“Technocorrections”: The Promises, the Uncertain Threats

by Tony Fabelo

In this new century, the technological forces that have made the use of cell phones ubiquitous will converge with the forces of law and order to create “technocorrections.” The correctional establishment—the managers of the jail, prison, probation, and parole systems—and their sponsors in elected office are seeking more cost-effective ways to increase public safety as the number of people under correctional supervision continues to grow. A correctional establishment that takes advantage of all the potential offered by the new technologies to reduce the costs of supervising criminal offenders and minimize the risk they pose to society will define the field of technocorrections.

The technologies of technocorrections

Emerging technologies in three areas—electronic tracking and location systems, pharmacological treatments, and genetic and neurobiologic risk assessments—may be used in technocorrections. Diverse, converging cultural forces are promoting them. While these technologies may significantly increase public safety, we must also anticipate the threats they pose to democracy. The technocorrectional apparatus may provide the infrastructure for increased intrusiveness by the state and its abusive control of both offenders and law-abiding citizens.

We need to start debating the ethical and legal questions that have to be answered if we are to understand how to prevent the state from using the technocorrectional establishment in ways inconsistent with constitutional or ethical standards. Because the application of technologies tends to move faster than the enactment of laws to manage them properly, legal protections need to be developed immediately.
practitioners and scholars foremost in their field, representing a broad cross-section of points of view, were brought together to find out if there is a better way to think about the purposes, functions, and interdependence of sentencing and corrections policies.

We are fortunate in having secured the assistance of Michael Tonry, Sonosky Professor of Law and Public Policy at the University of Minnesota Law School, and Director, Institute of Criminology, University of Cambridge, as project director.

One product of the sessions is this series of papers, commissioned by NIJ and the CPO as the basis for the discussions. Drawing on the research and experience of the session participants, the papers are intended to distill their judgments about the strengths and weaknesses of current practices and about the most promising ideas for future developments.

The sessions were modeled on the executive sessions on policing held in the 1980s and 1990s under the sponsorship of NIJ and Harvard’s Kennedy School of Government. Those sessions played a role in conceptualizing community policing and spreading it. Whether the current sessions and the papers based on them will be instrumental in developing a new paradigm for sentencing and corrections, or even whether they will generate broad-based paradigm for sentencing and corrections, remains to be seen. It is our hope that they will be instrumental in developing a new paradigm for sentencing and corrections, or even whether they will generate broad-based

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The critical challenge will be to learn how to take advantage of new technological opportunities while minimizing their threats.

**Tracking and location systems**

Electronic tracking and location systems are the technology perhaps most familiar to correctional practitioners today. Electronic monitoring—with either old-fashioned bracelets that communicate through a device connected to telephone lines or more modern versions based on cellular or satellite tracking—are in use in most States. With this technology, correctional officials can continuously track offenders’ locations to supervise their movements. Soon some of the current technical glitches in satellite tracking (such as difficulties in urban areas where skyscrapers block reception) will be removed. The technology may also enable correctional officials to define geographic areas from which offenders are prohibited and to furnish tracking devices to potential victims (such as battered wives). The devices will set “safe zones” that trigger alarms or warning notices upon approach of the offender.

Tiny cameras could be integrated into tracking devices to provide live video of offenders’ locations and circumstances. Miniature electronic devices implanted in the body to signal the location of offenders at all times, create unique identifiers that trigger alarms, and monitor key bodily functions that affect unwanted behaviors are under development and are close to becoming reality. Finally, related technologies that will make it difficult and expensive for offenders to defeat the tracking devices will guarantee their reliability.

**Pharmacological treatment**

Pharmacological breakthroughs—new “wonder” drugs being developed to control behavior in correctional and noncorrectional settings—will also affect technocrrections. Correctional officials are already familiar with some of these drugs, as many are currently used to treat mentally ill offenders. Yet these drugs could be easily used to control mental conditions affecting behaviors considered undesirable even when the offenders are not mentally ill. Experiments are now being conducted with drugs that affect the levels of brain neurotransmitters (substances in the body that transmit nerve impulses) and can be used to help treat drug abuse. On another front, research into the relationship between levels of the neurotransmitter serotonin and violent behavior continues to be refined. Findings to date seem to indicate that people who have low levels of serotonin are more prone than others to impulsive, violent acts, especially when they abuse alcohol.

The National Academy of Sciences (NAS) recommended a new emphasis in biomedical research on violence as a means to understand the biological roots of violent behavior. Neurobiologic processes are the complex electrical and chemical activities in specific brain regions that underlie observable human behavior. The NAS report states that research findings from animal and human studies “point to several features of the nervous system as promising sites” for discovering reliable biological “markers” for violent behavior and designing preventive therapies.

It is only a matter of time before research findings in this area lead to the development of drugs to control neurobiologic processes. By their very nature, these breakthroughs will result in advances (or claims of advances) in early identification of potentially violent individuals. These drugs could become correctional tools to manage violent offenders and perhaps even to prevent violence. Such advances are related to the third area of technology that will affect corrections: genetic and neurobiologic risk assessment technologies.

**Risk assessment technologies**

Correctional officials today are familiar with DNA profiling of offenders, particularly sex...
offenders. This is just the beginning of the application of gene-related technologies to corrections. The Human Genome Project, supported by the National Institutes of Health and Department of Energy, will be completed by 2003. A map of the 3 billion chemical bases that make up human DNA will be created, and high-powered “sequencer” machines will be able to analyze the map faster than any human researcher. Emerging as a powerhouse of the high-tech economy, the biotechnology industry will drive developments in this area.

Gene “management” technologies are already widely used in agriculture and are increasingly used in medicine. The progression is likely to continue, with applications in psychiatric and behavioral management. The genetic—or inherited—basis of behavior, including antisocial and criminal behavior, is being investigated by researchers. Studies of twins, for example, have revealed resemblances in behavior attributable to a genetic effect. Eventually, the genetic roots of human behavior could be profiled. An example of a step in that direction is scientists’ search for genetic explanations of variations among individuals in levels of the secretion of serotonin and dopamine (another neurotransmitter, this one playing a major role in addiction). Neurobiological research is taking the same path, although thus far no neurobiologic patterns specific enough to be reliable biological markers for violent behavior have been uncovered.

Is it possible that breakthroughs in these areas will lead to the development of risk assessment tools that use genetic or neurobiologic profiles to identify children who have a propensity toward addiction or violence? How about identifying males with a propensity for sex offending? The National Institutes of Health, working with psychologists at the University of Illinois, have conducted research on more than 8,600 children to identify those with high “aggressor” traits and to treat them, through social intervention, to prevent their involvement in violent behavior. What if these children could be more reliably identified with genetic or neurobiologic assessments?

We may be many years away from linking genetic and neurobiologic traits with social and environmental factors to reliably predict who is at risk for addiction, sex offending, violent behavior, or crime in general. But when, or perhaps even before, we are able to do it very well, attempts may be made to develop genetic or neurobiologic tests for assessing risks posed by individuals. This is already done for the risk of contracting certain diseases. Demand for risk assessments of individuals will come from correctional officials under pressure to prevent violent recidivism. Once under correctional control, specific offenders could be identified, on the basis of such testing and risk assessment, as likely violent recidivists. The group so classified could be placed under closer surveillance or declared a danger to themselves and society and be civilly committed to special facilities for indeterminate periods. In other words, incarceration could assume a more preventive role.

“Preventive incarceration” is already a reality for some convicted sex offenders. More than a dozen States commit certain sex offenders to special “civil commitment” facilities after they have served their prison sentences because of a behavioral or mental abnormality that makes them dangerous. This happens today with no clear understanding of the nature of the abnormality, other than that it is an “abnormality of behavior” detested by society. It is not difficult to imagine what might be done to justify preventive incarceration if this “abnormal” behavior or criminal behaviors could be explained and predicted by genetic or neurobiologic profiling.

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** Forces converging to escalate technocorrections **

At the same time that the three emerging technologies promise more effective control of recidivism, the country’s dominant social, political, and market forces appear to be converging to create conditions conducive to the rapid expansion of technocorrections. Social scientists Charles Edgley and Dennis Brisset recently captured the essence of present-day social and political culture in an accurately drawn (though perhaps overstated) portrait. In their analysis, American culture increasingly supports the conversion of every privilege, need, aspiration, and interest into a right that must be defended with governmental intervention in the name of protecting that right, public safety, or the good of the affected person or society in general. This “meddling” on the part of government is promoted, the authors argue, by bureaucrats, interest groups, advocacy groups, and voluntary associations and is supported by a risk-averse culture: “a citizenry that wants to be protected from every imaginable risk to which human lives are subject.” Anything that can happen could happen and therefore needs attention. The citizenry has lost the ability to “distinguish between major problems and minor vices,” they write, “for the latter are viewed as simply the inevitable first steps to the former.”

** Risk aversion in public safety **

This interventionist approach is clearly justified in the name of controlling crime and
promoting public safety. The national “tough on crime” reforms increased penalties for many criminal offenses and closed loopholes that once allowed lenient correctional supervision of offenders. These reforms, which reflect Edgley and Brisset’s thesis of the general sociocultural expectation that all risk be eliminated, have promoted tougher incarceration penalties and closer community supervision of offenders. The category of offenders targeted by the reforms is symbolized by a variety of “poster criminals” who have committed horrendous crimes. Even when the poster criminals did not represent the type of offender who was most likely to confront the public, they were a reminder that anybody could be confronted by these offenders at some point.

As a result of the sentencing reforms, the number of people under correctional supervision has continued to increase. More significant, public demands on correctional officials have escalated from the traditional requirement of good behavior on the part of offenders to the requirement that no offender who is under correctional supervision become a “poster criminal.” In other words, the performance bar has been raised. Reducing the risk of recidivism has always been part of the mission of corrections, but only in the technocorrectional world is it possible to reduce the risk of violent recidivism to almost zero. The promise of technology to supervise offenders more effectively will accelerate the impulse to expand technocorrections.

Market culture creates new needs

The market culture that sells the technologies reflects the social context and the political culture (or vice versa, depending on which is the “chicken” and which the “egg”). By exploiting the propensity toward risk aversion, market forces create new outlets for technology (for example, cell phones for emergency communications). At the same time, the technology creates perceived needs that then have to be satisfied (for example, the need for locational systems that pinpoint the whereabouts of cell phone users when they call for emergency service). As markets for these goods and services expand, the cost of the technology declines, creating even further expansion and spinoffs (e-mail, for example).

Competitive market forces make it hard to resist the expanding use of technology. A new fee schedule being tested by a large auto insurance company in Houston, Texas, is an example. The basis of the proposed system is the less you drive, the less you pay. The company uses a satellite system to track when and where drivers are going.12 If this approach attracts more customers, other insurance companies will find it difficult to resist adopting the same technology for fear of losing their competitive advantage. Therefore, it will be only a matter of time before the system is widely used for setting car insurance premiums. In the correctional “marketplace,” as in the marketplace at large, corrections officials, along with their political sponsors, are not likely to be able to resist the pressure to use technologies that both reduce costs and greatly increase the odds of eliminating the threat of “poster recidivists” or recidivists in general.

A scenario to ponder

Consider a futuristic scenario of dealing with released sex offenders, comparing current low-tech methods with possible future technocorrections methods. Sex offenders are selected here for demonstration purposes because they have been demonized and ostracized by society to a greater extent than has any other group of offenders. As a result, there is likely to be a strong social consensus for applying more regimented methods to them in the name of public safety.

Today’s approach to handling released sex offenders

In the 1990s, public policies were adopted to require that certain repeat sex offenders, particularly those who have preyed on children, register with law enforcement authorities after their release from prison. As a result, law enforcement has an inventory of the place of residence and the potential movements of registered sex offenders from one residence to another. Along with the registration requirement came the stipulation for public notification (usually in the newspapers) of the general area in which sex offenders live following their release. Such notification sought to make the sex offender “visible” to the community and thus defeat the anonymity said to be the best ally of those who want to reoffend.

The approach becomes more intrusive

The logic implicit in this approach leads naturally to expansion of the policy. Today, most States have moved from requiring registration of a narrowly defined group of repeat sex offenders and public notification of the general area of their place of residence to requiring that most sex offenders, including juveniles, register and notify their neighbors...
of their names and addresses. People now know if a sex offender is living “next door.” Some sex offenders must register for life. As a result of these policies, the number of registered sex offenders has increased nationwide. In one large State, for example, the number has increased from a few thousand registered as a result of the policy initially adopted in the early 1990s to more than 20,000 registered under the policy most recently adopted. This State’s requirement that a photo and criminal record of the sex offenders be posted on the community. Thus, they will be unlikely to receive the support they may need to help them avoid offending.

What price technological effectiveness?
Assuming that in the future the public will demand more effective interventions for sex offenders than current registration and notification policies can provide, could technocorrections make community surveillance or treatment more effective? Hypothetically, greater effectiveness could be achieved with either more regimentation or less of it. Would there be relatively less regimentation through development of a “wonder drug” that controls the impulse for sex offending? Depo-Provera® has been used for years to reduce offensive sexual behavior. Might other drugs be developed that make cognitive/psychological treatment of sex offending so effective as to eliminate the need for incarcerating a large number of sex offenders in order to incapacitate them (after appropriate punishment)? Would prison terms be shortened if the new treatment guaranteed effectiveness in reducing recidivism?

On the other hand, the aim might be to use the new technologies to develop more regimented and potentially more intrusive interventions. If so, we might implant computer chips in convicted sex offenders to monitor their location and measure the hormone levels that control sexual arousal and create a mechanism to track them. What if sex offenders implanted with these devices could be momentarily “stunned” by chemicals released by the implants if they came anywhere near day care centers, schools, or houses that were equipped with location alarms?

Should we be concerned about how these technologies are used as long as they curtail sex offending? Should they be used to increase treatment flexibility, reduce social regimentation, and restore the individual to a productive relationship with society? Should they be used to increase control and regimentation? To use traditional correctional parlance, do we care if the technologies are used mainly to enhance rehabilitation or mainly to enhance surveillance and incapacitation?

What other issues should we be concerned about as we implement an electronic, pharmacological, and genetic or neurobiologic infrastructure to identify, track, and control offenders more closely? Should we heed Edgley and Brisset’s warning, “The more we ask government to meddle into the lives of others, the closer we get to creating an apparatus that will in all likelihood eventually meddle into our own”?15

Controlling technological control

Technological innovations used to be years in the development stage before reaching the marketplace. Today, the interval between product development and the market can be almost instantaneous. We no longer have the luxury of time to anticipate the effects of technological innovations on society or to prepare for violations of our rights and privacy that they might present. The implementation and marketing curve has surged far ahead of the relatively sluggish enactment of legal and regulatory standards for appropriate application of technology.

As the development of technological innovations soars exponentially, it is not too early to start debating their potential threats. Can we shape the way these technologies will be applied to corrections? Can we encourage—through policies, funding, or research and
development—the application of these technologies in less regimented and more effective ways and thereby prevent the development of an extensive, government-controlled surveillance, incapacitation, and preventive incarceration apparatus?

Toward values-based technocorrections

It is possible to shape the way these technologies will be used if we start today to make explicit the value options that we face in deciding how to apply them. There needs to be a consensus about a values framework for promoting appropriate technocorrections. To arrive at that consensus requires first generating an understanding of the issues through research, symposiums held with private industry and policymakers, and input from related interest groups. The values framework developed through this process would then be widely circulated so as to create the necessary ethical awareness, at the policymaking level, of the direction technocorrections should take. The initial, concrete steps might be:

- Sponsoring an initiative to identify emerging technologies, indicate how they might be applied to corrections, and provide scenarios for applying them, with timelines of their potential marketability.
- Organizing private and public symposiums to develop scenarios of how best to apply the technologies, identifying and weighing the anticipated benefits and disadvantages of each technology profiled.
- Developing model policies, for consideration by State policymakers, that minimize the potential threats in applying the new technologies in a correctional setting.

A final caveat

The main threat of technocorrections may be the incentives it offers to expand the net of state control in order to deal with social and behavioral problems in the name of public safety. As control by the state becomes less costly and more effective, less attention may be paid to the development of policies to assist institutions of informal social control or to the accumulation of human capital to prevent crime and increase public safety. The advent of technocorrections could also mean there may be greater incentives to define a broader set of deviant, unpopular, or just unconventional behaviors (body piercing, for example) as criminal. As more people are labeled “criminal,” the apparatus of technological control would continue to expand, invisibly intruding into the privacy of individuals and providing more tools and opportunities for the state to abuse its powers if it is corrupt enough to do so.

The potential for abuse of state power should never be dismissed as farfetched. In our democracy, the debate over how best to balance the use of correctional techniques to maintain public safety against the need to preserve essential freedoms must take on a new urgency as technocorrections develop. As “corrections” becomes “technocorrections” in this new century, everyone in the field would do well to address the issue of how to make optimal use of new technology to increase correctional effectiveness without increasing regimentation and without building an apparatus of control for the state to abuse.

Notes

5. Ibid., 12. Reiss and Roth caution, however, that “the generalizability of experimental findings from other animal species to humans is not always straightforward” (p. 116).
10. Ibid., 15.
11. Ibid., 18.
The Executive Sessions on Sentencing and Corrections

Convened the following distinguished panel of leaders in the fields:

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Senator
Oregon State Senate

Harold Clarke
Director
Department of Correctional Services
State of Nevada

Cheryl Crawford
Deputy Director, Office of Development and Communications
National Institute of Justice
U.S. Department of Justice

Barbara Damchik-Dykes
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Walter Dickey
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Ronald Earle
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Joan Petersilia
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