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Neuroscience in forensic psychiatry: From responsibility to dangerousness. Ethical and legal implications of using neuroscience for dangerousness assessments

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ABSTRACT

Neuroscientific evidence is increasingly being used in criminal trials as part of psychiatric testimony. Up to now, "neurolaw" literature remained focused on the use of neuroscience for assessments of criminal responsibility. However, in the field of forensic psychiatry, responsibility assessments are progressively being weakened, whereas dangerousness and risk assessment gain increasing importance. In this paper, we argue that the introduction of neuroscientific data by forensic experts in criminal trials will be mostly be used in the future as a means to evaluate or as an indication of an offender's dangerousness, rather than their responsibility. Judges confronted with the pressure to ensure public security may tend to interpret neuroscientific knowledge and data as an objective and reliable way of evaluating one's risk of reoffending. First, we aim to show how the current socio-legal context has reshaped the task of the forensic psychiatrist, with dangerousness assessments prevailing. In the second part, we examine from a critical point of view the promise of neuroscience to serve a better criminal justice system by offering new tools for risk assessment. Then we aim to explain why neuroscientific evidence is likely to be used as evidence of dangerousness of the defendants. On a theoretical level, the current tendency in criminal policies to focus on prognostics of dangerousness seems to be "justified" by a utilitarian approach to punishment, supposedly revealed by new neuroscientific discoveries that challenge the notions of free will and responsibility. Although often promoted as progressive and humane, we believe that this approach could lead to an instrumentalization of neuroscience in the interest of public safety and give rise to interventions which could entail ethical caveats and run counter to the interests of the offenders. The last part of this paper deals with some of these issues—the danger of stigmatization for brain damaged offenders because of adopting a purely therapeutic approach to crime, and the impact on their sentencing, in particular.

1. Introduction

Neuroscientific evidence is increasingly being used in criminal trials as part of psychiatric testimony, nourishing the debate about the legal implications of brain research in psychiatric-legal settings. During these proceedings, the role of forensic psychiatrists is crucial. In most criminal justice systems, their mission consists in accomplishing two basic tasks: assessing the degree of responsibility of the offender and evaluating their future dangerousness and risk of recidivism. Until recently, most of the ongoing debate concerning the introduction of neuroscientific data in forensic psychiatric evaluation was focused on the first task, i.e., the relevance and efficacy of neuroscientific evidence for assessing the responsibility of an offender (Aharoni, Funk, Sinnott-Armstrong, & Gazzaniga, 2008; Morse, 2008; Vincent, 2010). Nevertheless, in the field of forensic psychiatry, the evaluation of future dangerousness, and prediction of recidivism risk gain increasing importance and become a central issue of an expertise, determining the therapeutic or security measures to be imposed (Leygraf & Elsner, 2008; Moulin & Gasser, 2012). This tendency comes as a result of a paradigm shift that takes place in criminal policies: in the current socio-legal context, as a result of the growing social concern about public security, the majority of European countries have massively adopted new legal provisions aiming to fight against various forms of risks associated with the dangerousness of certain offenders (Rose, 2010). Current criminal justice systems shift in focus away from punishment and on to prevention (Looney, 2009) through treatment (Doron, 2010).

We argue that in the current policy era of zero tolerance, neuroscientific data introduced by forensic experts in criminal trials will most probably be interpreted as an indication or used as a means to evaluate an offender's future dangerousness,.

Given the existing crimino-political situation, judges, confronted with the pressure to ensure public security, may tend to interpret neuroscientific knowledge and data as an objective and reliable way of evaluating one's dangerousness and risk of reoffending. This tendency might be encouraged by a utilitarian approach to punishment supposedly "revealed" by recent neuroscientific research that has been able

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to put into question the existence of free will and responsibility. Challenging the notions of free will and responsibility, neuroscience implies a radical revision of our criminal justice system, moving away from retributively motivated sanctions toward crime prevention and rehabilitation. Thus, on a theoretical level, this kind of approach seems to justify the current tendency in criminal policies to focus on prognostics of dangerousness.

Although this shift away from punishment aimed at retribution in favor of a consequentialist approach to criminal law is advanced by some authors as a more progressive and humane approach, we believe that it could lead to an instrumentalization of neuroscience in the interest of public safety, which can run against the proper exercise of justice and civil liberties of the offenders.

This paper is organized in four parts. In the first part, we aim to show how the current socio-legal context has reshaped the task of the forensic psychiatrist, with dangerousness and risk assessments gaining an increasing importance and becoming a legal necessity. In the second part, we aim to examine from a critical point of view the promise of neuroscience to serve a better criminal justice system by offering new and more reliable tools for assessing dangerousness. Given this context, in the third part we aim to explain why neuroscientific evidence in the future is likely to be used as evidence of dangerousness of the defendants. As this tendency might entail a risk to the proper exercise of justice and to civil liberties, several ethical issues have to be addressed. The last part of this paper deals with some of these issues—the danger of stigmatization for brain damaged offenders because of adopting a purely therapeutic approach to crime, and the impact on their sentencing, in particular.

2. The forensic psychiatrists' task within the current social and legal context

2.1. Security based criminal policies

2.1.1. A social concern for security

Individuals, communities, and civilizations have always been engaged in a permanent dialogue with fear. The latter's new face in the modern era is the fear of crime (Delumeau, 1978) and a generalized concern about public safety, which builds around the notions of fear, security, and risk prevention.

In the past 30 years, fear of crime has known a surprising increase internationally and according to past studies, it affects more than 50% of Swiss citizens, 50% of Portuguese, 45% of Belgian, 35% of French, 25% of Canadian, 45% of Japanese, and 20% of Finnish citizens (Roberts, 2001). Interest in security and its analogues, personal safety, community safety, and public order has grown enormously (Zedner, 2003a, 2003b). This popular fear of crime is accentuated by widespread media coverage, which depicts crime as a generalized every day phenomenon, threatening citizens' everyday life and necessitating stronger punishment. Considering these fears as unrealistic, some authors describe this phenomenon as a "societal paranoia agitated by unreasonable fears and haunted by a security neurosis" (Senon, 2005).

As a result, in our culture of social fear, public protection from risk and the pursuit of security as a matter of everyday domestic policy tops the political agenda (Rose, 2010). Like risk, security provokes strong emotions and licenses extraordinary exercise of power (Zedner, 2003a, 2003b). Criminality and the fear of the crime have the power to generate a broad social consensus concerning the measures of law enforcement or crime prevention (Boers, 2003; Hummelsheim, Hirtenlehner, Jackson, & Oberwittler, 2011). With citizens requiring that precautionary logic prevails in criminal policies, reduction of risk emerges as a major societal value (Kaminski, 2005), necessitating the intervention of the State in order to ensure public security and to protect citizens.

In this context, crime is seen as a normal risk of every modern society. This gives rise to the adoption of strict policies of crime prevention as part of a new management which redistributes criminal risk between the community and the individuals (Senon, 2012).

2.1.2. Strengthening criminal legislation in Europe

This increasing need for safety in the community, associated with a mistrust in the effectiveness of treatment of dangerous offenders, led to crimino-political initiatives and legal reforms, in which the protection of the community from dangerous offenders was of central importance (Leygraf & Elsner, 2008). Over the last 20 years, mental health legislation and procedures in almost all western countries have become pervaded by risk thinking (Rose, 2010), and new legal provisions have been massively adopted by the majority of western countries, aiming to fight against various forms of risks, combining, very often, programs of forced therapy (Senon, 2012; Van de Kerchove, 2011).

In France, the evaluation of dangerousness and of recidivism risk and the prevention of risk through treatment have become central elements of the French criminal policy. The French legal corpus has been expanding with new, increasingly repressive measures aiming to ensure the monitoring, treatment, and rehabilitation of offenders who are likely to reoffend because of their supposed dangerousness (Moulin, Palaric, & Gravier, 2012). The law of 25 February 2008, supplemented by the law no. 2010-242 of 10 March 2010, established a special form of preventive detention ("rétention de sûreté"). This form of detention concerns offenders of serious crimes who are considered dangerous and likely to commit more crimes in the future because of severe personality disorders and is imposed to them after they have served their sentence. This law is the final step of a long-term legal fight against recidivism in France, in which dangerousness and public safety measures tend to replace the notions of responsibility and legal punishment (Gkotsi, Moulin, & Gasser, 2014; Wyvekens, 2011).

In Germany, the state political powers have promised more safety against a statistically small number of violent and/or sex offenders: the criteria for preventive detention were eased, and postrelease supervision is getting tougher and is also increasing in numbers (Boetticher & Feest, 2008). In Switzerland, the revision of the penal code has also been influenced by a strong need for the reinforcement of public security to the detriment of the individual liberties. A recent referendum led to the vote of a new law according to which "non-treatable" extremely dangerous offenders will have to be confined for life, unless new scientific methods indicate new ways of treatment (Gravier, Raggenbass, & Gasser, 2006).

In Italy, several laws have been voted in the last decades with the aim to protect the community from some forms of criminality, considered as the most aggressive: recently, several laws have been voted against some specific "types of offenders," such as mentally disordered persons, juvenile offenders, recidivists, and sexual offenders (Bernardi, 2011). In Belgium, a recent modification (2007) in the legislation concerning mentally ill and recidivists has led to an increase in the categories of people or behaviors, which are affected by the law, and has altered the balance between medical and legal proceedings (Van de Kerchove, 2011).

Finally, in the UK, attempts to measure and control risk have become a central concern in criminal justice. Critics have pointed out how the use of risk assessments can conflict with proportionality (Raynor, 2011). The criminal justice act of 2003, which introduced the "indeterminate sentence for public protection," enables judges not only to set a minimum sentence but to require the defendant to satisfy the authorities that he is fit for release and does not pose any threat to the community. Individuals considered to be a continuing threat can be detained for indefinite periods, in the grounds of an expert psychiatric judgment on their dangerousness even if they have been convicted of a minor offense (Rose, 2010).

From this very brief overview of the evolution of criminal legislation in several countries across Europe, it can be seen that the evaluation of dangerousness, the predictions, and the prevention of future criminal conduct have become integral to the function of the legal system and play a prominent role in various parts of the criminal process. A paradigm shift is taking place in terms of criminal policies. The current criminal justice system subtly shifts in focus away from punishment and on to prevention (Looney, 2009) through treatment (Doron, 2010).

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