presence in the South Pacific. In 1789, 13 years after the last convicts were delivered to Chesapeake Bay, the first convicts were deposited in Australia, a land totally empty of Europeans, and a new chapter in transportation commenced. It was organized and operated not by merchant shippers but by the British Navy, and it turned out to be one of the most expensive ventures ever undertaken by the British government. Convicts were the first Englishmen to step foot on the Australian shore (Hughes, 1986; Neal, 1991). There was no one to whom to sell them, and indeed, no one to watch over them. So, naval officers were cajoled with mixed success into overseeing the convicts who were put to work constructing the first modern buildings in what are now Sydney, Port Arthur, Freemantle, and Norfolk Island. Indeed, convicts themselves constructed some of the first prisons for their own housing. Bentham’s plans for Panopticon were first put to use in Port Arthur in Van Dieman’s Land (Tasmania). Eventually, as colonization expanded, some convicts were sold into service much as they had been in America, but overall, in contrast
to North American transportation, it was a publicly managed operation. Still, the enterprise was successful beyond anyone’s wildest imagination. A new continent was populated by English settlers. All told, over 110,000 convicts were transported to Australia, the practice only halting in 1868 when the increasing numbers of free immigrants were successful in stopping the importation of the “criminal classes.”

The difference and the demise of Australian transportation, however, does not take away from the fact that it was an extension of an idea and policy that had been developed over two hundred years earlier by entrepreneurs who saw an opportunity, took steps to establish a market, and collaborated with a weak central government to make the plan work. In Australia, the government embraced the entrepreneurs’ wildly successful innovation and made it its own. Altogether, the two forms of transportation operated successfully for over 250 years, and during four-fifths of this time, it constituted the primary form of serious punishment meted out in the criminal process. Its numbers dwarfed the numbers who were executed during this same period. And only in transportation’s last years did imprisonment in England constitute a serious competitor.

One could provide an account of the rise of transportation in the 17th and 18th centuries as a story of dramatic risk-taking by bold entrepreneurs and amoral businessmen, and many such accounts have already been written that are eminently readable (e.g., Oldham, 1933/1990; Tracy, 1990). Certainly, like all innovative efforts, transportation had its juicy bits: its share of visionaries and larger than life risk-takers; its booms and busts and bankruptcies; its scandals, bribes, cronynism, and double dealing. Although transportation got off the ground because of intrepid innovators and risk takers, certainly its development was accompanied by all the shenanigans one might expect in the early stages of establishing a new market and organizing government contracts. Consider, for example, the first request for convict-laborers from Thomas Smith of Virginia, an ill-conceived business venture put together by politically-connected investors that suffered from a chronic shortage of labor. In London, convict transportation attracted the attention of Jonathan Foreword, a merchant who had found fame and fortune in the Africa-to-Jamaica slave trade. He saw convicts as a lucrative and comparatively less risky side business. In Bristol, Duncan Campbell, a Scottish merchant, and his colleagues operated a successful business shipping convicts until one indispensable partner died suddenly and another unscrupulous associate absconded with Campbell’s money just as he had completed construction on a special purpose-built ship to transport convicts (Oldham, 1933/1990).

The stories of flamboyant shippers and troubled investors add color, but they do not explain the success of transportation, which lies in the logic of the market for convicts in comparison to other forms of labor (Grubb, 2000, 2001). Rather, the enterprise succeeded because a market was created; there was both supply and demand. Indeed, once the market was established, it grew and succeeded because there was a surplus of criminals in England and a strong—near unquenchable—need for labor in the colonies.

As we have just seen, transportation was an innovation of vast significance and convict trade an important part of colonial trade. It became a powerful new sanction that defined English penal policy for well over 200 years, and, as we will see, it set in motion still more changes that shaped Anglo-American criminal justice systems. Like so many innovations, it had an inauspicious beginning. At its outset, no one could have imagined its eventual effects. Perhaps for the first time in history, a state had a form of punishment short of death that was socially acceptable, practical to administer to masses of criminal offenders, and relatively inexpensive. Transportation revolutionized not only punishment but criminal justice administration generally.

The history of the English criminal justice system does provide some explanation for the success of transportation. Until transportation was institutionalized, the English criminal justice system had been a largely amateur and ad hoc arrangement, depending upon local volunteer law enforcement officials, judges, and a variety of jerry-built arrangements to administer punishments. This is not to say that there was no organized criminal justice sector prior to the 18th century, however; only that it limped along ineffectively and inefficiently. Authority and cost were divided between the crown and local authorities. Since neither was willing to make investments to rationalize the process, criminal justice administration was chronically underfunded and woefully inefficient. With transportation, things changed, providing a market solution for the stalemate. It proved to be highly effective, in part because it placed the greatest risk burden upon the entrepreneurs tasked with devising the scheme and incentivized handling criminal offenders in an efficient, effective, and relatively inexpensive way. The state seized upon this, developed it, rationalized it, institutionalized it, and in Australia, eventually took it over. It was England’s, if not the world’s, first form of mass punishment.

The market solution for transportation provided a model for other reforms to follow. The reluctance of
both crown and local officials to bear the cost of other forms of criminal justice administration came to be addressed by market solutions. Law enforcement and private prosecution both came to be supplemented by market solutions that expanded the efficiencies of these functions. Indeed, the modern prison has its origins in the design of a prison that would be run by contractors and more than pay for itself (Feeley, 2002).

**Transportation as a Distinct Regime of Serious Punishment**

We are so accustomed to prisons measuring out punishments in terms of months and years and of prisoners and inmates inhabiting claustrophobic cells that punishment has become synonymous with imprisonment. Prisons and jails have so completely captured our imaginations that we fall silent when asked to name other meaningful alternatives. Surprisingly, though, the mass factory-like prison is a relatively new invention, a product of the 19th century. In England, before the prison, there was transportation. In other places, there were a variety of ad hoc methods of punishment, including banishment; slavery; and forced labor on public works and, at times, mines, agriculture, and the workhouse. On the Mediterranean, there were a few galleys. In the late 1500s and early 1600s in England, the most severe forms of punishment declined dramatically. By 1650, executions had reached a new historic low and remained there for the next century and a half (1650–1800), at which time they began to decline still further and almost to extinction by the late 1800s. By its end, transportation had affected well over 200,000 offenders in North America during the interregnum with the hulks and in Australia. This raises the following question: Did transportation replace executions? In other words, did offenders escape execution by means of transportation? As important as it is, this has not been addressed carefully by historians.

When we think of criminal sanctions, our historical imagination wraps around capital punishment and our contemporary imagination seizes upon the prison. As a consequence, we have largely ignored the regime of sanctions examined above, although by the numbers, transportation is on par with both capital punishment and imprisonment. In terms of its longevity, transportation was notable as it had a run about as long as the modern mass prison has had to date. Nevertheless, with few exceptions, the magnitude and comparative significance of transportation has been overlooked by historians as well (Beattie, 1986, is an important exception). Unfortunately, when it has received attention, it is often depicted as a transitional phase or stop-gap measure between capital punishment and the factory-like prison, or simply as a colorful feature of Australian colonization. These accounts, however, fail to recognize the importance of the measure and the circumstances surrounding its development.

This failure requires correction. Although the standard account of transportation as a transitional policy that facilitated the move from scaffold to prison is consistent with a cursory review of gross figures, more careful analysis reveals that executions declined precipitously well before transportation came to be widely used, and once it was, the numbers and rates of executions did not change much. Curiously, this evidence has been overlooked, although it is readily available (see Feeley, 2002; Rubin, 2012). This evidence indicates that the prior accounts of transportation have been, at the very least, incomplete. In light of it, transportation must be understood as a regime of punishment in its own right. In the section above, I began this corrective analysis and showed how transportation constituted a revolutionary innovation in technology and political economy that linked private entrepreneurs and the state. In this section, I will demonstrate the effects transportation had upon the expansion of the capacity of the state to punish, and underscore just how important this was.

So, who was transported, and what would have happened to them in the absence of transportation? Answers to these and related questions require us to move still further back in time in order to review the forms of punishment meted out by the courts before the era of transportation. In order to assess any impact of transportation on hangings, we need to examine the numbers of executions before, during, and after the period of transportation. As we will see, such a review reveals that capital punishment declined precipitously well before transportation took off, and once it did, execution rates remained relatively stable. This raises two sets of questions. First, once transportation took off, what sorts of penalties did it replace? Second, what effects did the 1718 Transportation Act have on transportation and on executions?

**Capital Punishment and its Decline.** In the previous section, we noted that transportation did not become a standard form of punishment until sometime after the 1660s. Thus, to show that transportation was an alternative to executions, as is so often claimed, we should expect to see a marked decline in executions after transportation was institutionalized. But this is not what happened. Although data are not complete for the period in question, there is ample evidence, and it all points in the same direction: Executions in England declined precipitously, in both absolute numbers and rates,
between the late 1500s and the early to mid-1600s. Around or just after 1650, executions in England reached a historic low and remained there for about 100 years, after which they declined still further throughout the 19th century. Given this, it is problematic to assert that transportation could have caused or even been associated with the great decline of capital punishment that so many writers attribute to it. Put simply, capital punishment declined precipitously well before transportation emerged as a standard form of punishment. Although one cannot claim that transportation had no effect (and, in fact, we will see that it likely did have some) on executions, this sequence of development reveals that transportation did not emerge as a more benign punishment that replaced the scaffold. The great decline took place much earlier. Few of those shipped to the colonies would have been executed in the absence of transportation.

To show this, we need to work through some not-very-digestible local records. Though all of them are incomplete and none of them directly address our question, in the aggregate, they reveal material that points in the same direction and to the same conclusion: The dramatic decline in executions took place before the rise and institutionalization of transportation.

Although there are no nationwide crime figures available for Early Modern England, available local records, including records for some areas in metropolitan London, all tell the same general story: Executions remained at something of a steady plateau throughout at least the last half of the 1500s and the early 1600s, after which there was a relatively sudden and widespread marked decline that leveled off sometime around 1650. Two factors account for this decline. First, there was a decline in violence in general, and crime in particular, during the 17th century (Gatrell, Lenman, & Parker, 1980), but this would account for only a modest decline in executions. Second, and more important, was the changing nature of criminal sentencing from the late 1500s and into the middle 1600s. Dispositions involving benefit of clergy, whippings, the pillory, the workhouse, and the gaol increased markedly throughout the late 17th century. Originally, benefit of clergy meant what the term implies: Clergymen could claim that they were not accountable to crown courts and could only be judged by ecclesiastical authority. In order to assert this privilege, the accused had to read a passage from the Bible on the assumption that only clergymen could read. Over time, the plea was expanded and eventually transformed into a legal fiction; at a judge’s discretion if selected offenders were able to read or recite or even repeat the verse, they might be successful in asserting the plea. If so, they would be branded with a “B” on their hand so that they could not claim the privilege a second time.

Despite this, most historians (with some notable exceptions, including Beattie, 1986; Eskirch, 1990; Smith, 1947) associate the decline in executions with the increase of transportation. For example, Sir Leon Radzinowicz (1948), the acknowledged dean of contemporary empirically-minded English criminal justice historians, assumed a causal connection. Other scholars have embraced his view uncritically. Radzinowicz saw transportation as a humanizing function during the transitional stage in the steady progress in English criminal justice beginning with the Enlightenment and culminating with proportional punishment and the penitentiary adopted in the Age of Reform. He writes that the fact remains that by the generous use of this power [to pardon upon condition of transportation] the Crown achieved a marked relaxation of the severity of criminal law. Hundreds of offenders were thus saved from a punishment [execution] which was admittedly out of all proportion to the gravity of their offense, … [and] served to bridge the gap between these emerging social needs and the old law, during the inevitable state of transition. (pp. 136–137)

A number of well-respected historians have echoed this view, and it now constitutes the received wisdom for the decline of executions.

As I suggested above, however, a careful review of the evidence shows that there is little if any connection between the decline of capital punishment and the rise of transportation. One important source comes from Middlesex, which by the late 17th century was the most highly populated area in England and the center of larger London. In his extensive and meticulous comments in the prefaces to his four volume compilation of the Middlesex Sessions Rolls for the years 1540 to 1820, John Jeaffreson (1886-92) traced the precipitous decline of executions over the longue durée. He tallied up names of those sentenced to death during the period and then collated them with those subsequently reported as executed. He found that about 800 people per year were executed from between 1540 and the early 1600s, and after that, it fell to a low of about 100 per year (Jeaffreson, 1886).

Jeaffreson’s findings are reinforced by scholarly work addressing other areas of London and England more generally. In the most detailed and expansive study of crime and punishment in 17th and 18th century London (including Middlesex and
neighboring Surrey), John Beattie (1986) reported that “over the seventeenth century there was a decided decline in several counties (and apparently nationally) in both the absolute number of felons hanged and the proportion of accused felons eventually brought to the gallows” (p. 169). Puzzled by these findings, he probed the figures closely, and concluded that there [was] no evidence, for example, that crime and social disorder were thought to be less a problem in the metropolis of London in the last decades of the seventeenth century. Indeed, if anything, there was a growing anxiety about such problems in the capital and a determination to find ways of dealing it th...m. If evidence from Surrey is any guide, the level of capital punishment declined in the metropolis as well as in provincial centers in the seventeenth century. (p. 169)

Others make similar observations. In his analysis of crime and punishment in Chester, in the northwest of England on the Welsh border between 1550 and 1750, James Sharpe reported a steady level of executions between 1580 and 1640, followed by a marked decline over the next few decades and into the next century. On average, there were 90 executions per decade between 1580 and 1640, and just under 20 per decade from 1650 to 1710 and on until 1750 (Sharpe, 1984, 1998). Unfortunately, Sharpe did not provide figures by year, or even by decade; still the changes he showed for the two periods are dramatic and consistent with those reported above.

Any number of factors might account for this change, and Sharpe has probed them with care. He noted that the figure of 90 executions for the period between 1580 and 1640 did not represent an unusual peak from earlier years, and if anything, was somewhat lower than the preceding decades. Nor was the new low temporary; it continued well into the 18th century before it declined even further. Furthermore, it was not an artifact of reporting or transient periods of war, peace, crisis, or turmoil. Although some variation can be accounted for by these factors, the singular degree and the direction of the change are both dramatic and unmistakable. Between 1580 and 1640, the number of executions was many times greater than the number between 1640 and 1710. Acutely aware of the significance of this, Sharpe wrote that “a court which could execute 166 felons in the 1620s and tens in the first decade of the eighteenth century was obviously reflecting a fundamental transition” (Sharpe, 1998, p. 91).

Considering these figures in national context and in light of other studies, including some I have discussed here, he continued:

Evidence from the south-eastern counties, from Cheshire, and from Devon, combines to demonstrate that this was a national trend, and that in some areas the number of persons executed for felony in the early eighteenth century may have been about a tenth of that current in the early seventeenth [emphasis added]. To put it simply, a society which is executing only a tenth of the criminals it was executing a century previously is either experiencing considerably less crime, worrying less about the crime it is experiencing, or being affected by a combination of these factors. (pp. 262–263)

Another study by Griffiths (2004), reporting on figures from Norwich in eastern England between 1540 and 1700, also reported a marked decline in executions in the middle of the 17th century: “The penal limelight was dimming [in Norwich] before 1650, when the number of death sentences also fell from its Elizabethan summit” (p. 107). Griffiths further expanded: “In the fifty-year period, 1570 and 1620, Norwich justices imposed 151 death sentences, while in the fifty-year period, 1630–1680, the number declined by two thirds, to 54. Executions peaked in the 1590s, when forty-four felons were hanged” (Griffiths, 2004, p. 120). Here, too, the most dramatic decline in severe punishment took place in the first half of the 17th century, and certainly not the 18th, well before the rise of transportation.

In an overview of studies on the death penalty in the 17th and 18th centuries, Jenkins (1990) also noted the marked decline of executions in the early half of the 17th century and contended that the great Age of Reform was the 17th, and not the 18th, century as is commonly asserted. He argued that “[between 1600 and 1750, and especially the first third of this period] the absolute number [of executions] had fallen from roughly 800 to 100 or 80 per year [for all of England], while the execution rate in 1750 was perhaps 6 percent of the figure in 1600” (Jenkins, 1990, p. 130).

Despite his own analysis of the figures, Jenkins repeated Radzinowicz’s mistake. He wrote that, in fact, the years between about 1630 and 1750 may have marked the real shift away from mass capital punishment, when the gallows were replaced in the first instance not by the factory-prison, but by the much
less studied expedient of transportation. The question of chronology has major implications for the rise of imprisonment during the eighteenth century and for the nature of penal change generally. It also suggests that historians of criminal justice need to pay more attention to the rather dark years of penological history in the century before 1750. (Jenkins, 1990, p. 130)

Jenkins was certainly right in emphasizing the need to pay more attention to both transportation and to chronology. The large numbers who were transported and its long duration certainly suggest, as he maintained, that it should be treated as a separate and distinct regime of punishment in its own right. Had he paid even more attention to chronology, however, he would have seen that the figures he examined show that transportation emerged well after the great decline in executions. At best, the rise of transportation could only have had a marginal impact on the decline of executions.

The figures reviewed above consistently reveal that a dramatic and lasting decline in executions took place between the late 1500s and middle of the 1600s. From the comparison of the numbers of executions in the early 1600s with executions in the late 1600s and early 1700s, it is clear that as transportation emerged, it replaced benefit of clergy and not the gallows. While these several scholars are correct to insist that the great era of decline took place in the 17th century and not the 18th, as so many historians of criminal justice reform contend, these same revisionist historians have not paused to consider this decline in light of the rise of transportation and reflected on the independence of the two changes.

Thus, we are left with some intriguing questions: If executions declined precipitously before the rise of transportation, what effects did the rise of transportation have? Did it displace still more executions, or did it displace other sanctions? That is, what would have happened to offenders had transportation not been institutionalized? As I will show, transportation did have an important effect, but not the one so often attributed to it. For the most part, it replaced lesser, not more, severe punishments, and, as such, it transformed the nature of the English criminal process. In particular, it replaced benefit of clergy, which as transportation continued to expand, all but disappeared. To a lesser extent, it also replaced the pillory and whipping. At best, the rise of transportation only had a marginal effect in further reducing executions. We examine this claim in the paragraphs below.

Conveniently, much of the work to address this second set of related issues has already been done (Feeley, 2002; Rubin, 2012). Rubin (2012) has subjected the replacement thesis (transportation replaced benefit of clergy and not executions) for those sentenced at the Old Bailey between 1684 and 1776 to rigorous scrutiny. She asks, “Did transportation cleanly replace capital punishment or did it have other, unintended consequences for the criminal justice system” (Rubin, 2012, p. 817)? Indeed, she elaborates on the issue and asks to what extent the Act snared people in its net (“net widening”). Examining all cases disposed of at London’s Old Bailey between 1684 and 1776, and drawing on additional materials published in the Parliamentary Papers of 1819, she undertook a multivariate time series analysis to assess how various punishments—executions, transportation, whippings, and the like—affected each other and were affected by the shifting mix of cases that came before the court over the 84-year period. Treating each sentence by itself as a dependent variable, and other sentence options and offense types as independent variables, she assesses the impact of each sentence option and offense type on sentences from 1684 to 1718, before adoption of the Transportation Act, and from 1718 to 1776, after the adoption of the Act.

The graph in Figure 1, based on figures drawn from the records of the Old Bailey (Old Bailey Sessions Papers [OBSP]), provides numbers for each type of major punishment actually imposed between 1684 and 1776 and breaks this long period down into two parts, the 34 years before adoption of the Transportation Act of 1718, and the 57-year period after, in order to determine what, if any, effects the Act itself had on sentencing. The single most prominent feature of the graph is the dramatic rise of transportation. It comes to dwarf all other punishments combined. However, this graph alone cannot tell us which sentence would have been imposed in the absence of transportation. To get at this, Rubin (2012) undertook a multivariate analysis that permitted her to consider each variable in isolation as it were and to draw up a set of complicated but persuasive findings, which can be summarized as follows:

Offenders who once would have received [fines, branding, and/or whipping] were suddenly much more likely to be transported, and thus...transportation did play some mesh-thinning role.... In general death sentences decreased after the 1718 law, both in the short term and the long term. On average, death sentences were
about 8.5 percent less common for all crimes in 1718 and after, and 13.3 percent less common for theft offenses. However, death sentences for non-theft offenses increased slightly thereafter.... Overall, these results support the suggestion that transportation helped to replace capital punishment, but only in the case of theft offenses (which represented the bulk of the caseload) .... The portion of individuals executed among those sentenced to death...increased following the Transportation Act. (pp. 833–836)

Short term and long term effects with regard to executions vary somewhat, but “in the long run...rather than decreasing the frequency of execution, transportation apparently made execution more likely for those capitally sentenced” (Rubin, 2012, p. 839). She summarized her central conclusions:

Sentences to transportation replace death sentences, but ... the availability of transportation did not replace executions once a convict was condemned; the Transportation Act had unintended consequences. Secondary punishments—branding, whipping, and fines—declined heavily...suggesting that transportation was used to punish offenders who would have received what was considered a less severe punishment....Moreover, this decline was proportionately much larger than the decline observed in capital sentences, suggesting that the unintended mesh thinning consequences of the Transportation Act was far more significant for the criminal justice system than its role in partially replacing capital punishment. (Rubin, 2012, p. 840)

Together the examination of these two periods, the late 1500s to the mid-1600s and Rubin’s examination of the period from 1684 to 1776, shows
conclusively that transportation had only a marginal impact on reducing executions. Executions declined precipitously before transportation was used in any significant numbers, and executions were replaced by expanded use of benefit of clergy. During the second period, as transportation was institutionalized and expanded, it had only a slight impact on executions. Rather, its greatest effect was to replace benefit of clergy and whipping with a harsher sanction. Rubin (2012) emphasized this when she concluded that William Thomas, the principal author of the Transportation Act of 1718 and opponent of the death penalty for most offenses, may have died believing that he had established a reliable alternative to capital punishment, while, in fact, its primary unintended effect was to sweep up a great many lower-level offenders and subject them to markedly harsher punishment (p. 841).

Transportation Conclusion

The discussion above has taken the reader through a painstaking analysis, tracing the decline of capital punishment and the rise of alternative punishments. It may appear to be an obscure discussion of punishment 300-plus years ago, but I want to insist that the exercise is important and has relevance to criminal justice reforms today. My point in all this is to show that despite the contentions of leading contemporary criminal justice historians like (e.g., Radzinowicz, the primary author of the Transportation Act itself, and still others), transportation had little (although some) effect on the numbers and rates of executions. However one looks at it, transportation was not a more benign alternative to executions. In contrast to what preceded it, transportation dramatically expanded the state’s capacity to impose severe punishment. Further, once transportation was institutionalized, as Rubin (2012) has shown, its impact on reducing executions was marginal; its overwhelming effect was to replace a less severe sanction for a harsher sanction. In short, transportation was an awesome expansion of state power. It increased many-fold the numbers of those receiving substantial sanctions. It strengthened the state’s criminal justice system and increased a weak state’s capacity to punish.

Once it was established, transportation may have been the most effective component of the English criminal justice system. Anchored in the creative energy of the market place, transportation in short order increased both the efficiency and effectiveness of the state’s capacity to punish at minimal cost. In contrast, the state’s capacities to arrest, prosecute, and adjudicate remained mired in pre-modern practices. As I have suggested elsewhere (see Feeley, 2002), the success of this innovation may have been the engine that sparked still other innovations that followed: the development of the modern police, modern prosecution, and the modern prison.

Perhaps more than any other single development in the 18th century, transportation set the agenda for criminal justice reform for the next 150 years. It inspired entrepreneurs to propose still other market-based solutions for public problems. Encouraged by the success of privately financed transportation and spurred on by the abrupt end of transportation due to the American War of Independence, Jeremy Bentham campaigned obsessively for the construction of a privately financed and operated prison, which he expected to run (Feeley, 2002). Although his idea was ultimately rejected in England (due in part to the post-war redirection of transportation to Australia), his ideas did help legitimize the idea of the mass factory-like prison in North America and England, some of which were organized to operate on a profit or at least be self-financing (Livingston, 1873; Rubin, 2012), and the use of prisons in mining, agriculture, and manufacturing (McLennan, 2008). Still, other innovations promoted by entrepreneurs seeking to exploit the labor of convicts and minimize the cost to the state of punishment followed these innovations. Among the most prominent in the United States were chain gangs and convict lease systems and productive labor within prison settings themselves. There may not be an easily traceable direct line between transportation and the chain gang, but they share two common features: They depend upon entrepreneurs to establish and maintain a market in convicts, and they shift some of the cost of punishment away to the state and to the market.

The fact that private programs initiated by entrepreneurs have not always remained private, or that they were less efficient and effective than initially expected, does not mean that the ideas and the sources of these innovations were unimportant or irrelevant. Their initial, if even at times only partial, success paved the way for the acceptability of new arrangements and new institutions and in so doing, helped expand the scope of the criminal sanction. Transportation to Australia involved unprecedented expenditures by the Admiralty and Home Office, but still, it was the success of the merchants who had shipped tens of thousands of convicts to North America that showed that transportation was workable. The genius of this initial effort should not be slighted. It rests largely on the fact that it was an innovation devised by entrepreneurs who operated it for 150 years, at which time, it was taken over by the state and used successfully for another 80 years.
Electronic Monitoring

The first electronic device used to monitor offenders remotely was invented by twin brothers Ralph and Robert Schwitzgebel (later shortened to Gable) in the early 1960s (Schwitzgebel, 1969). At the time, the brothers were graduate students at Harvard, one working with Timothy Leary and the other with B.F. Skinner. Combining the mind-expanding spirit of Leary with the operant conditioning theory of Skinner, the Gable brothers created a remote radio controlled device to monitor juvenile delinquents in the field. Their device, a bulky waistband, permitted two-way communication by pushing buttons that offered opportunities to seek guidance and send signals of both positive and negative reinforcement to the client. The twins continued to experiment with their invention on and off over the next decade, and although Robert wrote a book (1965) and some articles about the effort (1964, 1969), and obtained a patent for his communications device, they were never able to secure sufficient support to develop a prototype or convince any probation department to embrace their idea. Like so many innovators, the Gable brothers were ahead of their time.

By many accounts, the next person to experiment with electronic monitoring of offenders was Judge Jack Love of Albuquerque, New Mexico. In 1982, he hit upon the idea while reading a Spider-Man comic strip in which Spider-Man’s archenemy Kingpin attaches a tracking device to him so that he can monitor Kingpin’s every move. In his “Eureka!” moment, Judge Love asked himself, “Why can’t I use this on offenders? I’d rather place on probation than in jail?” He proceeded to badger a friend who worked for Motorola to construct such a device, who obliged.

Judge Love made his proposal at exactly the right time and to the right person. As forward looking as they were, the Gable brothers were clinical psychologists tinkering with new technology. Judge Love turned to someone working in the midst of the electronic revolution in which the industry was on the lookout for practical applications and new markets for its products. Beginning in the 1970s, Dick Tracy-like gadgets had begun to multiply like rabbits in springtime: cell phones, remote controls for TVs, cheap two-way radios, implants to track migrating whales, devices for police to track the cars of suspects or trucking companies to track their fleets, and mechanisms to monitor the elderly and infirm. The move to construct and develop a market in correctional administration was simply one more inspired step forward. Once built, Judge Love began to use it in his courtroom. This was the first known judicially-sanctioned use of electronic monitoring in the United States, and perhaps the world, and Judge Love went on to have a successful second career promoting his idea (see DeMichele & Payne, 2009; Mainprize, 1992).

The market grew by leaps and bounds. In 1962, the Gable brothers were able to communicate over two-way radio with their clients through a series of beeps from a set of buttons on a cumbersome belt (Gable & Gable, 2005; Schwitzgebel, 1969). Twenty years later, Judge Love could drive by the homes of his probationers and use radio frequency (RF) emissions to determine if they were there, and if not, call the police. Within a few years, micro radio transmitters worn by offenders could send signals to remote receivers, and they could be monitored as they moved about from home to work and school and the like. Transmitting monitors continued to shrink in size and cost and were increasingly effective and efficient. Glitches, false positives, and false negatives declined to nearly zero, and new designs made electronic monitors attached to the ankle—or electronic tags, as the British call them—tough and virtually tamper-proof.

By the late 1980s, a vast electronic monitoring industry had emerged to serve the various needs of law enforcement and other criminal justice agencies. Dozens of companies designed and developed specialized equipment to monitor offenders and pretrial releases in the community, each competing with the other on cost, effectiveness, capabilities, and services, ushering what was once an experimental technique into the mainstream. Vendors began to appear in droves at professional conferences of police, prosecutors, judges, sheriffs, probation, pretrial services, drug treatment programs, and the like, offering a myriad of electronic devices to expand their reach and improve their effectiveness.

Rapid-paced innovation made new electronic monitoring systems obsolete almost as soon as they were brought to market. Early RF monitors of the 1980s began to be supplanted by GPS units in the 1990s, and these, in turn, have begun to be supplanted by more sophisticated multi-purpose units in the early 2000s and 2010s. Further, as prices plummet, ideas for their use increase proportionately. If FedEx can track packages it sends around the world in real time through tiny electronic chips embedded in its packages, so too can parole officers track offenders released into the community in real time. The devices are small, unobtrusive (no larger than a cigarette pack), inexpensive, reliable, and can be attached to an offender, who then remains under 24/7 surveillance. As of this writing, RF systems continue to be used and preferred by many (especially those concerned with privacy, because the capacity of RF units is limited; they do not permit
24/7 surveillance). But as the fourth or fifth generations of GPS+ monitors emerge and prices continue to decline, it is difficult to imagine that RF systems have much of a future.\(^3\)

Already, electronic monitoring devices can “read” body sweat and send signals to central monitors providing information about blood-alcohol levels (Barnett, Tidley, Murphy, Swift, & Colby 2011; Fell & McKnight, 2013; Flango & Cheesman, 2009; 2008; Humphreys, 2013; Larkin, 2016; Marques & McKnight, 2007; McKnight et al., 2012). Operational remote drug testing devices are just around the corner (Paterson, 2007a; 2007b). Devices to measure signs of anxiety and anger, and hence propensity for dangerousness, will soon be available (Paterson, 2007b). A vast array of monitoring devices is feasible. Breathalyzers attached to automobile ignitions can shut down cars and, if combined with electronic monitoring, can provide information to law enforcement and insurance companies. Combine GPS systems with micro­cameras, finger print scanning technology, retinal scanning, facial recognition technology, and ubiquitous CCTV cameras, and who knows where it will lead.\(^4\)

In England, a great many probationers no longer report to human probation officers, but instead, punch in at ATM-like devices located at convenient locations, identifying themselves with thumbprints just as one unlocks a cellphone. Honing these technologies requires some degree of trial and error. If, for example, the thumbprint procedure is unreliable or proves to be easily circumvented, technologies will evolve to harness more secure (and costly) alternatives like retinal identification. Soon, urine for drug tests will be collected in much the same way (Jones, 2014). Imagine sensors implanted in drivers’ licenses or in tandem with millions of micro CCTV cameras attached to cars, buildings, and telephone poles, all automatically forwarding information to centralized monitoring and assessment stations (Jones, 2014). It may sound overwhelming, but not when one considers what other electronic monitoring programs are doing. For example, electronic data mining programs developed for the post-9/11 war on terror sort through billions of bits of data from across huge arrays of networks and sources almost instantaneously. Simple GPS monitoring devices seem primitive compared to these devices.

NYU Professor Mark Kleiman, with colleagues Hawken and Halperin (2015), has hailed electronic monitoring as the greatest innovation in corrections since the development of the prison. Now it is possible, he maintains, to have virtual prisons in which offenders are tethered to an electronic chain while in the community and at only a tiny fraction of the cost. It costs $35,000 to $50,000 a year to house a prisoner but only $1,500 to $3,000 to maintain them in an electronic prison. Of course there will be failures and a variety of auxiliary costs, but at this price, it is possible to absorb a great many failures and still administer a cost-effective and safety-conscious program. And if, in the future, devices can detect aggressiveness before it explodes into violence, all the better. Furthermore, proponents of risk analysis claim high reliability and accuracy in their new actuarial prediction models. Not only is there a vast new industry promoting its myriad electronic wares, there is now an extensive library of writing by academics, criminal justice practitioners, and industry representatives promoting electronic monitoring and predictive models as efficient, economical alternatives to incarceration, as well as effective tools for treatment and rehabilitation. The question remains, though: Will new devices become alternatives to prison or add-on features of probation and pretrial release?

Companies like the one Judge Love turned to after his comic-stripe epiphany had already begun developing applications for their new electronic inventions and immediately saw the implications for application within the criminal justice system. A host of innovative companies and their subsidiaries began developing a plethora of devices for use by law enforcement and criminal justice agencies. At first, they sought to obtain supplementary contracts to install and service the equipment and to train law enforcement officials to use it, and later, they proposed to administer the new electronic monitoring programs themselves.

But in the United States, electronic monitoring has not yet come into its own. The same problem that plagued the English criminal justice system during the age of transportation continues to plague criminal justice agencies, at least in the United States. Creating new forms of punishment often shifts costs from one level of government or one institution to another, and in so doing, generates resistance. In 18th century England, the national government promoted transportation, but local governments resisted because they were expected to absorb some of the administrative costs. Today in the United States, electronic monitoring as an alternative to imprisonment may shift costs from the state (which runs prisons) to probation (which is typically financed by counties), garnering unsurprising resistance from counties. Each level of government wants the other to absorb the costs. Similarly, a sheriff running a jail might want electronic monitoring as a way of reducing crowding, but this means increased costs for probation. As we will see, this is less of a problem in contemporary England and
in continental Europe at large, where almost all criminal justice expenditures are financed by the central government (Nellis, Beyens, & Kaminski, 2012) and where there is comprehensive national planning.

Apart from the misalignment of costs, there are still other factors that impede the expansion of electronic monitoring. For instance, probation and parole are anchored in the helping professions. Because their professional norms emphasize the importance of one-on-one contact with clients, technological incursions are deeply resented (Garland, 1985; Nellis, 2012). Additionally, probation departments as institutions are not primarily concerned with expanding alternatives to imprisonment because such expansions would invite more work, nor do they want to risk the increase in Willy Horton-like problems. (Horton was an inmate in a Massachusetts prison who was released on a short-term furlough and subsequently committed a murder. It occurred during Michael Dukakis’s term as governor and was successfully used against him by George H.W. Bush, his opponent in the 1988 presidential election campaign.) As it is, probation departments are already swamped with impossibly high caseloads and enough risky choices. They are desperate to keep up with simple tasks, such as collecting urine samples for drug testing, leaving them little patience for anything that does not relieve crushing caseloads. By the time electronic monitoring came onto the scene, most probation officers did little more than passively supervise their massive caseloads. Indeed, one study of English probation officers reported that nationwide, officers spend 75% of their time filling out forms (Nellis, 2014b). American probation officers are probably not far behind.

Furthermore, reality has overwhelmed the mission of probation. Offenders are less tractable than most theories of rehabilitation admit to, and communities into which offenders were to be reintegrated have disintegrated. In the 1970s, these hard facts contributed to the decline of the rehabilitative ideal, and this decline was aided by the steady drumbeat of those who rejected the idea of treatment and embraced increased reliance on retributive punishment, such as prison. All this has further undermined the raison d’etre of probation and parole and helped to transform former social workers into a demoralized corps of quasi-law enforcement officers. Federal parole and parole agencies in some states were abolished outright when new laws mandating determinate sentencing, guidelines, and truth in sentencing laws were enacted. Where parole has not been eliminated outright, its budgets, like those of probation, have not kept pace as caseloads mushroomed. Indeed, since the 1980s, probation population in the United States has probably grown at an even faster rate than imprisonment, yet budgets have not expanded proportionately (Phelps, 2013; Reitz, 2016; Robinson, 2016). Since around 2010 in the United States, this has accelerated. We have seen increased support for less punitive sentences and less reliance on incarceration, but this shift in sentiment has not (yet) been accompanied by significant increases in funding for probation and parole, except in a few isolated instances. So, the problems facing probation have been exacerbated.

This longstanding problem set the scene for the rise of electronic monitoring. In the 1980s in the United States, when vendors came calling on probation to sell or lease their equipment, they confronted a reluctant consumer who lacked the will and the capacity to respond. Indeed, many in these agencies were so hard-pressed that to them innovation might have been understood as replacing a dot matrix printer with a laser printer or equipping their field agents with cell phones. Under the best of circumstances, these agencies were resistant to change, but under the onslaught of vast increases in caseloads and shrinking budgets, they were virtually comatose. They did not understand high-tech equipment. They resented intrusion into their traditional ways of doing business. They were demoralized. They are now, perhaps, the weakest link in an already weak system of criminal justice.

Perhaps most importantly, though, local probation departments had little interest in embracing a reform that would lighten the workload of state corrections or county jails by shifting additional offenders to probation. To take one example, in the early 1990s, my friend Dick Rainey, sheriff of Contra Costa County, was keen on keeping the population of the county jail down. He wanted to avoid a crowding lawsuit, but above all, he wanted to run an exemplary jail. Therefore, when he learned about electronic monitoring, he approached Contra Costa County Probation with a proposal: Both he and the probation department could agree that there were many inmates who were neither dangerous nor posed risks to the community and, thus, did not need to be in jail. He proposed that both his department and probation approach the county judges to seek support for a plan to send more offenders to probation with electronic monitoring and fewer offenders to his jail. He was certain that local judges would agree to the experiment if both he and the head of probation jointly proposed the idea, but it never got that far; rather, probation turned him down outright, citing electronic monitoring’s purported incompatibility with the helping professions and the certain increase in their caseload. Above all, probation officials
wanted to avoid a Willy Horton-like scandal. Frustrated, but still undaunted, Sheriff Rainey realized that he already had the unilateral authority to use electronic monitoring within his department’s home confinement program and started a program that continues to operate some 25 years and two sheriffs later. As far as I know, this is the only electronic monitoring program in the United States completely run by a sheriff and the only program in which there is certainty that 100% of the participants serve a sentence that is truly an alternative to jail.

Probation’s reaction to the sheriff’s proposal reveals a widespread attitude. Despite being part of the helping professions, overwhelmed probation officials would only increase their own caseloads if they accommodated jail-bound offenders. More generally, as with all types of community corrections programs, local officials resent state efforts to shift state-borne burdens onto counties. In a highly decentralized system, such as the United States, such resistance is both powerful and effective. This contrasts with England and Wales, which, because of its strong and centralized national government, could establish a new privately operated electronic monitoring system and all but abolish traditional probation.

One consequence of these differences is that electronic monitoring is far less developed in the United States than in England. Despite the fact that in the United States, four to five million people are on probation and another two million people are in jails or prisons at any given moment (Robinson, 2016), only a tiny fraction of them are hooked up to electronic monitors, and of those, only a miniscule number are in programs that are real alternatives to custody. There is a vast market, but as of yet, it has not been tapped to any significant extent.

Recognizing this potential, private contractors have not given up. They have regrouped, altered their marketing model, and continue to promote their products. They have mounted a two-pronged attack, and at some point, they will undoubtedly find more success. At the outset, they offered to sell or lease equipment to probation departments. Under revised plans, they propose to operate the equipment themselves—to install it, to maintain it, to monitor offenders, to notify officials when they detected violations, and, at times, to run the treatment programs. Increasingly, they have gone over the heads of probation officials to pitch their ideas directly to county boards of supervisors and state legislators with the goal of selling cost-conscious elected officials on the economies of electronic monitoring, which provides secure confinement and surveillance at only a fraction of the cost of jail. In the 2000s, cost efficiency arguments in criminal justice administration have become increasingly attractive to public officials (Aviram, 2015).

Electronic monitoring contractors have made some inroads with their new approach, and in the United States, there has been a painfully slow but steady increase in the use of electronic monitoring since the late 1990s. But the market is decentralized. Authority is fragmented across levels of government and among different agencies. There is no national ministry of justice, and only a few states have strong statewide oversight and planning functions in criminal justice. Responsibility and functions are divided among state, cities, and counties. Private firms have faced enormous obstacles in even getting attention under such circumstances. If they are able to obtain a contract, it is likely to be local and thus relatively small.

But if they can find the right customer in this hyper-fragmented market, contractors have an impressive product and a powerful sales pitch. The voices of those promoting the myriad of electronic wares in this new industry are amplified by the expanding library of writings by academics, criminal justice practitioners, and industry representatives promoting electronic monitoring as an efficient and effective alternative to incarceration.

These entrepreneurs also aggressively market their product with a multiplicity of arguments. They promise efficient devices that can better incapacitate, deter, punish, treat, and rehabilitate all at the same time. They can be tailored for specific offenders and for unique circumstances. Moreover, unlike supervision by probation officers, electronic monitors with GPS work around the clock. Electronic monitoring is all things to all people: a meaningful punishment, deterrent, rehabilitation technique, and solution to crowding, all at a fraction of the cost. Go to a criminal justice agency convention, or simply Google “electronic monitoring,” and you will find this expansive array of claims. The central appeal of electronic monitoring is cost and efficiency. As previously noted, it costs $35,000 to $50,000 per year to keep someone in prison but only $1,500 to $3,000 to electronically monitor someone in the community. This is an eye-popping claim certain to get the attention of elected officials and is supported by ample evidence indicating that these cost estimates are correct.

When one looks closely at the sorts of promises these companies offer, however, there is something of a bait and switch going on: They emphasize the contrast between the cost of imprisonment and the cost of electronic monitoring (one-tenth the cost!), but the programs they actually promote are not likely to be alternatives at all. Rather, they are designed for the big pool of easier targets, such as pretrial release,
drug treatment, DUI treatment, probation, and parole, situations in which it is unlikely that those being monitored would otherwise go to jail. Put bluntly, then, electronic monitoring is sold as a miracle drug for cost savings but almost invariably increases the cost of managing offenders. So, while they may appear to produce enormous cost savings, such monitoring programs are, in fact, unlikely to reduce the expenses of incarceration, and they are likely to add to the costs of criminal justice administration.

This is a bold claim, so let’s look at the evidence on which it is based. One caveat exists at the outset, though. In the United States, it is dangerous to generalize about programs, their reception, their costs, and their impact. Indeed, most of the relevant agencies are organized at the county level. There are over 3,100 counties in the United States, and most of them have separate courts, prosecutors’ offices, sheriffs’ departments, and probation agencies. Some of them have distinct pretrial release systems and various shared city-county programs. In addition, there are 50-plus statewide correctional systems and parole departments; some of them are highly centralized, and others are decentralized in the extreme. In all of this, there is no national ministry of justice, or even a meaningful state department of justice, and this level of fragmentation and decentralization renders state and nationwide data particularly hard, if not impossible, to come by, and no Research and Development functions operate to speak of (Feeley, 1983/2013). Although a number of local police departments and some national police organizations have embraced innovations and experimental testing, few other criminal justice institutions have been willing to do so (Weisburd, Sherman, & Petrosino, 1990). Furthermore, even when there are experiments with electronic monitoring, and across the United States there are hundreds of small locally run programs, trying to gather information and make sense of them is next to impossible. They are set up by true believers; investing in them is a sunk cost, there is little oversight (although national agencies often provide temporary funding for “pilot” programs), and so there is little systematic evaluation. As a result, there is a pronounced lack of knowledge about electronic monitoring programs (Renzema, 2003).

Given this, how can I be confident in my assertion that electronic monitoring programs are not (yet) meaningful alternatives to incarceration? Assessing accounts of two projects that have been watched closely, one in England and the other in Florida, helps answer this question.

In England, a series of successive Governments have embraced the idea of electronic monitoring, and adopted and implemented a sweeping national program run by private contractors. This development has been closely watched by a host of people: vendors, program administrators, union officials, affected probation officials, government bureaucrats, politicians, and scholars. By now, there exists a vast literature on the electronic monitoring and the role of private contractors in administering the program. At the outset, in England, cost-conscious MPs and others who keenly embraced the privatization regime of Ms. Thatcher developed close ties to military contractors and with them developed plans for transforming the country’s prison and probation services. These efforts have been wildly successful. At least one junior minister in the Conservative Government in the mid-1980s, John Patten, made a name for himself by helping to form the Offender’s Tag Association, successfully championing the nation’s first electronic monitoring program and justifying it as a way to simultaneously reduce the prison population, save money, and increase public security (Paterson, 2007b; Zedner, 2006). Labour’s victory in the 1997 election made no difference. The private electronic monitoring grew apace under its rule and has continued under still other governments since. It is here to stay for the indefinite future. So, it provides an excellent case study for the uses of electronic monitoring.

There is no comparable body of work in the United States because there has been no comparable development. Nevertheless, Florida’s experience comes the closest. Florida is one of the few states in which a statewide agency, the Florida Department of Corrections, has substantial responsibilities for both state prisons, probation, and parole. So when corrections leaders were forced to confront the state’s burgeoning prison population, they seized upon the idea of electronic monitoring and drew up plans to direct some prison-bound offenders into programs requiring home confinement and electronic monitoring. Unlike corrections officials in other states, they had the authority to effect their plans. The Department not only contracted with one of the state’s many firms involved in military security, bank security, and corrections industry, it also contracted with researchers at the College of Criminology at Florida State University to monitor its activities and evaluate its programs.

There have been no definitive assessments of England and Florida’s grand experiments. Both enterprises are too messy and multifaceted even to hope for this. Nor in either case has even any smaller component program been carefully evaluated in ways that meet conventional standards for evaluation research (Taylor & Ariel, 2012). Yet, programs in both locations have generated small libraries of research and commentary, that when pieced together,
allow us to gain a picture of how they operate, who operates them, whom they target, and what impact they have had. Below I review some of this diffuse literature.

Consistent with the theme of this article, I have two objectives in the discussion below. First, I want to examine the role private vendors have played in the design, promotion, and administration of electronic monitoring programs, and then I want to determine the extent to which electronic monitoring is, in fact, an alternative to incarceration.

England

In England, the government’s embrace of electronic monitoring for people on probation came after a decade of successful experience with privatizing the delivery of a host of public services, including prison administration. Turning to private contractors to implement a new and promising technology for probation was part of a natural progression. The decision, however, created an even greater controversy than did the earlier decision to establish a handful of private prisons. Electronic monitoring was presented as an efficient and more effective way to monitor offenders. There was little rhetoric justifying it in terms of treatment or rehabilitation (Blunkett, 2004), but the new policy was promoted as a means of cutting into the growing prison population and providing a more effective and less costly alternative.

Not surprisingly, the new policy was perceived as a slap in the face by members of the National Probation Service, steeped as they were in a nearly 100-year history of the rehabilitative ideal. As Mike Nellis, England’s leading authority on electronic monitoring and the National Probation Service (NPS), has observed,

Probation’s opposition to electronic monitoring was so great that officials refused to cooperate with the Home Office to help develop and implement it. In this way, the NPS, in effect, signed its own death warrant. The Government circumvented it, a course of action that some believe the Government had expected to employ all along (Nellis, 2014a).

As in the United States, probation in England is probably the weakest link in the criminal justice system, an organization which recites the stirring phrases of the era of treatment and rehabilitation, but which is, in fact, an institution on life-support, unable either to articulate or pursue its mission. As mentioned earlier, according to some credible reports, probation officers spend up to 75% of their time doing paperwork in their offices, leaving precious little time to meet with clients in ways that help them reintegrate into their communities (Nellis, 2013).

Eventually the Government achieved a decisive victory over the NPS, and, in effect, created an entirely new, commercially-operated and electronically-sophisticated probation service. The changes in criminal justice services as exemplified by changes in probation and electronic monitoring are massive, far surpassing any of the similar developments that have taken place in the United States. A new Ministry of Justice was created to oversee the administration of the new commercially operated prisons and probation, as well as other functions hived off to the private sector. The Home Office is left to oversee the police and to share responsibilities with new commercial law enforcement organizations, which operate remote CCTV surveillance, traffic cameras, and the like. The size of the contracts for electronic monitoring and other privatized services is enormous, even by American standards. As of this writing, the NPS is an empty shell of what it once was. In short order, voluntary transfers, resignations, and retirement will cause it to all but disappear. Only a tiny handful of traditional probation officers will be retained to manage a small group of the highest risk probationers.

The new commercial criminal justice institutions have radically transformed and continue to radically transform the nature of criminal justice functions in England as they have been understood and operated for over the past 100 years. The transformation is as thorough-going and dramatic as the changes David Garland (1985) described in Punishment and Welfare, his book about changes in Edwardian England, when the modern helping professions were created and institutionalized. Contracts worth hundreds of millions of pounds per year have been let, and the plan is both to continue to expand this “public-private partnership in crime control” and to contract out indefinitely. Revised or new small and streamlined public agencies of all sorts have been established, not to provide services to clients, but to fashion, let, and oversee contracts for the private delivery of public services. These new bureaucrats are expected to manage the “business of government”
reiterated a continuing commitment to electronic monitoring functions, a set of obvious candidates for the lucrative contracts were quick off the mark: companies with prior experience in building and operating private prisons, companies with records of success in providing surveillance and security for banks and military institutions, companies involved in various forms of private policing, and newly established partnerships among some of these companies. The contracts were large enough to scare off all but the largest and most heavily capitalized companies with impressive track records. Bids for electronic monitoring and related contacts began to be let in the late 1980s and expanded throughout the 1990s. A handful of companies competed for them, and over the course of a few years, and after some consolidation and failures, the field was narrowed to two companies that now divide most of the business between themselves. In contract renewals in 2005, the Home Office awarded contracts to these two firms, G4S and Serco. In 2009, the Labour Government renewed and extended these two contracts, and in 2015, the returning Conservative Government extended them once again (Nellis, 2014b). An upstart company has gained a foothold in the business and may be able to expand its operations (Nellis, 2014b). The resounding victory of the Conservative Party in the 2015 elections all but assures that longstanding plans will be affected and that private community rehabilitation companies using cutting edge electronic technology will be fully operational and institutionalized. If there ever will be a return to traditional institutions, it will not be in the foreseeable future. The course for England in this area seems to be set at least for the next 100 years.

The struggle to privatize and institutionalize electronic monitoring led to a shift in expectations for its functionality. Privately-run electronic monitoring and related programs were initially promoted by a cost-conscious Conservative Government as a more effective and less expensive alternative to imprisonment. But the rationale for them has subtly shifted over the years. The law and order logic of social conservatism trumped the efficiency arguments of fiscal conservatism, and this was helped along by a handful of widely publicized crimes by offenders who were under home detention and electronic supervision. This shift in purpose was made explicit in 2010 when the new coalition Government reiterated a continuing commitment to electronic monitoring but added that “we do not want to see community sentences [i.e. electronic monitoring] replace custodial sentences” (Nellis, 2014b, p. 17). This, as Nellis (2014b) points out, “was an explicit departure from earlier ‘somewhat fudged’ commitments to use EM as an alternative to custody” (p. 17). So, by the government’s own acknowledgment, electronic monitoring by the new “community rehabilitation companies” consists of add-on conditions for those who would be released on probation and pretrial release anyway.

These new community rehabilitation companies have still other products under development. For those not attached to electronic tags, they plan to install kiosks in convenient locations so that clients can check in as easily as they can use an ATM. Similarly, they plan to maintain conveniently located stalls to collect urine for drug tests. Such programs are activated by fingerprint, voice, and retinal recognitions software. Still other plans in the works include skin-sensitive electronic tags that can determine alcohol and drug use (already operational) and devices that can register levels of frustration and aggression and then perhaps electronically return palliative responses. In a society shaped by a philosophy of limited government, the function of private rehabilitation companies is not to offer counseling, aid, or advice, let alone treatment and rehabilitation. It is to enhance surveillance and enforcement in a high-risk population in order to promote social security. One wonders when private insurance companies will begin to adopt some of the same techniques for drivers, renters, and home owners. Employers have already embraced some of these devices to great effect.

Florida

The United States is highly fragmented and decentralized; there is no equivalent national, or even state-wide, push as we have seen in England and Wales. Furthermore, there is no equivalent of the Home Office or the new Ministry of Justice that can shape policy and monitor oversight of criminal justice agencies—none at the national, state, or even local level. So, electronics-based reforms in the United States have been slow and on a much smaller scale in the United States than England. Most changes have been small efforts and involved only one county-based agency at a time.

There are, however, exceptions. One of them is the Florida Department of Corrections, which is one of the few corrections departments in the United States that not only manages corrections but is also mandated to develop policies addressing sentencing, parole, and probation. It is also an agency with a long history of innovation, experimentation, reform, and experience with privatization of prisons. The Department, which administers the third largest correctional system in the United States, is the first...
(and, as of this writing, the only) large agency in any state to embrace electronic monitoring with enthusiasm. So, in the 1980s—well before the big push in England—when the state faced a rapidly growing prison population, representatives for electronic monitoring companies (many of which were spin-offs from commercial private prison companies) offered a solution: expanded use of electronic monitoring to reduce the prison population. Reductions could be affected in two ways: Intensive supervision would reduce recidivism, and thus re-incarceration, and some low-risk nonviolent offenders could be diverted directly to electronic monitoring.

After discussion with key state legislators, members of the judiciary, and researchers at the state university, the Department of Corrections embraced electronic monitoring in a big but cautious way. Indeed, offenders in Florida’s electronic monitoring programs probably account for a sizable proportion of all those in such programs throughout the United States. The program was a new experiment. Contractors would provide the electronic equipment, install and maintain it, monitor offenders, and notify officials when violations occurred or equipment failed. Tighter supervision, it was expected, would lower rates of recidivism and absconding, problems that plague all probation and parole programs. Furthermore, state officials professed support for including more serious offenders in ways that would reduce, if even marginally, the state’s burgeoning jail and prison populations.

After some jockeying, the first contracts were let in 1987. Eventually, the bulk of the business went to 3-M, Minnesota Mining and Manufacturing, a manufacturing company that branched out into high-tech security services years earlier and has long been well-established in the Florida market. Since 1987, it has provided electronic monitoring services for most of the offenders in these new electronic monitoring programs. By all accounts, the initial bidding process was competitive and above-board, and the quality of service has been satisfactory. Program conditions vary by type of client and program and as a result of trial and error and adjustment over time. Typically, 3-M personnel accompany corrections and probation officers who meet with program participants at their homes, where they attach monitors and set up transmitters. Once up and running, the company then monitors clients according to the conditions specified in the contracts. For instance, they may randomly check to make sure that a probationer is at home when he is supposed to be, that sex offenders maintain specified distances from parks and schools, and that people strictly adhere to their work and home or treatment schedules. If the monitoring company detects violations, it is to call the appropriate state or county agency, which then takes over. Of course, there have been glitches, but over time, both technology and management have improved, and the problems have been reduced to nuisance level. This general account is provided in a number of documents produced by the Department of Corrections and various evaluation reports by the FSU team. The single most extensive report is that of Bales and colleagues (2010).

Florida’s experience with electronic monitoring is probably something of a best case scenario. As compared to most other states, the Florida Department of Corrections is innovative. Furthermore, it has a unique state-wide authority over probation and parole, as well as some sentencing-related decisions, and maintains a good reputation within the state and a high degree of confidence among state-elected officials. It also has ample experience working with private prisons and private contractors. Perhaps most importantly, officials in the Florida Department of Corrections were committed to using electronic monitoring to help alleviate crowding in their prisons and embraced electronic monitoring, in part, because of this. Finally, the Department has a long history of working closely with experienced researchers from the College of Criminology at Florida State University, which it expected would evaluate its efforts. To date, that collaboration has produced a library of research reports on the new program.

The state’s plan eventually called for an ambitious electronic monitoring program for the seven distinct types of offenders: 1) a group of standard probationers; 2) drug offenders on probation; 3) sex offenders on probation; 4) those in special community control prison diversion programs for probationers with histories of violating less-stringent conditions of community release; 5) parolees on conditional release (serious offenders who have served most of their long terms and have been released due to earned good time); 6) straight paroles (a dwindling group of older offenders who were sentenced before the state adopted sentencing guidelines and abolished parole); and 7) recovering addicts, that is, offenders who have served their time but have long histories of substance abuse (Bales et al., 2010).

The central question for the Department and its researchers remains: Does electronic monitoring reduce recidivism and absconding in comparison with traditional types of probation supervision? Additionally, is electronic monitoring a meaningful alternative to custodial sentences in this new initiative? Certainly, this huge and multi-faceted program was initially launched to pursue a number of
objectives: to reduce recidivism and absconding rates of those on parole and probation. But one central part of it was to reduce overcrowding in the state’s prisons and jails. To this end, it was constructed as a partnership between the State’s corrections department and the State’s leading criminal justice research organization.

Researchers at Florida State University were involved with the project from the beginning. They helped design the different programs, specify criteria for selecting participants, and then compiled databases to facilitate meaningful comparisons and evaluation. Beginning in the late 1980s, as soon as the programs were underway, they began collecting data and shortly thereafter began issuing periodic progress reports. Without a doubt, Florida’s experiments with electronic monitoring are the most evaluated electronic monitoring programs in the country. A massive final report by this team was produced in 2010 (see Bales et al., 2010), but various members of the team also produced a number of interim studies and detailed assessments of particular projects within the program (see Gainey, Payne, & O’Toole, 2000; Padgett, Bales, & Blomberg, 2006; Vollum & Hale, 2002). State Corrections itself produced still more accounts of the program.

Most of these studies point to the same findings. Corrections did a relatively good job dipping into risky categories of offenders to place on electronic monitoring, and 3-M, the private provider working with Corrections, did a good job fulfilling its promises and executing its responsibility. The programs all got off the ground and enrolled substantial numbers of participants, and when found, kinks in program administration and monitoring were ironed out. When they began operations in the late 1980s, the programs used RF units, which monitored offenders through telephone lines. Almost immediately, however, the Department began switching over to more flexible and also more expensive Global Positioning Systems (GPS) which can track people’s movement via satellite communications. By the early 2010s, RF units were all but phased out in favor of GPS units.

The shift raises more issues than just cost. GPS units promise a much greater capacity to track and monitor people as compared with RF units. The latter can track the movement of people around the clock and have the capacity to locate them within a few feet of their actual location. RF units can let remote monitors know if a particular person is or is not at a particular location at a particular time. Thus, the latter only permit limited monitoring while the former allow round-the-clock monitoring.

These issues are discussed from time to time in reports of monitoring projects and descriptions of the capacity of various types of equipment. But on the whole, the capacities of various types of equipment and their distinctive impacts have not been carefully scrutinized in Florida or elsewhere. However, it is clear that in Florida, the shift from RF to GPS was accompanied by an expansion of conditions placed on participants and their scrutiny. This change might be described as a shift from monitoring to surveillance.

What effects did these programs have? Were participants cooperative? Did recidivism and, thus, return to custody decrease? Did absconding decrease? Were the programs alternatives to jail and prisons, and if so, to what extent? Or were they add-ons? In one of their interim reports, the team of lead researchers from FSU drew four robust conclusions about the program: 1) Electronic monitoring contributed to modest reductions in reoffending and absconding; 2) Electronic monitoring “works for serious offenders”—this is a significant finding since other electronic monitoring programs enroll less serious offenders; 3) Most offenders in two of the three largest target groups (recall, the program was divided into seven different clusters) would have been in prison but for electronic monitoring and home confinement: a) those convicted of violent crimes, and b) those convicted of property offenses, but c) a third group, almost all drug offenders placed on home confinement with electronic monitoring, probably would not have received prison time in the absence of the program—so net-widening; and 4) Sex-offenders who were placed on electronic monitoring after serving their mandatory sentences had especially low rates of recidivism and absconding (Padgett et al., 2006, pp. 82–86).

At first glance, this summary of findings is impressive. Electronic monitoring programs can be administered effectively and efficiently by commercial organizations, and they may have some modest impact on reducing recidivism and absconding, and this, in turn, reduces incarceration because fewer people are returned to custody for violations. Furthermore, for two of three important groups, violent offenders and property offenders but not drug offenders, electronic monitoring appears to be a genuine alternative to imprisonment, at least for some portion of the participants in these categories. At first blush, not bad.

But let’s take a closer look at all seven groups to see how many monitored offenders were directed to a real alternative to custody. Four of the seven groups mandated electronic monitoring as an add-on, some by new laws that had been adopted expressing for this purpose: (1) Ex-offenders were subject to electronic monitoring only after they had completed the full sentence under new harsher laws, (2) Serious
offenders who completed their prescribed maximum sentence and who had to be released were monitored during the short period of earned good-time after release, (3) Older offenders who had served their full sentences under older sentencing laws (the laws changed in 1983) that included follow-up parole had electronic monitoring tacked onto their parole conditions, and (4) Offenders with histories of serious substance abuse who had served their full sentence and had to be released were subject to electronic monitoring. So, by the time the program was up and running, participants selected for four of the seven types of programs were offenders who had served their full terms in prison. In other words, electronic monitoring was an add-on, not an alternative. In some instances, new laws were enacted to accommodate this, perhaps over the objections of the advocates of electronic monitoring.

This leaves three other groups. How did they fare with electronic monitoring? One of the remaining three groups consisted of those convicted of drug offenses (almost all for possession). According to the FSU researchers, most would not have been sentenced to jail or prison had they been sentenced before the outset of the electronic monitoring option. So, for five of the seven groups, electronic monitoring appears to have been an add-on almost from the outset. Of course, the programs did have some impact in lowering recidivism and absconding rates, which indirectly had some impact on the reduction of jail and prison populations.

The final two groups involve those in community control (prison diversion programs) whose offenses were not so serious as to warrant jail but who, nevertheless, had difficulties complying with standard conditions of probation and a group of standard probationers. What would have happened to those in these two groups in the absence of electronic monitoring? The FSU researchers reported that a substantial number of them might have been in jail or prison absent electronic monitoring. Perhaps success in two out of seven categories is not so bad. However, when we look at the numbers within each of the seven groups in the monitoring program, we see that the single biggest group by far consists of those convicted of possessing small amounts of drugs, an offense least likely to result in a jail or prison term in the absence of electronic monitoring. Indeed, the numbers of participants in this group are so large that they almost swamp those in all the other groups combined (Bales et al., 2010).

Furthermore, these two groups most likely to have diverted participants from jail or prison are among those with the fewest numbers of offenders. So, while they appear to have produced a genuine alternative to incarceration, the numbers are so small that their impact on the size of the custodial population is negligible.

This review alerts us to two other important developments that have not been subject to much discussion in the electronic monitoring program in Florida or elsewhere. First, as noted above, it appears that after the electronic monitoring program in Florida was underway, the state legislature enacted new laws that built electronic monitoring into sentencing in ways that had not been part of the original plan. Sex offenders were made subject to new indefinite electronic monitoring after they have served the maximum possible of their lengthy prison terms. Serious offenders who have served lengthy sentences are now tracked during the limited “good time” release portion of their sentences. And offenders with histories of drug abuse are now monitored, however minor their current possession offense is. These are all add-on penalties that were adopted after plans for the program had been completed. As such, they undermine one of its central objectives: to search for alternatives to custodial sentences. This is much the same thing that occurred in England. There, too, the Government revised its understanding of the purpose for electronic monitoring and in the process, turned it into an add-on rather than an alternative.

Second, the Florida program, like the program in England and in other locations, adapted to rapidly changing technology and in so doing, altered the aims of the program, perhaps without even realizing it. At the outset, the objective of most components of the program was to monitor offenders to determine if they were complying with the restrictions of home confinement. However, as satellite and GPS replaced RF devices, 24 hour surveillance came to replace periodic radio frequency monitoring. So even if the theory of who should be monitored and why remained the same, the ready availability of more and continuous information has altered the objectives of the program (Carney, 2012; Nellis, 2013; Paterson, 2007b). As of this writing, the consequences of these quantum jumps in technology for privacy and surveillance are still in their infancy (see, e.g., Jones, 2014).

The best that can be said of the Florida programs is that some of them keep some people out of jail and prison, but not many. For most, electronic monitoring is an additional sanction, an add-on to conditions of release, or an add-on when offenders have completed the maximum terms allowed under law. Moreover, as suggested above, under new Florida laws, there is no way that these programs can be alternatives since they are required to be tackled on after a maximum allowable sentence has been served. This picture of Florida is mixed but hardly
encouraging. It shows that electronic monitoring is or can be an alternative to prison, but, in fact, this rarely occurs. The claims that electronic monitoring produce huge savings because it costs only 10% of the cost of housing an offender in prison is attractive and has powerful appeal. But it is misleading. In Florida, very few people tagged with electronic monitors would, in fact, have gone to prison. So, we have privatization, but we also have both increased cost and expanded public social control.

Of course, this is a limited conclusion, drawn from the results of an electronic monitoring program in only one state. As I pointed out above, however, Florida is something of a best case. Its Department of Corrections was committed to taking risks and to experimentation and, indeed, did so. Still, its programs have had only limited effect in cutting into prison-bound populations. Reports on other programs are even less sanguine. In the 1990s, the Campbell Consortium commissioned an assessment of evaluations of a number of electronic monitoring programs, including the Florida program, and its principal reporter, Mark Renzema, by himself and with various colleagues, has produced a steady stream of illuminating reports (Renzema, 1992, 2003; Renzema & Mayo-Wilson, 2005; Renzema & Skelton, 1990). They found what others engaged in meta-analysis of evaluation research in criminal justice typically find: programs vary widely in scope and targets; most published studies do little more than describe program operations; and most evaluations are so primitive that it is difficult, if not impossible, to draw conclusions about their validity and reliability. For instance, Renzema (1992) found that “[only] five experiments [out of 150 project evaluations he reviewed] were attempted using random assignment, [and] only two resulted in interpretable studies” (p. 12). Turning to the best of this work and piecing together insights as best he could from partial and inadequate studies of programs in a number of American states, Renzema (1992), nevertheless, concluded that if electronic monitoring has any effect at all in reducing recidivism, or any impact in diverting offenders from prison or jail, it is “probably not much” (pp. 12–13).

Implications of Electronic Monitoring

The combination of the plummeting crime rate over the past three decades, but only modest declines in imprisonment rates and an increase in cost-conscious public officials, have probably increased interest in electronic monitoring. It is not clear, however, that this translates into expanded use of electronic monitoring as an alternative to custody. If anything, the evidence reviewed above suggests just the opposite: Electronic monitoring is almost always used to enhance conditions of probation, parole, pretrial diversion, and pretrial release, and only occasionally as an alternative to custody. Still, it is clear that it can work as an alternative. Recall Sheriff Rainey’s self-initiated program in Contra Costa, California that has now been operating since the 1990s.

As of now, the most important promise of this innovation is its potential to enhance and expand control and surveillance of those who are not likely to be prison bound. The uses of electronic monitoring and its allied functions are limitless. We are on a new frontier that has yet to be mapped, and the boundaries of that frontier will grow by leaps and bounds and include applications we cannot yet even imagine. We can get a sense of this from reviewing some ideas that are by now well-developed by companies anxious to expand more deeply into the criminal justice market. Some of these ideas have already been put into operation in a few places. In the not too distant future, I suspect, many of them will be familiar and standard practices. The list below is just the tip of the proverbial iceberg. Note that none of these new ideas target prison-bound offenders. If adopted, all such privately run programs will have the consequence of expanding, not contracting, public social control. In addition, they will further blur the distinctions between the criminal and civil process, juvenile and adult justice, the school and the jail, and insurance companies and law enforcement. They will also add, not decrease, the costs of operating our criminal justice system.

Drug Possession. Electronic monitoring is likely to expand for those convicted of drug possession and replace what otherwise might have been unconditional probation or probation and drug treatment. The emphasis will be on drug testing through remote electronic monitoring devices.

Sex Offenders. It is increasingly popular to impose indefinite periods of electronic monitoring as an additional condition of parole for sex offenders. This has already reached its saturation point, but the policy can easily be expanded to other types of offenders (Lave, 2011; Leon, 2014; Leon, Burton, & Alvare, 2011).

Pretrial Services Agencies. Since they were first established, pretrial service agencies have championed supervised release as a condition for release (Feeley, 1982, 2014), and now they are enthusiastically adding electronic monitoring to their repertoire. Coupled with a new-found enthusiasm for actual prediction models, electronic monitoring should take off.

School Truancy. One innovative way to combat chronic truancy is to attach electronic tethers to problem students.
Gangs. Gangs and hot spots pose a major problem for law enforcement. Attaching electronic monitors to gang members, even just a few of them, should allow officials not only to track those individuals but also to identify hot spots where gang members gather.

Restraining Orders. Electronic monitoring can be of enormous use in enforcing restraining orders of all sorts.

Alcohol and Drug Monitoring. Electronic devices attached to the body can now monitor drug and alcohol intake and soon should be able to monitor physiological indicators of anger, so it is possible that insurance companies as well as law enforcement may insist upon them for some people.

Immigration and Naturalization. Electronic monitoring might be used to track low-risk people in trouble with the ICE, who previously would simply have been subject to a summons. They might be placed on wives and children of men who are in trouble with the ICE, as well as low-level terrorist suspects.

INS and Terrorist Lists. Persons of interest who may be required to appear at hearings for civil and immigration purposes may be subject to electronic tags.

Monitoring for Those in Custody. Electronic monitoring can also be used to keep tabs on people already in custody, such as open facilities, half-way houses, and even secure institutions. It may have a huge potential for both adults and juveniles housed in low-security community corrections facilities.

Traffic Cameras and Near-Automatic Conviction. Traffic light cameras are spreading like wildfire because they are installed on public property at no cost to government, reap windfalls for contractors and government alike, and promote safer driving.

Other Possibilities. Bioinformatic technology can be used for facial recognition and retinal identification and if installed widely, can provide near-instant identification of thousands of people going about their normal business (Jones, 2014).

Some of the uses for electronic monitors identified above do not involve criminal law enforcement but in light of current developments, seem plausible enough as extensions of current practices that might be used by law enforcement, public schools, civil matters, and by other institutions, such as schools, employers, and insurance companies.

Electronic Monitoring: An Assessment

Despite being touted as alternatives to incarceration, most of the electronic monitoring programs canvassed in this article were used where there was little likelihood that custody would have been imposed in their absence. It is clear, however, that electronic monitoring is used, in Blomberg’s (2003) terms, as part of the “piling up of sanctions” (p. 424) and only incidentally as an alternative to custody. This development was almost predictable from the outset (Blomberg, 2003). Merchant entrepreneurs promoted it as if it were a miracle pill: It could monitor, detain, be used to impose retribution, be used for treatment, and the like, and all at a tiny fraction of the cost of custody. Not surprisingly, it caught the attention of cost-conscious officials. Once they were hooked, however, risk-aversion set in, and electronic monitors were diverted to be used on softer, lower-risk, and more plentiful targets. Certainly, it is another feature of our Alice in Wonderland-like criminal justice system. Yet, as my discussion has shown, this pattern and practice were neither unforeseeable nor unforeseen. Florida’s own experiment with electronic monitoring quickly came to be constrained by new sentencing laws that precluded its use to cut into prison-bound groups. England’s great alternative to expensive prisons was transformed into an expansive new electronic probation. By now, piling up sanctions can no longer be seen as the unintended consequences of a good reform gone awry. It must be seen as the foreseeable and perhaps foreseeable reaction to risk-averse officials on the one hand and successful entrepreneurs’ desires to pluck low hanging fruit on the other.

To get an idea of just how energetic support for this high-tech world of the new criminal justice is, one need only attend meetings of professional associations of prosecutors, police, probation, pretrial services agencies, or corrections officers, or for that matter associations of county supervisors, state legislators, and judges. Or, one could read the ads in publications for the various professional associations of these groups or the slick documents produced by vendors. One will be overwhelmed by the number of vendors and the variety of products. At conferences, vast lobbies, ballrooms, tents, and parking lots are overflowing with new and improved products that vendors are happy to demonstrate. In the electronic monitoring business, RF devices are now being replaced with passive GPS units, and passive GPS units are being replaced with interactive units. The newer, smaller, more efficient and more effective devices can now detect alcohol and drug use; these will be soon be replaced by units that can monitor and perhaps respond to mounting anger. Operant conditioning technology can easily be built into these devices so that recorded feedback messages can be programmed into them to provide warnings to wearers if they are about to violate conditions (for an account of developments in technology, see
There is a steady move to expand and deepen surveillance and extend it to ever greater numbers of problematic persons, such as convicted offenders on parole and probation, arrestees out on bail, accused persons in pretrial diversion programs, juvenile delinquents, school truants, suspected offenders, those subject to restraining orders, offenders who have served their time and are on lifetime parole, people under civil restrictions, aliens who are under suspicion, and perhaps to those with high-risk scores based on actuarial tables.

Companies providing such services are not only out in full force at conferences, they do what all government contractors do: They develop ties to key decision makers, including chairs of key legislative committees, key officials in mayors' and governors' offices, and important figures in the judiciary. They also make contributions to election campaigns, take officials on junkets, and employ former public officials to contact colleagues in their old agencies.

Throughout all this, vendors continue to tout electronic monitoring as an alternative to custody and emphasize the huge cost savings—as much or more than 90% in savings. Nevertheless, to date they have been most successful designing programs for add-ons, not alternatives. Cost savings is an illusion, a way to catch the attention of customers, and not a viable proposal—at least for England and the United States for the foreseeable future. In the United States, cautious innovators like Sheriff Rainey, whose program I discussed above, are too few and far between.

Of course, there are frequent charges of conflict of interest, favoritism, and corruption, claims familiar to anyone who knows the literature about the military-industrial and the prison-industrial complex in the post-Cold War era. Certainly, many allegations are true. Some officials have gone to jail for taking bribes, others have resigned from company boards or from public service, while the behavior of others remains questionable. And contracts have been voided. But there is nothing to suggest that such problems are any greater or any smaller than problems found in other areas of government contracting, say supplying janitorial services in public schools, garbage collection for municipalities, or weapons for the Defense Department (Jacobs, 2006). Indeed, many of the same problems were found in the process of obtaining government contracts to ship convicted felons to Chesapeake Bay.

Opponents of privatization point to such practices as reasons not to privatize, but to my mind, they miss the deeper issue that drives privatization and its inability to provide real alternatives: the entrepreneurial drive that leads to innovation, the appeal of new markets, the attraction of soft targets, and, at the same time, intensely risk-averse public officials.

Conclusion

This paper has examined two important policies: transportation and its 21st century counterpart, electronic monitoring. Both had or are having transformative effects on the criminal process. In the 18th century, transportation dramatically increased the state's capacity to punish, and now, electronic monitoring is reshaping and expanding the state's capacity to impose social control. Both innovations were introduced by entrepreneurs, private contractors who sensed a market for their products and successfully promoted them.

The significance of these developments is underappreciated. In both instances, one strong appeal is that the programs are replacements or alternatives for harsher and more primitive policies: transportation for capital punishment and electronic monitoring for imprisonment. Historians of criminal justice have popularized this alternative explanation for transportation, and advocates of electronic monitoring are doing much the same for this innovation. Today, contractors themselves, public officials, and a great many observers and academics characterize electronic monitoring as an alternative. But in both instances, with transportation and electronic monitoring, the innovations have been directed at softer and more tractable targets, those who most likely would have been pardoned or whipped in the case of transportation, and those who would not receive time in jail or prison now. Different reasons account for each policy. The account of transportation has been institutionalized by Whig historians who have advanced the argument that transportation was part of the steady and inevitable reform of English criminal justice, although, of course, it was the central objective of the architect of the 1718 Act (Beattie, 1986; Rubin, 2012). No doubt it is also due in part simply to a careless causal inference from a careless assessment of a sequence of events.

Vendors of commercial electronic monitoring services do what salespeople always do, emphasize cost savings and dramatic benefits, and try to be all things to all people. The claims of vast cost savings are, in fact, true if used as directed. The claim has to turn heads. But as they go on to talk about their products, they turn to softer targets—less risky offenders—which are likely to have greater appeal to risk-averse officials. Not coincidentally, the less-risky group is far larger than the riskier group. Four and a half million people are on probation and parole in the United States at any given moment, as opposed
The story of electronic monitoring is, however, quite different on the European continent. Judges, prosecutors, corrections officials, and ministries of justice in a number of European countries have taken great interest in electronic monitoring, even if they have not embraced it with the enthusiasm of the English. They have watched the American and English experiences with care, and after doing so, set out on a quite different path. They have been explicit and emphatic in their desire to use the technology to reduce reliance on prison, and they have devised carefully defined and controlled pilot programs to pursue this objective. In many instances, electronic monitoring has been approved in conjunction with new sentencing laws that, for instance, create a presumption of a noncustodial sentence for anyone sentenced to six months or less in prison (Nellis, 2014a; Nellis et al., 2012). Use of electronic monitoring varies widely across Europe, and it is beyond the scope of this study to report on the successes of the various programs (see Nellis et al., 2012), but it does appear that officials there have taken a page from Sheriff Rainey’s playbook and begun from the presumption that electronic monitoring should only be used to reduce reliance on incarceration for offenders who otherwise would receive relatively short custodial sentences, which is a huge percentage of those doing time in both the United States and England. By all accounts, this targeted approach has worked wherever it has been tried on the Continent (see Nellis, 2014a; Nellis et al., 2012). One reason, I suspect, is that it has been devised from the start to finish, not by private entrepreneurs, but by cautious officials in countries with strong, capable central ministries of justice who simultaneously are charged with oversight for reviewing sentencing practices, correctional populations, and criminal justice policy making. In contrast, criminal justice administration and policymaking in the United States are fragmented in the extreme (see, e.g., Feeley, 2012).

Transportation and electronic monitoring are bookends in my analysis of privatization and innovation in the criminal process in the United States and England. Transportation was the first great innovation in the modern Anglo-American criminal justice system, and electronic monitoring is still only a revolution-in-the-making, but, in all likelihood, it will impact the criminal justice system in ways that we cannot yet even imagine. Still other innovations proffered by private entrepreneurs, such as private prosecution societies, convict leasing, private prisons, pretrial diversion programs, pretrial service agencies, treatment facilities, fine collection agencies, traffic light cameras, and even private courts, have been sandwiched between them. Indeed, the history of innovation in the criminal justice system is in large part the history of the experience of private entrepreneurs. It is also the history of institutions designed for one purpose that are subsequently adapted for other purposes. Indeed, this is the genius of successful entrepreneurs generally.

I am not yet clear as to what all this means. I do not have a theory, and I am not advancing a cause. I am simply curious, and I am taking a look at some readily accessible information and connecting some dots. In my ambitious moments, I am inclined to believe that the modern criminal justice system was shaped by private contractors who in the pursuit of private gain, came up with innovations that transformed the criminal process in a series of developments that started with transportation and runs to electronic monitoring and an array of other forms of surveillance and control. But a more modest view is that public officials contracted with private companies for help in implementing new reforms, and companies were successful in adapting and developing innovations that enhanced the effectiveness of the criminal process. Presumably, as I work through still more examples of innovation by private contractors, I will be able to determine whether to offer the stronger version or the weaker version of this account. In still another sense, my project is a limited extension of some of the ideas put forth by Rusche and Kirchheimer (1939/1968), Melossi and Pavurini (1981), and Sellin (1976).

Whatever version of this history best fits the case, it is clear that the history of modern criminal justice administration is one of vastly expanded horizons and controls and technologies that have been introduced by private entrepreneurs. The innovations I have examined here dramatically expanded and continue to expand the reach of criminal justice institutions in ways that were unimaginable just a few years before they were adopted. The contractors who have introduced them to the criminal process have participated in the expansion of public social control even as the innovations have been celebrated as reducing the scope and responsibility of government.

This is not an obscure or hidden function of these innovations. Despite the language of alternatives, most of the programs are specifically designed to work the way they do. They are, as it were, hidden in plain sight. It is we who prefer to
mask them in benign dress. My object, however, is not to debunk or to criticize, nor to praise. These developments may be beneficial at times and undesirable at others. More modestly, I simply want to make the facts more explicit. An analysis of public policy requires both sobriety and clarity. To date, the discussion of alternatives of both yesteryear and today has been mired in obfuscation. Contractor-supplied transportation has come and gone, so perhaps we need not worry about it as much as I have done here. Nevertheless, electronic monitoring, private prisons, juvenile facilities, ICE detention centers, drug treatment programs, pretrial diversion programs, privatized probation, and a host of other privately administered alternative programs are still in their infancy. No doubt some of these programs are deserving of support and expansion (see, e.g., Morris & Tonry, 1990). Some advance sound ideas and others may not. But whatever they are, we do no one any good if we mask their functions by labeling them as alternatives.

References


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Malcolm Feeley is the Claire Sanders Clements Dean’s Professor of Law at the University of California Berkeley School of Law. Before joining the Boalt Hall faculty in 1984, Malcolm Feeley was a fellow at Yale Law School and taught at New York University and the University of Wisconsin. He served as the director of the campus Center for the Study of Law and Society from 1987 to 1992. He has also been a visiting professor at Hebrew University, Kobe University, and Princeton University.

Feeley has written or edited over a dozen books, and has authored several dozen articles in social science journals and law reviews. Among his books are The Process is the Punishment(1992), which received the ABA’s Silver Gavel Award and the American Sociology Association’s Citation of Merit; Court Reform on Trial (1989), which received the ABA’s Certificate of Merit; and Fighting for Political Liberalism: Comparative Studies of the Legal Complex (with Terrence Halliday and Lucien Karpik, 2008). His most recent articles examine issues of federalism, women and crime in the eighteenth century, prison privatization, and the role of bench and bar in fostering political liberalism.

**ENDNOTES**

1 The year 1685 is a good date to settle upon, although it was not formally recognized as a punishment on its own until 1718.

2 This graph was prepared by Ashley Rubin, and is based on material presented in her article, “The Unintended Consequences of Penal Reform: A Case Study of Transportation in Eighteenth Century London,” *Law & Society Review, 46,* 815–851 (2012) and is used with her kind permission.) Some comments are necessary in order to interpret this graph. Were systematic figures available for the 1500s and up to 1680 and added to it, the death penalty, the middle orange segment, would be much larger, especially in contrast to the bottom right hand segment of the graph that consists of transportation.
For an exhaustive description of the succeeding generation of electronic monitors, see Renzema, 1992; Paterson 2007a, 2007b.

See Paterson 2007b and Jones 2014 for a discussion of various individualized reporting and surveillance devices that are or soon will be on the market and likely will be adopted.

Formerly Securicor, which had merged with the Danish security firm, Group 4.

See Taylor & Ariel, 2012, for a discussion of the possible impacts of different types of equipment and levels of monitoring.

For a more recent review on the quality of evaluation research in this area, see Taylor & Ariel (2012), whose conclusions are not much different.