Some twenty years ago I wrote that following a lecture in Florida on psychopathy and emotions a forensic psychiatrist approached me and said, "Your research implies that psychopaths may be mentally disordered, perhaps not as responsible for their behavior as we once thought. Until now, a diagnosis of psychopathy has been 'the kiss of death' for many murderers. Will it now become the 'kiss of life' for them?" I can't recall how I responded, but it is clear that his comment and question reflected dilemmas that persist to this day: What implications do the findings from risk assessment, behavioural genetics, and neuroscience have for the criminal justice system, particularly with respect to psychopathy and legal culpability? Is psychopathy a mitigating factor, an aggravating factor, neither, or dependent on the context?

There are no simple or generally satisfying answers to these questions, as the contents of this volume clearly indicate. First, there is disagreement among researchers and commentators about what the science actually tells us about the nature of psychopathy (e.g., genetically or neurologically “damaged,” or just different?). Second, there is debate about the extent to which the legal system will be, or should be, influenced by what the science says about psychopathy and culpability.

My own view is that psychopathic individuals have an intellectual understanding of the rules of society and the conventional meanings of right and wrong, and know enough about what they are doing to be held accountable for their actions. Like Iago in Shakespeare’s Othello, they choose which rules to follow or to ignore, based on their own self-interest, a calculating appraisal of the circumstances, and a lack of concern for the feelings or welfare of others. They lack empathy, guilt or remorse for their actions, and are emotionally “disconnected” from others. But, they do not ignore or break every moral or legal code, nor do they make everyone they encounter a victim. There is little doubt that many psychopathic features are associated, in theoretically relevant ways, with a variety of brain structures and functions that differ from those of the majority of other individuals. But, this does not necessarily mean that they suffer from a neurological deficit or dysfunction. Indeed, psychopaths might claim that because they are not encumbered by emotional baggage they are more rational than most people. As a psychopathic offender in one of our research projects put it, “The psychiatrist said that my problem is I think more with my head than with my heart.” He did not see this as a problem, and went on to say that he was “a cat in a world of mice.”

This unintended but succinct allusion to the evolutionary view of psychopathy as an adaptive life strategy implied that he merely was doing what nature intended him to do. Whatever the merits of this particular view, we should consider the possibility that the actions of psychopaths reflect cognitive, affective, and behavioural processes and
strategies that are different from those of other people, but for reasons other than neuropathology or deficit, in the traditional medical and psychiatric sense of the terms. I say this because it is tempting—for experts and laypersons alike—to explain the callous, manipulative, and remorseless behaviour of psychopaths in terms of “something” that doesn’t work properly. Such explanations are understandable when the observed differences between psychopathic and other individuals involve brain regions and circuitry that are related to emotional, social, and executive functions that characterize psychopathy. And it is not surprising that many observers view clinical descriptions and empirical findings through a prism of dysfunction when dealing with adjudicated criminals, particularly those who are violent. It is more difficult to do so with respect to psychopathic entrepreneurs, stock-brokers, financial consultants, politicians, clinicians, lawyers, academics, and so forth.

At a meeting of the MacArthur Foundation Law and Neuroscience Project at Stanford University in January 24-25, 2008, the topic of psychopathy and neuroscience was listed under a category labelled “Diminished Brains.” I argued that the use of this label prejudged the issue; the label subsequently was changed to “Differing Brains.” It may turn out that psychopathy is causally associated with functional and structural deficits or abnormalities, but, for now, it is difficult to differentiate correlation from causation. Are the brain structures and circuitry of psychopaths the cause of psychopathic behaviour, correlates of such behavior, or the result of a life-long pattern of unusual cognitive and behavioural strategies? How do genetics and environment play into these issues? Whatever the answers, some might argue that psychopaths lack the emotional wherewithal needed to translate intellectual, moral knowledge into behavior acceptable to society, and that this is a deficit that places them at a disadvantage when making crucial life decisions. That is, like Iago and the offender who thinks more with his head than with his heart, it is possible that their ability to make “calculating” decisions that primarily serve their own best interests (at least in the short term) reflects a deficiency in the emotional processes that contribute to “conscience” and that help others to make prosocial life-decisions.

The public is becoming increasingly more fascinated with psychopaths, both as villains and antiheros. Unfortunately, much of the information it receives comes from what has become a “psychopathy industry,” with dramatic and often uninformed portrayals of “psychopaths” in television programs and movies, magazine articles, newspaper reports, and popular books. Brain scans are great attention-grabbers, and even though their scientific meaning may be uncertain they tend to have considerable impact on the public—and no doubt legal—perceptions of psychopathy. “They must be mad or brain-damaged to do that,” goes a popular refrain. Perhaps, but among the issues that concern me are the following, listed in no particular order of importance.

• There needs to be agreement on the conceptualization and measurement of the psychopathy construct used in the legal system. Psychopathy overlaps with, but is not identical to, antisocial personality disorder as defined in DSM-IV. They may become more similar to one another in DSM-5, but it is unlikely that they will be interchangeable,
at least at the measurement level®. Self-report measures are important for research but in legal settings are not viable substitutes or proxies for carefully conducted clinical assessments.

- Scores on some measures of psychopathy, particularly the PCL-R and its derivatives, are generally reliable, but problems may arise when they are obtained by opposing sides in an adversarial legal system. The problems might be minimized by ensuring that those who conduct psychopathy assessments for the courts are qualified and trained to do so in accordance with the highest professional standards, and without regard for who pays the bill. I’ve been told that this is a naïve expectation.

- Current measures of psychopathy appear to identify a dimensional construct, although this does not rule out the possibility that individuals with extremely high scores on an instrument (e.g., on all four factors of the PCL-R) are qualitatively different from those with lower scores (i.e., members of a taxon). In any case, how high up the dimension must an individual be before being considered psychopathic enough for purposes of determining culpability? Researchers use standardized thresholds (e.g., > 30 on the PCL-R) for psychopathy, but what thresholds, cut points, or patterns of scores will be appropriate for use in the legal system?

- This brings up several related issues. How different from “normal” do brain structure and function, and cognitive, affective, and behavioral processes, need to be in order to be considered “abnormal” or “deviant” for legal purposes? What is “normal?” With respect to the dimensional/taxon issue, do differences from normality gradually appear as the measured level of psychopathy increases (suggesting dimension), or do they emerge only at a very high measured level of psychopathy (suggesting taxon)? What degree of difference from normality does a “psychopathic brain” represent? Can we have a “psychopathic brain” without a high psychopathy score? What about an individual who has a very high psychopathy score but a “normal” brain?

- At present we know little about the variability in brain structure and function in the general population, and even less about how such variability relates to differences in genetics, environment, personality and behaviour. What proportion of the general population has the structural and functional features found in psychopathy but without any indication of psychopathic behaviour? What is the ecological validity of the laboratory tasks used in cognitive/affective laboratory paradigms?

- Besides the measurement error associated with the assessment of psychopathy, there are methodological, measurement, and statistical problems in acquiring and interpreting neuroimaging data. There also is uncertainty about what such data tell us about underlying cognitive and affective processes. As a well-known psychiatrist said after a presentation I had given on psychopathy and brain imaging, “Some pretty pictures, but what do they mean?” My response was that they may provide a neurological basis for understanding psychopathic behaviour, to which he replied, “But, not necessarily a
causal basis!” Similar considerations have been raised about the implications of neuroscience for criminal culpability in general.

The chapters in this volume provide a valuable framework for discussing the difficult scientific, philosophical, and legal issues that arise when science informs debates about criminal responsibility. The basic issues are not new, but the literature relevant to the issues has increased dramatically in recent years. For example, over the past 50 years the number of publications on psychopathy has increased from less than 15 per year to over 250 per year, with a cumulative total approaching 3000. The number of active researchers has increased from a dozen or so to many hundreds, and growing rapidly, with a healthy mix of those with basic and applied interests. Researchers now have their own professional organization, the Society for the Scientific Study of Psychopathy (SSSP; www.psychopathysociety.org). The increasing breadth, depth, and sophistication of the multidisciplinary thinking and research on psychopathy are truly impressive, but we have a lot to learn. For now, we should be judicious in drawing out the potential implications of this research for legal matters.

* DSM-5 retained the DSM-IV diagnostic criteria for ASPD. This note is not in the published version of the Forward.

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