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Gerben Meynen

Legal Insanity: Explorations in Psychiatry, Law, and Ethics

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Sickness will surely take the mind
where minds can't usually go

—The Who (1969)

Preface

Insanity cases may attract a lot of media attention. The severity of the crimes and their nature play an important role in this. The crimes tend to be strange, inexplicable, and shocking. Every decade has its examples of famous—or infamous—insanity cases, such as *Hinckley* and *Breivik*. Looking closely, debates about such memorable cases—and they are bound to be the subject of debate—are not limited to the cases themselves. The discussions may well involve the insanity defense as such. After John Hinckley attempted to assassinate U.S. president Ronald Reagan and was acquitted of his crime by reason of insanity, major revisions regarding insanity were made in many U.S. states; some even abolished the defense. After *Breivik*, legal insanity in Norway was reviewed by a commission as well. In fact, the defense has many components, and it is safe to say that most—if not all—of them are subject of debate.

Why should insanity be a component of our legal system? What should be the criteria for a successful insanity defense? What would be the reasons for abolishing it? Who should bear the burden of proof? This book addresses central questions about insanity from a multidisciplinary perspective. The perspective must be multidisciplinary because, even though insanity is a legal matter, it brings together three disciplines: law, ethics, and psychiatry. Each of them is relevant to answering central questions, and, therefore, it is not only natural, but necessary, to examine the concept and evaluations of insanity from a combined legal, psychiatric, and ethical perspective.

The reason why insanity is often debated, I suspect, cannot be explained merely by the legal relevance of the defense. Part of the explanation is the fascinating and puzzling nature of the issues under debate. They touch upon a variety of intriguing and perplexing subjects, such as serious crimes, getting away with crimes, fairness, 'madness' and the nature of mental illness, the reliability of psychiatric diagnosis and expert testimony, the use of neuroscience in the courtroom, blame, punishment, and free will. Some of these issues are practical in nature, others highly conceptual. They are drawn together by the topic of legal insanity. At least some of these notions are ones we tend to care deeply about, such as fairness, responsibility,

and freedom of choice. From my perspective, insanity is much debated not just because of practical qualms and interests, but also because we care about the concepts and values attached to it.

Even if this is not generally true, it is definitely what made me gravitate towards the concept during the first year of my postdoc in philosophy, working on a grant about free will and mental disorder. Legal insanity forcefully brought together my interests as a psychiatrist and my curiosity as a philosopher. Later on, the legal and neuroscientific intricacies only added to the appeal of the concept. Yet, in the end, it is the practice, it is the seriousness, and often the tragic sequence of events that gives the topic its relevance for me. I believe that, as a medical doctor, I would never have studied this subject for going on a decade now if, in the end, it were not about real people suffering from severe mental disorder—and doing justice to them.

Even though the topic of insanity as such is intriguing, writing this book would not have been as exciting as it has been without the input of many other people. For commenting on the manuscript, I am indebted to Sanne Buisman, Lisa Claydon, Iris Haenen, Tijs Kooijmans, David Ludwig, Ronnie Mackay, Marije Martijn, Bert Musschenga, Dennis Patterson, Hans Radder, Susanna Radovic, Henk de Regt, Dick Swaab, Jacco Verburgt, and an anonymous reviewer for Springer. I am particularly grateful to Stephen Morse, Nicole Vincent, and David Widerker, who contributed to this book through their thought-provoking writings and enlightening discussions. Furthermore, I am indebted to Stichting Koningsheide, and to Chris Wilby at Springer for his guidance and kind advice. Part of the research on which this book is based was funded by The Netherlands Organisation for Scientific Research. Finally, I thank my wife, Eva, for her many valuable remarks, but most of all for her loving support.

Tilburg, The Netherlands Gerben Meynen

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Gerben Meynen (1971) studied medicine at the VU University Amsterdam, and philosophy and theology at the University of Amsterdam. He trained as a psychiatrist, and received a Ph.D. in philosophy (2006, Radboud University Nijmegen) and in medicine (2007, VU University). He is an Endowed Professor of Forensic Psychiatry (Tilburg Law School, Tilburg University) and an Assistant Professor in the Faculty of Humanities, Department of Philosophy, VU University. Since 2006, he has been a psychiatrist at GGZ inGeest, Amsterdam.

Chapter 1
Introduction

1.1 Theoretical and Practical Background

Mental disorders can excuse a person for performing a harmful action. Consider a depressed mother who neglects her duties as a parent. We may excuse her for neglecting her children because of her psychiatric condition. Such an ethical response is widespread, and it is also reflected in criminal law, via the insanity defense. Diminished guilt due to mental disorder even predates psychiatry as a medical discipline: the insanity defense, in some form, dates back to ancient times (Robinson 1996; Simon and Ahn-Redding 2006). Still, it remains unclear exactly when and why mental disorders affect a person's moral and criminal responsibility.[1] This uncertainty is accompanied by much disputation and contention. As the neuropsychiatrist and lawyer Marvin Firestone puts it, "Probably no single issue in the annals of criminal law has stirred more controversy, debate, and comparison among laypersons, as well as jurists, than the insanity defense."[2] Some legal systems have even abolished the insanity defense—it is no longer available in Sweden and in four

[1]There are different notions of responsibility, e.g., moral responsibility, role responsibility, and causal responsibility. Within the context of this book, I distinguish between moral and criminal responsibility. See Vincent (2011a) for a differentiated account and taxonomy of responsibility concepts. Note that the concept of "lacking criminal responsibility" is broader than "legal insanity." Roughly, legal insanity can be defined as the absence of criminal responsibility due to the presence (and impact) of a mental disorder. Meanwhile, depending on the jurisdiction, mental disorders may also excuse a person in other ways than through legal insanity, e.g., by negating *mens rea*.

[2]Firestone (2007, p. 623). See also Daftary-Kapur et al. (2011, p. 40): "The insanity defense is one of the most controversial defenses in the United States." And Mackay (1995, p. 73) writes: "Perhaps more than any other area of the criminal law, the insanity defence generates heated discussion and debate."

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of the United States.[3] Still, it is available to many defendants worldwide, and legal insanity is often considered a basic and valuable notion of fairness and justice.[4]

Those who agree on the availability of the insanity defense may profoundly disagree on *many* aspects of the defense. Differences of opinion have led to an impressive variety of legal standards defining criteria for insanity. For instance, the most influential standard in Anglo-American systems is the *M'Naghten* rule. According to this standard, the defendant is exculpated if, due to a mental disorder, he did "not to know the nature and quality of the act he was doing; or if he did know it, that he did not know what he was doing was wrong."[5] This test focuses exclusively on the defendant's knowledge—and it has been extensively criticized for that reason (Elliott 1996). It is argued that mental disorders can influence behavior not merely by affecting a person's knowledge, but also and notably by impairing one's capacity to control one's actions. Such influence should excuse a defendant, too, at least in some cases.[6] In many legal systems, therefore, a defendant can also be exculpated if the mental disorder resulted in a lack of control (Simon and Ahn-Redding 2006). Still, the issue of whether a "lack of control" should be included in the legal standard for insanity is a topic of ongoing debate. This is just one example of an aspect of legal insanity which differs between jurisdictions and on which opinions diverge strongly.

One could, of course, suppose that what excuses a defendant is the mental disorder *influencing* the action, but this answer is not really helpful. For instance, a crime may be profoundly influenced by a person's passion, jealousy, or hatred. Yet, the mere fact that such a sentiment influenced the crime does not excuse the defendant at all. While our behavior is constantly influenced by a multitude of factors, mental disorders are singled out in criminal law: *their* influence can exculpate a defendant, while those of so many other phenomena cannot. In fact, what we are

[3]Morse and Bonnie (2013) and Radovic et al. (2015).

[4]Morse and Bonnie (2013) and Penney (2012). The percentage of legal cases in which the insanity defense is raised differs between jurisdictions, but it is generally low, and the success rates are even lower (Lymburner and Roesch 1999). For the United States, Callahan et al. (1991, p. 331) found, as they write in their abstract of a study in eight states, "Overall, the insanity defense was raised in one percent of all felony cases. Further, only 26 % of those raising the insanity defense were actually acquitted." See also Chap. 3 on misconceptions about the insanity defense.

[5]M'Naghten's Case, 10 Cl. & Fin. 200, 8 Eng. Rep. 718 (H.L. 1843).

[6]In some contexts, it may be helpful to distinguish between excuses and exemptions. According to Antony Duff, exemptions negate responsibility (insanity is thus an exemption), while excuses do not. Note that Duff (2007, p. 287, footnote 86) does not oppose using the term "excuse" within the context of insanity either: "What matters is not the terminology of 'excuse' and 'exemption,' but the substantive distinction it is used to draw. We could use 'excuse' in its traditional broad sense, to cover insanity as well as what I will call 'excuses': but we would then need to find another way to distinguish 'excuses' that negate responsibility, as insanity does, from those that exculpate without negating responsibility." Although the difference between the concepts is appreciated, in this book I do not make this distinction. I use "excuse" in the broad sense of the term, in particular because this book is not about different types of excuses.

looking at is an exceptional feature of mental illnesses: their ability to exculpate. Note that even if a crime is very serious, or horrific, mental disorder may still be able to excuse a defendant. After the massacre on the Norwegian island of Utøya in 2011, the sanity of the defendant, Anders Breivik, was evaluated. In principle, he could have been considered insane, even though he killed dozens of innocent and defenseless teenagers. Apparently, exculpation by mental disorders is a special and significant phenomenon. Yet, the grounds for this type of exculpation remain unclear and a matter of fierce debate. Psychiatrists, psychologists, lawyers, philosophers, and—more and more—neuroscientists are participating in this profoundly interdisciplinary debate (Pardo and Patterson 2013; Popma and Raine 2006).

To clarify the debate on legal insanity, the primary challenge is to answer the basic question: What is it about the influence of a mental disorder on human behavior that explains why we may excuse that person, in particular in a court of law? Is the influence special because, for example, the disorder affects the defendant's rationality (Morse 2003), or his free will, or his capacity for autonomous decision-making (Juth and Lorentzon 2010)? Since, nowadays, many diagnoses of some form of mental disorder, such as depression, autism, and ADHD,[7] are more common, the question that is becoming increasingly relevant is: How do mental disorders affect people's responsibility for their actions?

1.2 Approach and Aim

1.2.1 Three Perspectives

This book explores the grounds of legal insanity from the perspectives of psychiatry, law, and ethics. The issue of legal insanity lies at the intersection of these three disciplines. It is almost impossible to address the topic of insanity in any depth without touching on each of them. Psychiatry is required for expertise about the impact mental disorders may have on people and their actions—and how such impact can be reliably evaluated; note that not only psychiatrists, but also psychologists, assist courts in these matters.[8] Legal expertise is needed because insanity is a legal concept that may determine the outcome of legal decisions. Ethics is required for clarification and justification of general notions regarding responsibility and excuse. Let us look at the three perspectives a bit more closely.

Generally, the basic justification for the insanity defense is considered a *moral* one. From various traditions, ethicists have tried to explain the impact of

[7]For instance, the estimated lifetime prevalence in the United States is 47.4 % for any mental disorder, according to Kessler et al. (2007).

[8]Much of what will be said about psychiatric expert testimony in this book is also true for psychological expert testimony.

psychiatric disorders on moral responsibility.[9] Their analyses, however, tend to focus on *particular* disorders, mostly addiction and psychopathy. Psychopaths are typically callous persons lacking empathy, not caring at all about the suffering they inflict on others. Characters like Hannibal Lecter in *The Silence of the Lambs* commit horrifying crimes and seem to be prototypes of bad persons. But if they are really suffering from the mental condition "psychopathy" then, according to many authors, we cannot blame them for their acts (Luca Malatesti and John McMillan 2010). Other ethicists disagree and argue that psychopaths are—to some relevant extent—responsible for their crimes (Maibom 2008), for instance, because they still know that what they are doing is prohibited. And how about substance dependence? Should those who are addicted and who commit crimes because of their addiction be exculpated? Is an alcoholic merely the victim of a brain disease or fully responsible for failing to control his drinking behavior (Herbert Fingarette 1988; Hall and Carter 2013)? These are still very much issues of debate.

Psychopathy and addiction are just two of many psychiatric conditions, and moral philosophers have paid much less attention to the "rest" of mental disorders and their possible impact on responsibility. Susan Wolf is an exception. In her article "Sanity and the metaphysics of responsibility" (1987), Wolf does not focus on one type of mental disorder, but provides an account of insanity as a *general* factor in ascribing moral responsibility. At the same time, she acknowledges that her notion of sanity considerably extends everyday use of the term. Some ethicists hone in on the actual insanity defense, arguing that it should be revised in some specific way. For example, the philosopher Steve Matthews maintains that insanity should not be about whether or not a defendant suffered from a mental disorder, but only about whether or not the defendant's capacities required for responsibility were compromised (Matthews 2004). Ethical views on insanity are discussed in Chaps. 4 and 5.

The *legal* perspective on insanity usually relies on moral justification, which, in the legal context, can be phrased as *fairness* (Morse and Bonnie 2013). Just as it is not fair to blame and punish a young child, it is not fair to blame and punish a person suffering from a severe mental disorder that decisively influenced the commission of a crime.[10] In Bonnie's words, "The insanity defense, in short, is essential to the moral integrity of the criminal law."[11] In addition, there is a type of legal justification of the insanity defense, concerning consequentialist arguments for insanity, that is invoked less often. Sinnott-Armstrong and Levy (2011) present such a line of argument as follows:

> If someone really is insane in a way that removes the ability to avoid doing illegal acts, then threats of punishment will not deter this person from breaking the law. He will continue to commit the illegal acts regardless, in which case punishment would be pointless.

[9]Examples are Wallace (1994), Mele (2004), Matthews (2004), Fine and Kennett (2004), Maibom (2008), Haji (2010b), Litton (2010) and Vincent (2011b).

[10]On fairness, see, e.g., Fletcher (2007, pp. 134–37).

[11]Bonnie (1983, p. 194).

> Similarly, if the purpose of punishment is moral education of criminals or rehabilitation more generally, then these purposes cannot be served by punishing insane people who simply cannot learn or come to know right from wrong. Indeed, punishment and confinement might even exacerbate some mental illnesses, perhaps by removing support networks.[12]

While Sinnott-Armstrong and Levy present these consequentialist arguments in favor of legal insanity, consequentialist arguments are often used *against* the insanity defense (see Chap. 3). For instance, some fear that the insanity defense undermines deterrence and therefore should be abolished—which is a consequentialist argument. So, even though the really insane offender himself may not be deterred by punishment, as Sinnott-Armstrong and Levy argue, other citizens may be more deterred if the insanity defense is *not* available because as long as it exists, it may be perceived as a way to escape prison.

A new legal perspective on insanity is provided by neurolaw, which will be considered in Chap. 6. Neurolaw is a rapidly developing field of research concerning the impact of neurosciences on the law, in particular on criminal law. On the one hand, neuroscience allegedly provides arguments against legal insanity, while, on the other, it may support evaluations of insanity (Meynen 2013a, 2014b).

What is the basic *psychiatric* perspective on legal insanity and on performing evaluations of insanity? Psychiatrists assist the courts by giving expert testimony. They make it possible for justice to be done. As Eastman et al. put it, "it would be unethical to deny the court process expert psychiatric testimony, which is needed in order for justice to be done, including to the defendant."[13] In addition, the idea of not punishing those suffering from severe mental illness is supported by defining moments in the history of psychiatry. For instance, the removal of the chains from mentally ill patients at Salpêtrière, Paris, as depicted by Robert-Fleury (Berlin 2003).[14] But psychiatrists are not experts on either moral or legal responsibility.

Legal insanity is a *legal* concept, not a medical or psychological category. This may seem self-evident, but it is a topic of controversy as well (Chap. 7). Meanwhile, in my view, the variety of ways in which legal systems deal with insanity are always helpful reminders that insanity is indeed a legal matter. For instance, although psychiatry does not differ much between U.S. states, the criteria for insanity differ hugely, and in some states, such as Idaho, the insanity defense has even been abolished (while psychiatry is still practiced in Idaho). Nevertheless, psychiatrists and psychologists are the experts on pathological mental states and therefore their assessment of a defendant is, in principle, indispensable to a legal judgment about insanity. Clarifying and respecting the boundaries between legal and psychiatric responsibilities is a specific aim of this book (see Chap. 7).

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[12]Sinnott-Armstrong and Levy (2011, pp. 319–20).

[13]Eastman et al. (2010, p. 319).

[14]According to the myth, Philippe Pinel (1745–1826), a founding father of modern psychiatry, had the chains removed (Weiner 1994).

The approach deployed in this book can be characterized as interdisciplinary, combining the three perspectives just described: psychiatry, law, and ethics.[15]

1.2.2 Two Questions

The aim of this book is to answer two primary questions. First, which are the *theoretical* grounds for legal insanity? Second, which *practical* issues and constraints must be taken into account when translating theory into legal and forensic psychiatric practice? As we will see, the topic of insanity extends from highly theoretical notions, such as free will, to very practical issues, such as the reliability of psychiatric evaluations. Exploring legal insanity, one needs to take both theory and practice into account. Although philosophical notions may not be immediately applicable in the courtroom, they are relevant to legal responsibility and excuse—as are practical qualms about, for instance, expert testimony in an adversarial system. Some fear that psychiatrists and psychologists may become "hired guns" for the prosecution or the defense (Chap. 7). The combination of abstract and down-to-earth matters makes insanity both a fascinating and challenging topic.

The goal of this book is not to make the subject of insanity look simple. Each chapter considers further complexities: theoretical, practical, or both. But each chapter also offers arguments and conclusions that can be used when forming judgments about insanity, either in a particular legal case in which the defense is raised, or when reviewing insanity as an element of criminal law. Such judgments may be made by, e.g., legal theorists, lawmakers, behavioral experts, juries, and judges. Ultimately, insanity is about defendants, verdicts, and society's aspiration to do justice.

1.2.3 Differences Between Jurisdictions

The analysis in this book is further characterized by an international approach. It is not written from the perspective of one, single jurisdiction and it derives its examples from a variety of legal systems.[16] Still, legal insanity is always bound to a *particular* legal system. This means that some of what is true of insanity in one jurisdiction may not be true in another. Moreover, there are differences between legal systems in all kinds of respects. Let me give three examples.

First, there are significant differences regarding the *criteria* included in the insanity standard. For instance, *M'Naghten* (see above) is very different from the

[15]These three perspectives concern not only the *practice* of psychiatry, law, and ethics, but also research in these areas, such as neurobiological research in psychiatry.

[16]Meanwhile, it is not my aim to provide a systematic overview of many or all jurisdictions.

Norwegian criterion for insanity, where the mere presence of psychosis at the time of the crime is sufficient to exculpate the defendant. The variety of such criteria are considered in Chap. 2.

Second, the *burden of proof* may be different. For instance, insanity may have to be proven by the defendant or by the prosecution. Another difference is that some legal systems require sanity to be proven, while others require insanity to be proven. Finally, the threshold for proof may be different: some jurisdictions require a "preponderance of the evidence," while others may require "clear and convincing evidence," which is a heavier burden of proof.

Third, levels or *degrees* of responsibility may differ. In many jurisdictions, the dichotomy of sanity or insanity is used. In other legal systems, however, three or more degrees of responsibility are available (Simon and Ahn-Redding 2006). In the Netherlands, there are as many as five degrees of criminal responsibility: responsible; somewhat diminished responsibility; diminished responsibility; severely diminished responsibility; not responsible (legally insane) (Van Marle 2000).

These examples show that the differences between jurisdictions regarding insanity concern core elements of the defense, and must therefore be taken into account. In fact, the international perspective enables us to transcend the boundaries of individual jurisdictions and to reflect on the differences. Note that this transcendence of legal boundaries is not meant to turn away from legal practice, but rather to develop a viewpoint that can be fruitful to many legal systems.

Finally, it is not just the insanity defense that differs across jurisdictions, but legal systems themselves are likely to differ as well. For instance, a system may be inquisitorial or adversarial. Since legal systems differ considerably from one another, there is no one-size-fits-all solution to problems concerning the insanity defense. Nevertheless, some general conclusions about the shape legal insanity should take can be drawn (Chaps. 7 and 8).

1.2.4 Moral and Criminal Responsibility

The context of criminal law is significantly different from the everyday ethical context in which we may excuse friends, colleagues, family members, etcetera, for their behavior. First, criminal law deals with serious violations of norms; their gravity is such that society has criminalized this behavior. Notably, the *severity* of the violation of a social norm may be relevant for whether or not a person is exculpated for that violation. For instance, a depression may excuse a person for not going to a party. The symptoms of his depression are such that we feel the person is not to blame for staying away—a minor issue. Still, if the stakes are higher, we may feel that the disorder does not provide an excuse. Although a person is depressed, he should not behave in a certain way (e.g., abuse his children). The gravity of certain violations—*crimes*—requires people to put a lot of effort into avoiding them.

Second, a major difference between the contexts of criminal law and everyday situations of excuse concerns the issue of *proof*. In a court of law, clear evidence has to be presented regarding the defendant's psychopathological condition and the further criteria for exculpation. In principle, people will not be excused, for instance, merely on the basis of hearsay evidence. In everyday contexts, however, we may excuse a person just because someone tells us: "She is depressed." Of course, this second point, just like the first, has to do with the fact that the stakes are much higher in a court of law. The issue of proof, and more specifically the reliability of the evidence regarding insanity criteria, is a central topic of this book.

Although the stakes are usually higher in a court of law, we should not underestimate the consequences of excuse due to mental disorder in everyday human interaction. Suppose a woman has recently begun working less accurately than she used to. If her colleagues feel that this is due to a mental disorder, and that she is not to be blamed for it, their response may be supportive. However, if they are unaware of the mental disorder, or do not feel that the mental disorder is such that their colleague should be excused, their response may be less supportive. In the end, the colleagues' response may even decide whether or not this woman can keep her job. Losing one's job may have serious consequences for one's life. In other words, the impact of everyday excuses due to mental disorder—excuses outside the courtroom—may be enormous, too.

The severity of the disorder appears to be a factor as well. Certain disorders, such as fear of heights (a phobia), are very unlikely to excuse a person in a court of law due to insanity, but they may nevertheless excuse a person in everyday situations. Note, however, that there are no clear theoretical grounds why such a mild disorder could not at least partially exculpate a defendant in a specific situation, either because of insanity or otherwise. As Yaffe (2013, p. 351) writes, "For example, if a hydrophobic defendant is told that he will be tossed into open water if he does not commit a serious crime, he ought to have a better claim of duress than a non hydrophobic defendant faced with the same threat. Perhaps to a hydrophobic person such a threat is as serious as a threat to one's life."[17] Therefore, on the one hand we have to distinguish between the moral and criminal contexts, but on the other hand, they may not be *that* different.

Ultimately, the issue is: How is justice done to the impact of mental disorders on a person's responsibility? There are basically two types of errors that have to be avoided. First, erroneously considering a defendant insane who is, actually, sane. We deny this person something intimately related to being human: taking responsibility.[18] Another, perhaps even more pressing, problem with this type of error is that a person who deserves punishment, escapes it. The second type of error is holding a defendant responsible who should be considered insane. This may result in unfair judgments, unjustified punishments and, eventually, the denial of necessary treatment.

[17]The usual term for the fear of water is "aquaphobia" rather than "hydrophobia.".

[18]See Chap. 3.

1.3 Overview of the Chapters

Chapter 2 considers some influential or otherwise interesting standards for legal insanity. It discusses the *M'Naghten* rule, the "irresistible impulse" test, the Model Penal Code standard for insanity, the "product" test or *Durham* rule, the "medical principle" as used in Norway, and the option of having no legal standard specifying criteria for insanity (which is the case in the Netherlands). As it turns out, each of the standards has both advantages and disadvantages, and serious objections can be formulated against all of them. In the end, I argue, the concerns regarding these standards fall into two groups, theoretical and practical.

In Chap. 3, I consider arguments against the insanity defense, as well as responses to them. The arguments regard, *inter alia*, the fact that the evaluation is about a past mental state, that expert testimony is required, that deterrence is undermined, that defendants may escape deserved punishment by malingering or faking, that only rich people can successfully raise the defense, and that insanity results in stigma. The persuasiveness of these arguments is evaluated.

Chapter 4 discusses two classical theoretical grounds of insanity: lack of free will and irrationality. The theoretical views explored in this chapter may shed new light on the justifications of legal insanity and on what could be used as its criterion in a court of law. However, as it turns out, both theoretical perspectives on insanity have problems of their own. Free will is not only a contested concept but fails to encompass everything that is relevant to exculpation due to mental disorder. Irrationality is theoretically attractive as the ground for legal insanity, but, as we will see, it is also vague and ambiguous.

In Chap. 5, two alternative theoretical views on legal insanity are considered. First, legal insanity is compared with patient competency, a related concept. There are so many similarities between legal insanity and patient competency that we will examine the extent to which the criteria for patient competency could serve as a model for the criteria for legal insanity. Second, we look at insanity from the perspective of "the stages of decision-making." According to this approach, there are three separate stages of decision-making: option generation, option selection, and the initiation of the action. The value of this approach for clarifying evaluations of legal insanity is explored. Together, these views reveal the multifaceted nature of the impact of mental disorders on responsibility. The picture that emerges by the end of this chapter is that, basically, three issues are relevant to insanity: lack of appreciation, inauthenticity, and lack of control due to a mental disorder.

Chapter 6 deals with neurolaw. Increasingly, the question being asked is to what extent neuroscience can help in assessing a defendant's legal insanity, and even in formulating legal criteria for insanity. After a brief introduction to the rapidly developing field of neurolaw, I consider the potential of neuroscience for legal insanity evaluations. Basic issues in this chapter are the reliability of neuroscientific knowledge and techniques, and the difference between neuroscientific findings on the one hand and legal norms on the other.

Chapter 7 addresses the following question: What issues must be taken into account when revising legal insanity in a particular jurisdiction? I argue that these should include issues such as whether the criteria for insanity are clear, whether they are consistent with moral intuitions, and whether they can be reliably tested. The burden of proof and possible degrees of responsibility must also be considered. Arguments are provided that may support decisions about these issues.

Chapter 8, the concluding chapter, summarizes the main findings and looks to the future of legal insanity. Conclusions are drawn regarding the need for an insanity defense in a legal system; the importance and consequences of a clear division of labor between behavioral experts and lawyers; the desirability of a legal standard and its elements, in particular the component of mental disorder; the burden of proof; and the consistency between legal insanity and our common morality.

Together, from the perspectives of psychiatry, law, and ethics, these chapters reveal the multifaceted and intriguing character of legal insanity. The aim is to provide arguments that may resolve at least some of the complexities surrounding this controversial element of criminal law. I hope that this book thus contributes to a better understanding of legal insanity and, eventually, to making well-argued and prudent legal decisions that do justice to the impact mental disorders may have on people's actions.

Chapter 2
Legal Insanity Standards: Their Structure and Elements

The variety of ways in which the moral notion that mental disorders may exculpate a defendant is reflected in criminal law, is impressive. In this chapter, several legal insanity standards are considered: the *M'Naghten* Rule, the irresistible impulse test, the Model Penal Code standard, the *Durham* Rule (also known as the product test), the Norwegian legal criterion, and insanity in the Netherlands. The Anglo-American standards are discussed because they are subject of many debates on legal insanity and because their components reflect some more general approaches to what insanity is about. In addition, the *M'Naghten* Rule has been highly influential in many jurisdictions, which justifies looking more closely at this test. The Norwegian and Dutch tests are included because they are significantly different from the Anglo-American tests as well as from each other.[1] We not only examine the structure and elements of the standards, but also evaluate their strengths and weaknesses. Three basic issues will be addressed. First, does the standard cover all cases that, according to our "common morality,"[2] should lead to

[1]Although I focus on some Western legal systems, the insanity defense is also available in other legal systems, see *The insanity defense the world over* by Simon and Ahn-Redding (2006).

[2]The notion of common morality refers to what we *share* regarding moral rules and judgments. The term is used by Gert (2004, p. 8), who writes: "The existence of a common morality is supported by the widespread agreement on most moral matters by all moral agents." It has also been adopted by Tom Beauchamp (2003, p. 260): "I define the 'common morality' as the set of norms shared by all persons committed to the objectives of morality. The objectives of morality, I will argue, are those of promoting human flourishing by counteracting conditions that cause the quality of people's lives to worsen." Beauchamp and Childress (2009, p. 3) use the same concept, defining the notion as follows: "The common morality is the set of norms shared by all persons committed to morality." The notion of a shared morality may also be phrased differently. For instance, Appelbaum was, as American Psychiatric Association President-elect, quoted as follows (Moran 2002, emphasis added): "'It is clear that when juries are asked to consider the insanity defense, they are doing something much more than simply applying the legal standard that is handed to them,' Appelbaum said. 'They are making a moral judgment as to whether punishment is deserved. That's a reasonable function, and I think it is precisely what we should ask our juries to do—to represent *our morality at large*.'" I will use the term a bit more loosely than Beauchamp and Childress, more in line with the Appelbaum quote.

G. Meynen, *Legal Insanity: Explorations in Psychiatry, Law, and Ethics*,
International Library of Ethics, Law, and the New Medicine 71,
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exculpation (sensitivity of the test)? Second, does it exclude cases that should not lead to exculpation (specificity of the test)? Third, can the standard be straightforwardly applied in actual cases, or is it hard to use in a court of law (applicability)? It will become clear that developing a standard that is sensitive, specific, and forthrightly applicable is no easy task. We start by briefly considering some historical roots of the insanity defense.

2.1 Historical Roots

The insanity defense dates back to ancient times, thus predating psychiatry as a medical discipline. Traces of the defense can be found in ancient Greek and Roman texts (Simon and Ahn-Redding 2006), for instance in an often-cited passage by Plato:[3]

> I believe we had set down what pertains to those who plunder the gods and what pertains to traitors, and also what pertains to those who corrupt the laws with a view to the dissolution of the existing regime. Now someone might perhaps do one of these things while insane, or while so afflicted with diseases or extreme old age or while still such a child as to be no different from such men. If, on the plea of the doer or the doer's advocate, it should become evident to the judges chosen for the occasion that one of these circumstances obtains, and he should be judged to have broken the law while in such a condition, let him pay to the full exact compensation for the injury he has done someone, but let him be released from the other judicial sentences, unless he has killed someone and has hands that are not unpolluted by murder. In the latter case, he is to go away into another country and place, and dwell away from home for a year; if he comes back prior to the time which the law has ordained, or sets foot at all in his own country, he is to be incarcerated in the public prison by the Guardians of the Laws for two years, and then released from prison.[4]

This is Plato's proposal in *The Laws*. Several things are of interest here. First, insanity is apparently a defense that has to be raised *by the defendant*. The doer or the doer's advocate must plead for it. Second, insanity is on a par with other excusing conditions such as being afflicted with diseases or being very old or very young. In addition, although there will be no further judicial sentences, the person will still have to make restitution. I am not aware of such restitution as a component of the insanity defense in current Western criminal law systems. Furthermore, if murder has been committed, the person will be exiled for one year (the reason for such an exile is not mentioned in this quote). Finally, it is essential that the mental condition have been present at the exact moment of the crime: "he should be judged to have broken the law *while in such a condition*" (emphasis added).

[3]See, e.g., Robinson (1996), p. 21 (in another translation). For Aristotle's relevance to the insanity defense, see Sect. 4.1.

[4]Cited from Plato (1980) 864D-E, see also Konstan (2013, p. 428). On mental illness in Plato, see, e.g., Sassi (2013).

Although this element is often taken to be central to insanity, it is not always explicitly mentioned. For instance, in the Netherlands, the law (Section 39, Dutch Criminal Code) does not mention such simultaneity.

A famous historical insanity standard is the "wild beast test" that goes back to Bracton in thirteenth century England (Simon and Ahn-Redding 2006). In *Rex v. Arnold* (1724), according to Justice Tracy, a defendant "must be a man that is totally deprived of his understanding and memory, and doth not know what he is doing, no more than an infant, than a brute, or a wild beast; such a one is never the object of punishment," as cited in Robinson (1996, p. 134). Interestingly, this test refers to children and wild beasts, thus placing "insane" defendants, as it were, in another category of beings who are already excused: children and animals. The defendant's mental state is, apparently and in a relevant way, *similar* to that of children and animals, and therefore he should not be punished. Note, that this test does not yet refer to a medical category, such as disease or disorder. Since there is no reference to medical or psychological terminology, expert testimony does not appear to be particularly relevant to the application of such a standard. We all know what animals are, and we all know what children are. Furthermore, there is something salient about the way in which young children and animals are excused. We need not first establish whether there was a relevant relationship between the mental state of a five year old and the act he committed, and then conclude that the child is not responsible.[5] No, being five years old unconditionally exempts one from punishment, just as being an animal unconditionally exempts one from punishment.

A case in which explicit reference to specific psychopathology was made is *Hadfield* (Robinson 1996).[6] James Hadfield attempted to kill King George III because of a delusion. His lawyer, Thomas Erskine, argued in 1800 that "*Delusion*… is the true character of insanity" (Robinson 1996, p. 146). Several doctors testified in this case. Hadfield was acquitted on the grounds of insanity. Here, the legal decision about a defendant's insanity becomes founded on medical terminology and expertise. And, indeed, wouldn't it be strange if, after the birth of psychiatry as a medical discipline, legal tests were to continue to refer to children and animals rather than to mental illness?

[5]In many legal systems, a specific type of impact of the disorder must be determined—for instance, influence on a defendant's knowledge or behavioral control—before the defendant can be considered legally insane. Norway is an exception; Norwegian General Civil Penal Code § 44 merely states: "A person who was psychotic or unconscious at the time of committing the act shall not be liable to a penalty. The same applies to a person who at the time of committing the act was mentally retarded to a high degree." Quote taken from the English translation of the Breivik verdict, Lovdata TOSLO-2011-188627-24E.

[6]In this book, I cite a number of legal cases, some historical, some of recent date. The presentation and interpretation of these cases is based on generally accessible information, highlighting certain interesting aspects (often as an illustration), and should never be interpreted as "expert opinion" on the case or the defendant. I was not involved in any of the cases.

Current legal standards refer to mental states in terms that at least suggest the relevance of psychiatric and psychological testimony. Still, it has been emphasized that what counts as a disorder in the courtroom is ultimately a *legal* decision.[7] The DSM-5 even includes a "Cautionary Statement for Forensic Use of DSM-5" about its use in a court of law,[8] clarifying the fact that having a disorder according to the DSM-5 should not be considered the same as meeting "legal criteria for the presence of a mental disorder." Still, at present, legal decisions on insanity are generally based on psychiatric and psychological evaluations and testimony.[9] But courts do not always follow the experts. For instance, in the Netherlands, there have been cases in which the psychiatrist was unable to diagnose a psychiatric disorder (because the defendant did not cooperate; the evaluations are court-ordered). Despite this, judges have concluded that the defendants were suffering from a mental disorder, because of which their criminal responsibility was considered diminished.[10] We will revisit the requirement of expert testimony for legal judgments about a defendant's sanity in Chap. 7.

2.2 The *M'Naghten* Rule

The *M'Naghten* Rule (1854) was the outcome of what has been considered "the most important case in the history of the plea of insanity."[11] In many jurisdictions, *M'Naghten*—or a variant thereof—is the standard for legal insanity. In addition,

[7]Morse (2011b, p. 894), yet, differences between jurisdictions exist.

[8]DSM-5 (American Psychiatric Association 2013): "However, the use of DSM-5 should be informed by an awareness of the risks and limitations of its use in forensic settings. When DSM-5 categories, criteria, and textual descriptions are employed for forensic purposes, there is a risk that diagnostic information will be misused or misunderstood. These dangers arise because of the imperfect fit between the questions of ultimate concern to the law and the information contained in a clinical diagnosis. In most situations, the clinical diagnosis of a DSM-5 mental disorder such as intellectual disability (intellectual developmental disorder), schizophrenia, major neurocognitive disorder, gambling disorder, or pedophilic disorder does not imply that an individual with such a condition meets legal criteria for the presence of a mental disorder or a specified legal standard (e.g., for competence, criminal responsibility, or disability). For the latter, additional information is usually required beyond that contained in the DSM-5 diagnosis, which might include information about the individual's functional impairments and how these impairments affect the particular abilities in question." See also DSM-5, 'Definition of a mental disorder': "Additional information is usually required beyond that contained in the DSM-5 diagnostic criteria in order to make legal judgments on such issues as criminal responsibility, eligibility for disability compensation, and competency (see 'Cautionary Statement for Forensic Use of DSM-5' elsewhere in this manual)."

[9]It is also possible that expert testimony about a certain disorder will not meet the standard for admissibility of evidence, see, e.g., on Posttraumatic Stress Disorder: Appelbaum et al. (1993), Berger et al. (2012).

[10]Court of Appeals Arnhem, 18 May 2011, ECLI:NL:GHARN:2011:BQ4981.

[11]Quote from Moran (1981, p. 1).

many other legal systems have insanity standards that reflect elements of *M'Naghten*.[12] Controversies regarding this standard are widespread as well.

Daniel M'Naghten, a Scotsman, suffered from a delusion that the Tories were persecuting him and, therefore, he planned to kill the British Tory Prime Minister, Sir Robert Peel. However, in what looks like a case of mistaken identity, M'Naghten killed Edward Drummond, the secretary to the Prime Minister, instead.[13] Eventually, M'Naghten was acquitted on grounds of insanity. After heated debates because of this verdict, the judges formulated what would become known as the *M'Naghten* Rule:

> At the time of committing the act, the party accused was laboring under such a defect of reason, from disease of the mind, as not to know the nature and quality of the act he was doing; or if he did know it, that he did not know what he was doing was wrong.[14]

According to Yaffe (2013, p. 352), "There is no overstating the influence of this formulation of the insanity defense." If we consider the structure of this standard, the following three elements can be distinguished:

1. The presence of psychopathology: disease of the mind, resulting in
2. a defect of reason, such that the person:
3. lacks knowledge concerning the nature, quality and/or wrongfulness of the act.

So, this standard consists of three components: psychopathology[15] (no reference to children or animals), defect of reason, and lack of knowledge. If any of the three is absent, the standard is not met. Yet, the second step—defect of reason—is not really a separate requirement, because, in practice, the defect of reason *exists in* the lack of knowledge, since the formulation is: "*such a defect of reason as not to know*…"[16] Using this interpretation, we need not evaluate step 2 independently, but we can immediately move on to step 3. And this is how *M'Naghten*, in general, appears to be interpreted, and how I will interpret it here.

Although mental disorders may impact people's behavior in many different ways, the *M'Naghten* Rule clearly singles out the disease's influence on types of

[12]See Robinson (1996), Simon and Ahn-Redding (2006).

[13]On this famous case, see Moran (1981). Moran also investigated the correct spelling of the name, concluding that it should be McNaughtan. I will continue to use the usual spelling of the name in the legal standard.

[14]M'Naghten's Case, 10 Cl. & Fin. 200, 8 Eng. Rep. 718 (H.L. 1843).

[15]Yet, it could be argued that this is not 'real' psychopathology, because it is a legal, not a clinical definition (see also Chap. 7 on the element of mental disorder in the insanity test).

[16]In *Kemp*, the meaning of defect of reason was clarified in English law. Lord Devlin stated: "A defect of reason is by itself enough to make the act irrational and therefore normally to exclude responsibility in law. But the Rule was not intended to apply to defects of reason caused simply by brutish stupidity without rational power." *R v Kemp* [1957] QB 399.

knowledge. Still, *M'Naghten* leaves room for interpretation.[17] For instance, does the "wrongfulness of the act" refer to moral or legal wrongfulness? (Sinnott-Armstrong and Levy 2011) Should the defendant be ignorant about the fact that the law prohibits the act, or should the defendant not know that the act in this situation is morally wrong? In some cases, these two interpretations lead to a similar outcome. However, consider a psychopath; and let us assume that this particular psychopath is completely lacking in moral sensitivity while still being very much aware of the criminal law because he happens to be a lawyer. This psychopath knows very well that the act is legally wrong (prohibited), but is such a lawyer-psychopath really capable of knowing that the act is morally wrong? Does the psychopath have "access" to such a domain of moral knowledge? It has been argued that this is not the case and that psychopaths, therefore, should be excused.[18]

What I find particularly interesting about *M'Naghten* is that the rule does not mention a *causal* relationship between the lack of knowledge and the criminal act, at least not explicitly. It does not state that the defendant committed the crime *because* of that lack of knowledge, or that *if* he had known the nature, quality, or wrongfulness of the act, he would not have committed it.[19] Still, it appears to be an underlying assumption that *if* the defendant had known the nature or wrongfulness of the act—he would not have committed it.[20] Although this may be considered

[17]As Yaffe puts it (2013, p. 352): "Numerous difficult, perhaps intractable, questions exist concerning what, exactly, a defendant's disorder must do to his psychology if he is to meet this legal definition of insanity. For instance: Which features of one's conduct are included in its 'nature and quality'? For example, does a defendant who thinks he's wielding a knife when he is actually wielding a broken bottle know the 'nature and quality' of his act? Or does a defendant who knows that his act is illegal but falsely believes it is morally obligatory, or at least morally permissible, know that 'he is doing what is wrong'? What if he knows it is morally wrong but falsely believes it is legal, perhaps because he deludes himself to be an agent of the government who is licensed to commit crimes? And so on."

[18]Levy writes: "I shall argue that psychopaths do not possess the relevant moral knowledge for distinctively moral responsibility; lacking this knowledge, they are unable to control their actions in the light of moral reasons. This conclusion is of obvious practical significance." (Levy 2007, p. 128). See Vargas and Nichols (2007) for a response to Levy's argument.

[19]It is of interest that under English law, as interpreted in *R v. Codere* [1916] 12 Cr App R 21 (CA), Lord Reading C.J. stated (Friedland 1978, p. 613): "It is said that 'quality' is to be regarded as characterising the moral, as contrasted with the physical, aspects of the deed. The court cannot agree with that view of the meaning of the words 'nature and quality.' The court is of the opinion that in using the language 'nature and quality' the judges were only dealing with the physical character of the act and were not intending to distinguish between the physical and moral aspects of the act." According to Loughnan (2012, p. 121), in *Codere*, wrong was understood as moral wrongness, "However, since that decision, the courts have moved to a narrower interpretation of 'wrongness' that equates it with 'legal wrong.'"

[20]Mackay (1995, p. 86) argues that causality has been tested in the "sense that the *M'Naghten* Rules have been interpreted to require a causal relation between the accused's 'defect of reason' and his 'disease of the mind.'"

self-evident, it is noteworthy because some other standards explicate the role of a mental disorder in the coming about of the crime. *M'Naghten* does not mention any sort of relationship other than an *epistemic* relationship: lack of knowledge about the nature, quality, or wrongness (whether moral or legal) of the act.

Let us now consider the three questions we set out to consider regarding a legal standard. First, does the standard cover all cases that, according to our common morality, should lead to exculpation (sensitivity)? Second, does it exclude cases that should not lead to exculpation (specificity)? Third, can the standard be straightforwardly applied in actual cases, or is it hard to use in the courtroom (applicability)? Answering these three questions, however, is complicated by the fact that there is considerable disagreement about what should and should not be covered by the standard. Bioethicist Carl Elliott (1999, p. 75) writes: "Ask a group of psychiatrists what sorts of mental disorders excuse a criminal offender from responsibility, and the number of answers you get will usually equal or exceed the number of psychiatrists in the group." Usually it is helpful to start with "paradigm cases" most will consider clear examples of insanity. These are often cases in which the defendant is psychotic and in which there is a clear and direct relationship between the psychosis and the act. Consider a mother who suffers from the delusion that Satanists are persecuting her and her daughter. The mother also believes that these Satanists are on the verge of killing her daughter and herself, possibly in a horrendous way. She goes to the fourth floor of a department store in the center of a big city. After some time, she drops her daughter from the fourth floor, which results in the child's death. Almost immediately afterwards, she herself jumps as well. Although she is grievously injured, the mother survives.[21]

In a way, this may be considered a classic tragedy, in which a mother does something terrible to her child in order to avoid some imagined danger.[22] Yet, although many may consider this case to be a "clear" example of legal insanity, it is worth noting that a psychiatric expert concluded that the mother was not fully insane, but that her responsibility should be considered strongly diminished (this is one of the five degrees of criminal responsibility in the Netherlands). However, eventually, she was considered legally insane.

Let us look at this case from a *M'Naghten* perspective. There is a disorder—psychosis; more precisely a paranoid delusion. The delusion entails a profound distortion of the mother's knowledge about reality. Still, at least in a narrow sense, she knows the nature and quality of the act: she is intentionally killing her child. But because of her distorted view of reality, the mother apparently does not feel that what she is doing is morally wrong. Nevertheless, she may know that

[21]A case in the Netherlands, Court of Appeals Amsterdam, 17 September 2010, ECLI:NL:GHAMS:2010:BN7345.

[22]See also the case of Andrea Yates, who "on June 20, 2001, in less than an hour…drowned all of her [five] children in the bathtub, one by one." (Denno 2003). In fact, "According to Andrea, she killed her children to save them from Satan and her own evil maternal influences…" (Denno 2003).

dropping her daughter to her death from the fourth floor of a department store is legally wrong[23] (prohibited). Consequently, whether or not she will be exculpated may very much depend on the interpretation of the nature of the wrongfulness of the act that is used by the relevant court: legally wrong or morally wrong. Still, it looks like there is at least one interpretation of *M'Naghten*—not knowing that the act is morally wrong—that is compatible with the intuition that this mother is legally insane.[24]

Consider a second case. A patient diagnosed with schizophrenia suffers from auditory verbal hallucinations. Sometimes these hallucinations take the form of commands, and, in some rare cases, the patient somehow *cannot but obey* the commanding voice.[25] Suppose that in the past such voices said things like: "Make

[23]Sinnott-Armstrong and Levy (2011) distinguish between four interpretations of wrongness: legal wrongfulness on the one hand and three senses of moral wrongfulness on the other: personal, social, and—as Sinnott-Armstrong and Levy call it—"plain *morally* wrong." These three variants of moral wrongfulness are explained as follows (2011, pp. 302-303): "The second possibility [socially wrong] is that a responsible agent needs to know that the act is contrary to the moral beliefs of most people in the particular society—that is, *socially wrong*. To call an act socially wrong in this sense is to refer not merely to custom or etiquette but, instead, to moral beliefs and principles generally accepted in that community. In order for a defendant to know that an act is socially wrong, then, she must know something about what people in a given society generally believe about morality. A third possibility is that a responsible agent needs to know that the act violates that particular agent's own moral principles or moral beliefs—that is, that it is *personally wrong*. In order for a defendant to know what is personally wrong, she must be aware of her own moral beliefs and how to apply them. Finally, a responsible agent might need to know that the act is just plain *morally* wrong. For a defendant to know this is not for the defendant to know what other people do or would say or believe about the act or about its moral status. Instead, it is to know something about the act itself—namely, that there is at least one property of the act that gives it the moral status of being wrong." Although Sinnott-Armstrong and Levy refer to these three notions as "social, personal, and moral" wrongness, they all involve *moral* notions. Therefore, I consider them three senses of the moral explanation of wrongness in M'Naghten (see also Sinnott-Armstrong and Levy 2011, p. 313, and note 53 for support for this view).

[24]Sinnott-Armstrong and Levy (2011, pp. 303–304, references omitted) write: "M'Naghten jurisdictions do not agree about which kind of wrongness must be known in order for an agent to be responsible. Most seem to have remained silent, and at least two have explicitly refrained from adopting a position, on this issue. Regarding the jurisdictions that have taken a position, some of them maintain that defendants may generally be found not guilty by reason of insanity only if, as a result of mental illness, they did not know that their acts were *legally* wrong. Other jurisdictions explicitly specify that legal knowledge is not enough for responsibility; that even if defendants knew that their acts were illegal, they might still be eligible for a verdict of not guilty by reason of insanity if they did not know that their acts were *socially* wrong. No jurisdiction seems to accept the view that a defendant may be found not guilty by reason of insanity simply because he failed to know that his act violated his own personal moral beliefs." On the issue of wrongness, see also Lord Goddard CJ who stated in *Windle*: "it would be an unfortunate thing if it were left to juries to decide whether some particular act was morally right or wrong. The test must be whether it was contrary to the law…" *R v Windle* [1952] 2 QB 826.

[25]See, on such command hallucinations that cannot be disobeyed Braham et al. (2004); Bucci et al. (2013).

some tea!"—the patient immediately complying by making tea. Today, however, the command is very different: "Attack your neighbor!" The patient, who cannot but obey, immediately complies with this command, attacking and thus harming his neighbor. Let us look at this case from a *M'Naghten* perspective. Is anything wrong with this patient's knowledge? Does he hold certain beliefs that made him attack his neighbor, or that made the attack morally or legally justifiable in his own view? As far as we know, that is not the case. The explanation of why the neighbor was attacked is this: the patient experienced a certain—rare—type of hallucination that commanded him to do something *irrespective* of that patient's own beliefs and desires. Knowledge about the nature, quality, or wrongfulness of the act was untouched by the commanding voice—it was the command *as such* that made the patient act as he did. So, distorted or absent knowledge is not part of the explanation of why the patient committed the crime.

Cases in which the defendant committed a crime because of such a commanding voice are sometimes considered the most powerful examples of legal insanity (Mooij 2012), because they do not leave the patient any other option but to act as ordered. This is significantly different from the mother in the first example. As far as we know, and in principle, she did have other options: at least she was not ordered to kill her child the way she did. The act was her own response to the terrifying situation and threat—as she perceived it. She may have contemplated a variety of options to escape from the Satanists, but eventually she chose this one. The commanding voice in the second example, however, leaves no other options open. Still, the criteria for insanity according to *M'Naghten* are not met; knowledge about the act is unaffected by the disorder, at least in the *M'Naghten* sense. Therefore, the defendant who acts on a auditory hallucination that he cannot but obey is not legally insane, and he is therefore criminally responsible and punishable. The fact that a compelling case like this—the commanding voice that cannot be disobeyed—is not covered by *M'Naghten* can be considered a profound problem with this legal standard. In other words, it does not cover all instances in which, according to our common morality, a defendant should be exculpated. Therefore, as far as the sensitivity of the test is concerned (does the standard cover all cases?), *M'Naghten* is problematic. Instances in which mental disorders decisively influence human behavior by ways other than impacting that person's knowledge do not meet *M'Naghten*.[26] And such other ways do exist.

[26]R. Jay Wallace (1994, p. 170) writes: "Almost from the time of their first formulation, the M'Naghten Rules have come under fire for their exclusive focus on cognitive defects or defects of reason in mental illness and insanity. It has been argued that mental illness may equally cause defects of the will, such as susceptibility to irresistible impulses…"

An additional issue concerns knowledge about *the nature and quality of the act*. Sometimes, psychosis may affect such knowledge. For example, the famous case of a defendant who killed a police officer believing that he was an alien disguised as a police officer (*Clark v. Arizona*). The defendant did not know the nature of this act: he believed he was killing an alien, while he was actually killing a human being. Still, in many cases, patients—even if they are very psychotic—know the nature and quality of the act in terms of attacking, harming, and killing another person.[27] They may even know that their acts are legally wrong. They commit them, however, because they have deeply distorted knowledge about the *context* of their acts.[28] In fact, delusions tend to affect the knowledge of crucial elements of the context of an act rather than of the act itself (although it may sometimes be hard to distinguish between an act and its context; for instance, an "act of self-defense" implies the context of being attacked). The distorted appreciation of the context is likely to make these defendants believe that what they are doing was not morally and/or legally wrong—perhaps that it is even good and justified.[29]

Therefore, the way in which part of the knowledge component in *M'Naghten* has been formulated does not straightforwardly reflect how knowledge is actually affected by psychopathology: psychotic people usually know the nature and quality of the act they are performing (at least in a narrow sense). Meanwhile, the act is often motivated by a distorted perception of the context. Still, the distorted context is likely to be covered by the fact that the defendant lacked knowledge that the act was *wrong* (i.e., the final component of the knowledge element), at least in the moral sense. The reason is that the moral evaluation of one's acts is likely to take into account the context of those acts. Consequently, "not knowing the nature or quality of the act" may be a somewhat redundant element of this standard. Notably, some other standards lack the element of knowledge about the nature and

[27]As Wallace (1994, p. 168) rightfully notes, "cases in which a mentally ill person literally has no idea about the nature and quality of her acts seem quite rare. More commonly, when someone in the grip of such conditions as depression or paranoia does something wrong (attacking a relative, say), she will know perfectly well that she is attacking the person; indeed, such actions are sometimes elaborately premeditated. But there will often be present a 'defect of reason' that prevents the agent from accurately assessing the moral quality of her act."

[28]While I use the term "context," Wallace (1994, p. 169) uses the term "situation": "One must also be able to attain a clear and accurate view of the morally relevant features of the situation in which one is acting, and this is something that a delusion would appear to preclude."

[29]Note that *M'Naghten* does not require the defendant to believe that his or her action was "good," "justified," or "praiseworthy." It merely requires that the wrongfulness of the action was not known to the defendant due to a mental disorder's impact on that defendant's reason.

quality of the act, while including the appreciation of the wrongfulness of the act (e.g., the Model Penal Code test).[30]

If we look at the other two issues we have to consider evaluating an insanity standard, the general feeling is that *M'Naghten* passes both. These issues are: does the standard exclude cases that should not lead to exculpation (specificity) and can the standard be straightforwardly applied in a court of law (applicability)? *M'Naghten* is usually regarded as sufficiently strict to avoid overinclusion (the

[30]Slobogin (2003, p. 317–18) writes about *M'Naghten*: "A third part of the House of Lords' opinion is not as well known. Toward the end of the *M'Naghten* opinion the Lords announced a special test for cases of 'partial delusion,' or what today might be called an encapsulated delusion. According to the Lords, individuals with partial delusions should be placed 'in the same situation as to responsibility as if the fact with respect to which the delusion exists were real.'" *Cf*. Simon and Ahn-Redding (2006, p. 201) refer to the insanity defense in Nigeria (Section 28 of the Nigerian Criminal Code Act 1990) as follows: "A person whose mind, at the time of his doing or omitting to do an act, is affected by delusions on some specific matter or matters, but who is not otherwise entitled to the benefit of the foregoing provisions of this section, is criminally responsible for the act or omission to the same extent as if the real state of things had been such as he was introduced by the delusions to believe to exist." What is actually stated here is that the defendant's actions should be judged based on the assumption that the delusional beliefs were *true*. See also Bortolotti et al. (2014, p. 380) who emphasize that not all delusions that help *explain* certain criminal behaviour provide an excuse: "In this respect, we want to draw a parallel with the case of a young man with a diagnosis of schizophrenia who attacked his neighbor after experiencing auditory hallucinations about the neighbor making loud noise and insulting him repeatedly." Bortolotti et al. (2014, pp. 380–381) elaborate on the case as follows, based on an earlier publication: "[S]uppose Bill had actually had a very noisy neighbor. What kind of ascription of responsibility would we have made in relation to the harm inflicted on his neighbor in those circumstances? What kind of punishment would Bill have deserved for his attacking his truly noisy neighbor? Should the fact that the experiences were hallucinatory (and thereby that the neighbor was not in fact noisy) make a difference in relation to how we conceive of Bill's responsibility for what he did and of the punishment he deserves? It is true that Bill was hallucinating: He was hallucinating that his neighbor was making loud noises, and the content of the hallucination explains in part why he attacked his neighbor. Had he not hallucinated that his neighbor was making loud noises, Bill would have probably not attacked and harmed his neighbor. But it is also true that having noisy neighbors does not morally justify assaulting them. That is, had Bill's neighbor been truly noisy, Bill would have still been doing something blameable in assaulting his neighbor. If one has a noisy neighbor, then one should try to convince his neighbor to be less noisy, and, failing that, one should perhaps call the police." They interpret the case as follows: "Here, what we find is that the psychotic symptoms experienced by Bill help explain his aggressive behaviour towards his neighbour, although they are not sufficient to motivate his actions." In fact, what Bortolotti et al. have done is assume the truth of Bill's psychotic belief and then evaluate Bill's actions based on that assumption, concluding that what Bill did is still blameworthy, even though the symptoms help explain why he acted as he did. Meanwhile, in some cases it may be difficult to assume the truth of a delusion and its possible consequences. For instance, if another person were an alien in disguise, what would be a permissible range actions? Or, assuming the existence of a demon, what should or shouldn't we do? Certain delusions may even defy the laws of physics—how can we assume their truth and then reason about what is and is not permissible in a world in which our laws of physics no longer apply?

problem is rather that it is too strict). In addition, it is generally assumed that the presence or absence of the relevant knowledge can be *sufficiently* reliably assessed.[31]

In sum, with respect to the first case (the mother), *M'Naghten* appears to be flexible enough to explain why she should be excused: we can use the wrongfulness component of the standard, and interpret this as morally wrong. Yet, in the second case, in which psychopathology influences behavior in ways other than through impact on knowledge (namely, by commanding auditory hallucinations), *M'Naghten* seems to fall short.[32]

2.3 The Irresistible Impulse Test

Several variations of the "irresistible impulse test" (*Parsons v. State* 1887) exist. For instance, to explain the irresistible impulse test, Gerber refers to the Supreme Court of New Mexico: "if, by reason of disease of the mind, defendant has been deprived of or has lost the power of his will which would enable him to prevent himself from doing the act, he can not be found guilty."[33] Becker (2003, p. 43) specifies the following requirements for the Irresistible Impulse test:

1. The defendant must have a significant mental illness.
2. The defendant's impulse must arise directly from the mental illness.
3. There must be no evidence of planning or premeditation by the defendant before the criminal act was committed.

This irresistible impulse test can be used together with *M'Naghten* as the legal standard for insanity (Gerber 1975). In such a combination, the rule may be considered an improvement with respect to reflecting the morally relevant impact of a mental disorder on a person's actions, compared to *M'Naghten* alone (see previous section). The reason is that it recognizes that mental disorders may have decisive influence on human behavior without affecting a person's knowledge.

There is further philosophical and legal support for adding "irresistible impulse" to the standard for legal insanity. As Michael Moore (1984, p. 221)

[31]However, see the next chapter, in which it becomes clear that some do not trust the reliability of psychiatric evaluations.

[32]Still, some people may feel that commanding voices as described in the second case should not lead to exculpation by reason of insanity, for instance, because they may be faked. Then, the fact that the influence of this psychopathological phenomenon is not covered by *M'Naghten* does not constitute a weakness of the standard, but rather the contrary. On faking command hallucinations, see McCarthy-Jones and Resnick (2014), Resnick and Knoll (2005). We will return to issue of faking in the next chapter.

[33]New Mexico Supreme Court, *State v. White*, 58 N.M. 324, 270 P.2d 727, 730 (1954).

writes: "In criminal law, as in morals, two general sorts of conditions excuse: ignorance that is not itself culpable, and compulsion.… These two moral excuses are as old as Aristotle and are embodied in contemporary criminal law."[34]

Moral philosopher R. Jay Wallace (1994, p. 171) provides further support for adding a control prong to the ignorance part[35] as he writes about impulses related to addiction:

> If these impulses are truly irresistible, then the agent will not genuinely have the ability to control his behavior in light of the moral obligations that the impulses lead him to violate. Even if he can perfectly grasp and apply the principles that support those obligations, so that he knows that what he is doing is wrong, the irresistibility of the impulses deprives the agent of the capacity to act in conformity with them. Of course, the resulting impairment of the powers of reflective self-control may be selective rather than total, leaving aspects of the addict's behavior, or periods in the addict's life, in which he retains the general powers to control his behavior by the light of moral obligations. But to the extent that irresistible impulses deprive the agent of those abilities, it would seem unreasonable to hold the agent morally accountable.

Although Wallace writes about addiction, it is clear that this line of thought applies to all mental disorders that lead to irresistible impulses. Note, however, that Wallace does not claim that addiction involves impulses that are truly irresistible; his statement is conditional. It is also relevant that Wallace points out that even if irresistible impulses do occur, the person may still retain control over many other actions. This implies, conversely, that the fact that a person has significant control over many actions does not rule out the possibility of lack of control regarding *some* of his actions. In other words, control may be selectively compromised. Within the context of forensic psychiatric evaluations of defendants, this means that the fact that some control was retained cannot in itself justify a conclusion that the defendant retained the legally relevant type of control.

Still, there is a serious problem attached to the irresistible-impulse component of a legal insanity standard. Morse (1985, p. 817) writes:

> There appears to be a prima facie case for a compulsion branch of the insanity defense, but is it persuasive and would the test be workable? If or to what degree a person's desire or impulse to act was controllable is not determinable: there is no scientific test to judge

[34]Moore (1984) adds: "There are thus basically two kinds of traditional insanity tests: those based on the ignorance of the mentally ill accused person; and those based on some notion of his being compelled to act as he did."

[35]Hart (2008, pp. 189–90) notes: "Angrily and enviously, many of the critics [of M'Naghten] pointed to foreign legal systems which were free of the English obsession with this single element of knowledge as the sole constituent of responsibility. As far back as 1810 the French Code simply excused those suffering from madness (*démence*) without specifying any particular connexion between this and the particular act done. The German Code of 1871 spoke of inability or impaired ability to recognize the wrongness of conduct or to act in accordance with this recognition. It thus, correctly, according to the critics, treated as crucial to the issue of responsibility not knowledge but the capacity to conform to law. The Belgian Loi de Défence Sociale of 1930 makes no reference to knowledge or intelligence but speaks simply of a person's lack of ability as a consequence of mental abnormality to control his action."

> whether an impulse was irresistible or simply not resisted. At best, we may develop a phenomenological account of the defendant's subjective state of mind that will permit a common sense assessment of how much compulsion existed.[36]

On the one hand, Morse acknowledges the theoretical relevance of "not being able to control one's behavior" to legal insanity.[37] On the other, he points to the fact that, in practice, a lack of control cannot be *reliably assessed*. In 2011b (p. 929), Morse expresses a similar view: "I readily concede that lack of control may be an independent type of incapacity that should mitigate or excuse responsibility, but until a good conceptual and operational account of lack of control is provided, I prefer to limit the insanity defense to cognitive tests."

In this quote, Morse adds conceptual concerns to the practical qualms already expressed. In fact, he voices an often-heard criticism—also voiced by Herbert Fingarette,[38] among others—that it is too hard to make a reliable distinction in a court of law between those who could and those who could not resist their impulses. Apparently, there is an epistemic problem here, not on the part of the defendant, but on the part of the evaluator: it is difficult for a psychiatrist or psychologist, and therefore for the judge or jury, to *know* whether a defendant really lacked the capacity to control his behavior at the moment of the crime. The problem is addressed in The American Psychiatric Association's 1983 position paper on the insanity defense as well: "The line between an irresistible impulse and an

[36]See also Morse (2011b, p. 893, references omitted): "Lack of control is not well understood conceptually or scientifically in any of the relevant disciplines such as philosophy, psychology, and psychiatry, however, and we lack operationalized tests to accurately identify this type of lack of capacity. I have long been a critic of such standards for just these reasons. The American Bar Association and the American Psychiatric Association also urged the rejection of control tests for legal insanity on these grounds. I suggest that for all cases in which a control test may seem required, the reason can be better characterized as a rationality defect because control difficulties flow from lack of access to the good reasons not to act in the wrong way." In the "Cautionary Statement for Forensic Use of DSM-5" we can read about control over one's behavior: "Nonclinical decision makers should also be cautioned that a diagnosis does not carry any necessary implications regarding the etiology or causes of the individual's mental disorder or the individual's degree of control over behaviors that may be associated with the disorder. Even when diminished control over one's behavior is a feature of the disorder, having the diagnosis in itself does not demonstrate that a particular individual is (or was) unable to control his or her behavior at a particular time."

[37]See also Morse (2000, p. 264, footnote omitted): "I am not sure what it means to be *unable* to control oneself, but if this condition warrants preventive detention, it should also furnish an excuse to crime. After all, could it possibly be fair to blame and to punish those who genuinely cannot control themselves?"

[38]Fingarette (2004, p. 70): "First of all, the notion of irresistible impulse is for theoretical purposes a very troublesome notion. The problem has been well expressed in the question: How do we tell the difference between 'He could not resist his impulse' and 'He did not resist his impulse'? This becomes in practice a very perplexing issue in the law. Typically, when it comes up openly, as in insanity cases, for example, it involves psychiatric testimony. Yet there is no theoretical understanding of how to apply the distinction."

impulse not resisted is probably no sharper than that between twilight and dusk."[39] In an interesting discussion of the control prong, Penney (2012, p. 101) articulates the consequences of the control prong that people often fear:

> The main criticism of control tests, expressed by both courts and commentators, has always been that defendants who were capable of controlling their conduct will too often be excused from responsibility. (…) Given this alleged difficulty of measuring control, it is posited, a great many defendants (including those with disorders like kleptomania, pyromania, and pedophilia) would escape punishment. Commentators have objected to this prospect on moral and deterrence grounds and because it would engender popular dissatisfaction and disrespect for the law.[40]

The fear, in sum, is that including a control element in the insanity standard would result in injustice, in the sense that people who actually are responsible would be acquitted on the grounds of insanity. In defense of a control prong, one could respond that juries and judges handle similarly difficult evaluations all the time. For instance, they may have to determine whether a defendant was acting negligently, recklessly, knowingly, or purposefully.

What would the irresistible impulse test mean for both cases we discussed in the previous section (the mother with the paranoid delusion and the defendant hearing commanding voices)? Under the irresistible impulse test, the mother would probably be considered sane (unless the irresistible impulse test were used in combination with *M'Naghten*). She performed a deliberate action, and that action was the end-product of a decision-making process—not a mere impulse. How about the command hallucination? The commanding voice may be considered an irresistible impulse: the defendant could not but immediately comply with the command. Still, what should be considered an "impulse" is, to some extent, open to interpretation.

It becomes clear that, with respect to the control prong, the conditions for moral and legal excuse *diverge*—at least according to some authors. These authors do not deny that mental disorders may undermine a person's behavioral control and that a lack of control diminishes one's moral responsibility. Yet, they argue, the assessment of a lack of control in a court of law is hampered by theoretical, as well as practical, shortcomings. Such a concern about the applicability in legal practice should be taken very seriously. Because the stakes are high in a court of law, the evaluation of an excusing condition should be reliable. If the reliability is in doubt, this is clearly a reason to omit the control prong. At the same time, this type of prudence comes at a price: leaving out the control element for this reason implies that defendants who actually lacked control will be held responsible. Consequently,

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[39]Insanity Defense Work Group, American Psychiatric Association ("American Psychiatric Association statement on the insanity defense," 1983, p. 685), also cited by Elliot (1996, p.14). See, e.g., Glannon (2011) on the problems of the notion of impulse control in mental disorder.

[40]References omitted. Penney (2012, p. 101) also writes here: "Even with the assistance of expert testimony, the argument runs, it is simply too difficult for judges and juries to distinguish between the capable and the incapable. … Indeed, it was primarily this concern that led both the American Psychiatric Association (1983) and the American Bar Association (1989) to advocate for the removal of the control test in the aftermath of the Hinckley case."

some defendants who do not deserve blame and punishment, at least in the moral sense, will nevertheless be blamed and punished. So, there is a tension here between moral and criminal responsibility. In my view, even though the assessment of lack of control may be more challenging than assessments of ignorance, a control prong should be part of a standard because of its moral significance (see the next section, and Chap. 7). Still, the concerns have to be acknowledged and, to the extent possible, dealt with (see also Penney 2012). In Chap. 6, we consider the possibility that neuroscience could be helpful in this respect.

2.4 Model Penal Code (American Law Institute)

The Modal Penal Code standard for insanity was developed by The American Law Institute (1962) and it states: "a person is not responsible for criminal conduct if at the time of such conduct as a result of mental disease or defect he lacks substantial capacity either to appreciate the criminality (wrongfulness) of his conduct or to conform his conduct to the requirements of the law."[41]

The standard became widely used in the United States. However, after John Hinckley attempted to assassinate President Ronald Reagan in 1981 and was acquitted on grounds of insanity under the Model Penal Code test, many U.S. states that had adopted the Model Penal Code test returned to *M'Naghten* (Becker 2003). Still, at present, a considerable number of states use this standard or a variant of it.[42]

The standard diverges from *M'Naghten* in several ways.

1. With respect to psychopathology, it uses the terms "mental disease or defect;" which means that "defect" is added to *M'Naghten*.
2. It uses the formulation "lack of *substantial* capacity" instead of "did *not* know" in *M'Naghten*. The *Explanatory Note* reads: "The standard does not require a total lack of capacity, only that capacity be insubstantial." This allows leeway for exculpating defendants whose capacity was substantially affected, but who, nevertheless, retained some capacity.
3. Instead of "know," this standard uses the word "appreciate," which refers to a deeper form of understanding. It requires knowledge *plus* some form of appraisal. At least in principle, a defendant may have known that what he was doing was wrong, but still he may not have appreciated the wrongfulness of the action. Therefore, as a criterion, "appreciation" is more demanding than mere knowledge.[43]

[41]Model Penal Code (American Law Institute 1985).

[42]See Packer (2009), Appendix A.

[43]See Sinnott-Armstrong and Levy (2011, p. 314): "The change from 'know' in the M'Naghten rule to 'appreciate' in the MPC [Model Penal Code] rule is arguably an attempt to move beyond a purely abstract account of knowledge. Appreciation requires the person not only to know the right answers to questions but also to understand those answers." See also Mackay (1990) on "appreciate" in the Canadian standard for legal insanity, which is otherwise very similar to *M'Naghten*.

4. The phrasing "criminality (wrongfulness)" is used.[44] Jurisdictions could choose either term. Criminality refers to legal wrongfulness, while the term wrongfulness is generally considered to refer to moral standards (Packer 2009)—and, in principle, just as the wrongness in *M'Naghten*, it can be interpreted in different ways (Sinnott-Armstrong and Levy 2011). The Model Penal Code test is thus not really different in this respect: it may cover *legal* as well as *moral* wrongfulness, depending on how it is used.
5. Most importantly, this standard adds a control prong to the criteria for insanity. If, due to a mental disease or defect, a defendant was unable to conform his conduct to what the law requires of him, he is considered to have been insane.[45] Notably, the phrasing of the control prong is so broad that it may be interpreted in such a way that it also includes the appreciation prong. For we may argue that the defendant could not conform his conduct to the requirements of the law because he was unable to appreciate the criminality of his conduct. Having the ability to appreciate (both a situation and the law) is crucial to one's ability to conform one's behavior to the requirements of the law. Based on this interpretation, the control prong can even be considered to comprise *M'Naghten*, because we may say: he was unable to conform his conduct to the requirements of the law because, due to a defect of reason, either he did not know what he was doing or he did not know that it was wrong.[46] Still, in general, the incapacity to conform one's conduct to the requirements of the law is considered to concern the inability to exercise control over one's behavior even though one knows or appreciates that the action is wrong.

[44]The Explanatory Note, Model Penal Code §4 (American Law Institute) reads: "An individual's failure to appreciate the criminality of his conduct may consist in a lack of awareness of what he is doing or a misapprehension of material circumstances, or a failure to apprehend the significance of his actions in some deeper sense. Wrongfulness is suggested as a possible alternative to criminality, though it is recognized that few cases are likely to arise in which the variation will be determinative."

[45]According to Becker (2003, p. 44), "The ALI [American Law Institute] test was viewed as a broader more expansive test of insanity as compared to the outdated M'Naghten test… The ALI test also broadened the insanity test to include a volitional or 'irresistible impulse' component. The test focused on the 'defendant's understanding of his conduct' and also on the 'defendant's ability to control his actions.'"

[46]*Cf.* Hart (2008, p. 189): "From the start English critics denounced these [M'Naghten] rules because their effect is to excuse from criminal responsibility only those whose mental abnormality resulted in lack of knowledge: in the eyes of these critics this amounted to a dogmatic refusal to acknowledge the fact that a man might know what he was doing and that it was wrong or illegal and yet because of his abnormal mental state might lack the capacity to control his action. This lack of capacity, the critics urged, must be the fundamental point in any intelligible doctrine of responsibility. The point just is that in a civilized system only those who *could have* kept the law should be punished. Why else should we bother about a man's knowledge or intention or other mental element except as throwing light on this?"

The Model Penal Code test makes it possible to exculpate both the mother who was deluded (at least as long as wrongfulness is understood in a moral sense) and the defendant who acted on an auditory hallucination he could not but obey.

In fact, the term appreciate may open up the possibility of exculpating a wider range of defendants suffering from mental disorder, e.g., those suffering from antisocial personality disorder, and from these, a subgroup considered psychopaths.[47] Although these people, it may be said, *know* perfectly well that what they are doing is wrong, the may not have the capacity to really *appreciate* the wrongfulness of their actions.

In the previous section, some quotes arguing against a control prong, which is included in the Model Penal Code test, were considered. According to Penney (2012, p. 101, emphasis added), however, the ignorance element is not unproblematic either:

> Cognitive impairment typically stems from major mental illnesses (such as schizophrenia or bipolar disorder) that manifest with obvious, tangible symptoms (such as paranoid fantasies or command hallucinations). In the forensic context, these conditions are typically easy to diagnose and difficult to feign. That said, it may be *much more difficult* to assess whether defendants' mental illnesses rendered them incapable of appreciating the wrongfulness of their conduct. It is possible that a significant proportion of defendants excused on this basis retained some capacity, despite their illnesses, to understand that what they were doing was wrong.[48]

In other words, the assessment of a defendant's knowledge about the wrongfulness of the act is prone to possible mistakes or misjudgments as well. So, the view that the psychiatric evaluation of the cognitive prong is uncomplicated while the evaluation of the control prong would be fishy is not correct.[49] Penney adds that the "evaluative tools commonly used to assess impulse control differ little from those used to assess cognitive impairment. And while there has been a dearth of research on the question, studies have suggested that clinicians are able to measure control as accurately as cognitive impairment."[50]

Still, in my view, there is a reason why assessments of distorted knowledge or appreciation tend to be easier than assessments of impaired control. The distortion of a person's knowledge due to a delusion usually exists *over a longer period of time* and it is *stable*, in the sense that it does not suddenly come and go. Therefore, in the weeks preceding a crime, the defendant may have talked about his deluded worldview and his behavior may show clear indications of distorted beliefs. The act may thus be part of a *longer and stable pattern* of behavior and expressions. In contrast, control issues tend to come and go suddenly. The defendant may almost always have been able to control his actions, except for that very moment when he heard the commanding voice. But we may ask: did he really hear a commanding

[47]Not all psychopaths, though, fulfil the criteria of antisocial personality disorder.

[48]References omitted.

[49]Penney (2012, p. 101) writes that it is not "evident that impulsivity is so clinically nebulous that courts cannot determine claims with reasonable reliability."

[50]Penney (2012, p. 101, references omitted).

voice at that particular moment in time? It may be harder to establish whether this was actually the case, than to establish whether a certain action fits within a longer-lasting, severely delusionally distorted view of reality. Of course, there are short-lived but very intense delusions as well, e.g., during a drug trip. But even they tend to be present for several *hours* at least—while a commanding voice (or other control problems) may only be present for a few seconds. In addition, the control problems tend to occur erratically, making it difficult to witness a person hearing voices or having control problems. If a psychiatrist interviews a defendant who is suffering from a delusion, the delusion is very likely to be evident during the interview. However, if a person hears voices from time to time, these voices may or may not occur during the interview: they come and go.

Penney also provides empirical data on successful insanity defenses to show that a control prong does not, as is sometimes feared, lead to extensive abuse of the insanity defense. He refers to three studies that, taken together, show low to modest percentages of defendants who are not considered criminally responsible *only* because of the control prong. These percentages varied from 9 to 24 %; the two larger studies found percentages of 9 and 11 %. Penney notes that the "vast majority" of the defendants considered not criminally responsible in one of these larger studies suffered from "major mental illnesses such as schizophrenia and bipolar disorder." Kleptomania and pedophilia were not among the disorders that led to irresponsibility because of the control prong. Based on these findings, fears of an enormous increase of successful insanity pleas if a control prong were added appear to be unwarranted, as do possible fears that pedophiles would be considered insane.

Meanwhile, the fact that a small but significant percentage of defendants were considered not responsible on control grounds alone, Penney argues, shows that, in legal practice, the element of control *adds* something to the knowledge criterion.[51] He also uses this observation to counter a view expressed by Morse, among others, "that deserving candidates for the irresistible impulse defense should normally be exempt from responsibility under a proper interpretation of *M'Naghten*."[52]

[51]See Redding (2006, pp. 89–90, references omitted) on those who oppose a control prong: "Opponents of control tests have offered, and continue to offer, three rationales for their abandonment: (1) that cognitive tests for insanity are sufficient, since those with impaired impulse control will also be cognitively impaired; (2) that mental health professionals are incapable of reliably assessing the capacity for impulse control, particularly in relation to criminal behavior, or of differentiating between a truly irresistible impulse and an impulse that is merely difficult to resist; and, therefore, that control tests lead to erroneous insanity acquittals; and (3) that because 'they directly pose the question of whether a person could control his or her behavior,' control tests run counter to the law's assumption of free will and notion that criminals should be held accountable for their crimes." Adding to that: "As I demonstrate below, current neuroscience and clinical research challenges each of these claims."

[52]Penney (2012, p. 101, references omitted).

However, to be able to consider Penney's findings a solid argument against this position, we would have to know the exact grounds for considering these defendants insane, and whether these grounds amount to a "proper interpretation of *M'Naghten.*"

Morse's argument pro *M'Naghten* and contra the control prong relies, at least in part, on the notion of "capacity for rationality." In his view, insanity comes down to an incapacity for rationality. And lack of control, he argues, can be subsumed under rationality defects. Morse writes (2002, p. 1064): "No logical or legal reason prevents a court from understanding and interpreting 'control' problems as rationality defects … Lack of capacity for rationality is almost always the most straightforward explanation of why we colloquially say that some people cannot control themselves when they experience intense desires."[53] And in the same paper he (2002, p. 1075) adds: "In sum, lack of capacity for rationality is the best explanation of and the most workable standard for non-responsibility. It is also the best explanation of what we really mean when we say that an agent cannot control himself. Control standards should be understood in terms of rationality defects."[54]

This line of thought is not unreasonable. Lack of control over one's behavior may be considered in terms of a lack of rationality, because the behavior was not under the control of a rational being. In fact, the notion of rationality appears to be very broad and flexible; it may cover a lot, especially when considering the human being a "rational animal" (see Chap. 4). It is less certain, however, that *M'Naghten* should be considered a complete rationality standard.[55] Although it is true that "lack of knowledge" is a rationality test, this does not necessarily mean that *M'Naghten* exhausts the concept of rationality. There is more to rationality than knowledge about the nature and quality of an act and its wrongfulness.[56] For instance, controlling one's behavior can easily be considered part of rational

[53]Morse (2000, p. 257, emphasis added) writes: "I am firmly of the opinion that disorders of desire should excuse only in those cases in which the desire is so strong and overwhelming that the agent at least temporarily loses the capacity to be *guided by* reason. Thus, the problem would be irrationality and not compulsion."

[54]See also Morse (2002, p. 1065): "Indeed, as I argue below, if one examines closely most cases of alleged 'loss of control,' they essentially raise claims that, for some reason, the agent could not 'think straight' or bring reason to bear under the circumstances." Others, like Penney (2012) and Redding (2006), disagree with Morse on this issue.

[55]Morse (2002, p. 1041) writes: "The criteria for the dominant, 'cognitive' insanity defense tests include a mental abnormality that causes a further, necessary defect in rationality. For example, the *M'Naghten* test requires that the mental abnormality cause the person not to know the nature and quality of the act or not to know that it was wrong. The cognitive criteria of the American Law Institute's Model Penal Code test require mental abnormality to produce a lack of substantial capacity to appreciate the criminality or wrongfulness of one's act."

[56]In fact, rationally *controlling* one's behavior may well be considered to be a cognitive capacity. For example, the domain in neuroscience that studies such behavioral control—in health and disease—is often called "cognitive neuroscience." See, e.g., Astle and Scerif (2009).

behavior (just as Morse claims). Therefore, *M'Naghten*'s "lack of knowledge" can be considered part of, but not identical to, the concept of a rationality defect. In this vein, interpreting the notion of "rationality defects" as being central to insanity could just as well lead to the conclusion that *M'Naghten* is obviously too narrow and that, in addition to a "lack of knowledge," a "lack of control" is required to constitute a "defect of rationality" test. Consequently, the Model Penal Code test would encompass more of what can be considered "rationality deficits" than would *M'Naghten*.[57]

Penney argues for including a control prong in the insanity standard, but only with a high threshold. The threshold should be "a total inability to exert control in the circumstances."[58] This implies that urges that are extremely hard to resist do not qualify for insanity—because there is no *total* lack of control. Penney's proposal appears to be stricter than the Model Penal Code standard, which reads "lacks *substantial* capacity" rather than *total* capacity. In addition, Penney argues that the burden of proof should be on the defendant. This second point is also aimed at allowing "decision makers to distinguish between deserving and undeserving claims." In practice, it would just make it more difficult for a defendant to be considered insane, which may be at odds with another remark by Penney (2012, p. 101): "However few in number, defendants who are incapable of restraint despite knowing that their conduct is wrongful are as deserving of excuse as those who lack such an appreciation." If the burden of proof is on the defendant, Penney deliberately takes the risk that some who "are as deserving of excuse" may not be considered insane, because, for instance, they lack the financial resources required for an effective defense in this respect.[59]

Finally, we should note that where the Model Penal Code is in use, it may also be a *variant*. The same is true for *M'Naghten*. Packer (2009, Appendix A) provides a nice overview of standards in U.S. jurisdictions, showing for example, that Alabama has a *M'Naghten* variant which uses "appreciate" instead of "know"; Alaska has a *M'Naghten* variant without "wrongfulness" and uses the term "appreciate"; Arizona has a *M'Naghten* variant without the "nature and quality" part; Arkansas has a Model Penal Code test variant without the word "substantial" (capacity), and so on. Only the first jurisdictions in alphabetical order are

[57]See also Chap. 4 on irrationality.

[58]Penney (2012, p. 101). I assume that Penney has in mind an inability to exert control *regarding the criminal act* and that "total" does not refer to all aspects of human functioning (such as, e.g., bladder control, see Chap. 6).

[59]See Sinnott-Armstrong and Levy (2011, p. 324): "…shifting the burden to the defense might increase the chance of punishing people who are not guilty, if insane people really are not guilty." See also the next chapter on arguments against the insanity defense.

mentioned here.[60] These variants clearly add to the variety of standards for legal insanity.[61]

In conclusion, the Model Penal Code allows leeway for the fact that mental disorders may influence people's behavior in ways other than by influencing their knowledge. It adds the notion of control to appreciation of the wrongfulness of the act. Still, expanding the insanity standard in this way has been met with criticism. The control prong, it is argued, is unhelpful because it would be (1) theoretically unclear (2) difficult to evaluate, or (3) unnecessary because *M'Naghten* covers the lack of control. We return to these issues, in particular in Chap. 6, on neuroscience and insanity.

2.5 Product Test or *Durham* Rule

According to the *Durham* rule (*Durham v. U.S.* 1954), also known as the "product" test, the defendant is "not criminally responsible if his unlawful act was the product of mental disease or mental defect."[62] The test is currently used in the U.S. state of New Hampshire.[63]

This standard is significantly different from the *M'Naghten* Rule, irresistible impulse test, and the Model Penal Code. Each of these three standards defines a *specific area of human functioning* as legally relevant with respect to the impact of a mental disorder. *M'Naghten* defines knowledge of the act as the relevant area.

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[60]An extensive overview of legal insanity in U.S. jurisdictions can also be found in Janofsky et al. (2014). Note that differences regarding legal insanity across jurisdictions are not limited to the United States. For instance, Ferris (2010, p. 364–365) writes about Australia: "Although Australian states may apparently have given some support to this attempt at harmonization of the law, in practice the Model Code has been modified and applied in disparate ways. For example, South Australia has not included severe personality disorder as a condition capable of producing mental impairment (…). Victoria has not included the volitional element concerning control of conduct in its mental impairment legislation (…). New South Wales has ignored the Model Code altogether…"

[61]Helm et al. (2016) performed a "mock juror" study among 477 undergraduate students (who participated in the study for course credit) comparing *M'Naghte*n to the Model Penal Code criteria. Their results appear to downplay the relevance of the differences between jurisdictions as far as the test for insanity is concerned: "The results of this study support the contention that jurors' decisions in insanity cases are not affected by whether they are asked to decide based on the Model Penal Code test (with a rationality limb and a control limb) or on the McNaughten test (based entirely on rationality), even when considering a defendant suffering from a clear control disorder. This suggests that jurors are making decisions based on who they think is insane rather than on the specific legal standard they are given and is consistent with existing literature showing that jurors tend to use their own conceptions of insanity rather than legal definitions when making determinations." Yet, even if this is true for jurors, the extent to which it is true for judges is unclear.

[62]*Durham v. United States*, 214 F. 2d 862 (D.C. Cir., 1954).

[63]See Packer (2009, Appendix A).

The irresistible impulse standard defines the ability to resist an impulse as the relevant area, while the Model Penal Code defines appreciation of the wrongfulness of the act and the ability to conform one's conduct as the legally relevant areas of human functioning. *Durham*, in contrast, does not specify such an area. So, in principle, there are no limitations regarding the domains of functioning that may be affected or compromised in order to meet the standard, just as long as the criminal act can be considered the *product* of the disorder or defect.

Theoretically, there is something interesting about this view, as articulated by Gerber (1975, p. 125):

> The *Durham* standard views mental functioning as essentially unitary but multifaced. No single mental faculty determines the existence or nonexistence of sanity, just as no single faculty is responsible for the control of human behavior. Impaired control may result from a wide variety of causes in the psyche, not all of which are cognitional.

He further explains that "If a single theme pervaded Judge Bazelon's opinion in *Durham* it was encouraging the fullest possible range of psychiatric testimony on the question of responsibility."[64] According to Becker (2003, p. 43), in practice, this rule "leaves the ultimate decision of criminal responsibility to the expert medical witness without any limitation or guide as to which kinds of cases the law seeks to exempt from condemnation and punishment."

This standard for insanity highlights the fact that the disorder provides an excuse only if it *produced* the defendant's behavior. The idea that the illness is relevant *only insofar as* it directly contributed to the occurrence of the crime is not unreasonable. A fear of flying will not exculpate a defendant for robbing a shop because there does not appear to be any relationship between the fear and the act; the crime cannot be considered the "product" of the defendant's phobia. To complicate the matter, suppose now that the robber wanted to visit his daughter thousands of miles away. He cannot go by plane because of his fear of flying, so he has to go by boat. This boat trip, however, is much more expensive than a flight, and the defendant has no money for such an expensive trip. This is why he decided to rob the shop. Is the crime the product of the disorder? Without the disorder, he would have gone by plane, and he would have visited his daughter instead of standing trial. But does this amount to the crime being the "product" of the disorder? *M'Naghten* is probably more helpful here: because, as far as we know, the fear of flying did not cause a lack of knowledge about the nature and quality of

[64]Gerber (1975, p. 124). He also writes on that page: "Before 1954 the District of Columbia employed the right-wrong rule of *M'Naghten* taken together with the irresistible impulse test. Two principal problems arose in attempting to apply this standard. First, the antiquated terminology of *M'Naghten* ceased to represent society's notion of who should be punished relative to the existing state of psychiatric knowledge. Second, expert witnesses felt obliged to go outside their expertise into the realm of law and social morality in testifying as to whether defendants knew right from wrong. The issue of responsibility was framed so narrowly that experts felt precluded from adequately describing the ramifications and manifestations of a defendant's illness relevant to an assessment of criminal responsibility." In *Durham*, the court concluded that "a broader test" than *M'Naghten* had to be adopted.

the robbing of the shop or its wrongfulness, the defendant will not be considered insane, which probably corresponds to our moral intuitions about such a case.

Becker (2003, p. 43–44) formulates the conceptual concern regarding the "product"[65] component of this standard as follows:

> The question of causation or "product" is fraught with difficulties. The concept of singleness of personality and unity of mental processes that psychology and psychiatry regards as fundamental, makes it almost impossible to divorce the question of whether the defendant would have engaged in the prohibited conduct if he had not been ill from the question of whether he was, at the time of the conduct, in fact ill.

Under this interpretation, if the defendant was ill, the actions would *have to* be considered the product of his illness, because the illness was part of the mind that formed the intention to commit the crime. Although I am not completely convinced by this line of thought, it is clear that there could be a theoretical issue here.

Blocker v. United States (288 F.2d 853 (D.C. Cir. 1961)) contains an interesting and influential concurrence from Warren Burger (future Supreme Court Justice) regarding the product test. He writes:

> Since its adoption in 1954, the "disease-product" test has been both acclaimed and criticized; it has been called "vague," "confusing," "ambiguous," "misleading," and it has been condemned as taking the fact determination away from jurors and transferring it to experts. … As I see it, our Durham opinion was a wrong step but in the right direction; its direction was correct because … it sought to open the jury's inquiry to include the expanding knowledge of the human mind and personality. The precise step—the "disease-product" test—is, however, subject to many valid criticisms which we must face.

One practical problem with the product test was that, allegedly, it led to "the domination of the courtroom by psychiatrists" (Gerber 1975, p. 127). In the absence of further legal criteria, it was basically up to psychiatrists to decide whether the crime was the product of the illness. As Gerber (1975, p. 125) states: "Clearly, it represents the psychiatrization of the criminal law." Warren Burger illustrates this point in *Blocker v United States*:

> We reversed Blocker's first conviction because after his trial and while his appeal was pending in this court, another case, In re Rosenfield, D.C.D.C. 1957, 157 F. Supp. 18 was being heard on petition for release on a writ of habeas corpus. In that case a psychiatrist made it known to the District Court that between the court session on Friday and Monday morning, St. Elizabeths Hospital, by some process not then disclosed, altered its "official" view that sociopathic or psychopathic personality disorder was *not* a mental disease. It had been decided that commencing Monday, St. Elizabeths Hospital and its staff would thereafter call and classify the condition known to them as "psychopathic personality" as a "mental disease" or "mental disorder."… I am now satisfied that our reversal of Blocker's first conviction on the stated grounds without more, was an error (and one in which I participated at the time.) In holding as we did, we tacitly conceded the power of St. Elizabeths Hospital Staff to alter drastically the scope of a rule of law by a "week-end"

[65]The term "mental disease or defect" in this standard has also been criticized, but I will focus on the product component, since that is the distinguishing feature of the *Durham* test.

> change in nomenclature which was without any scientific basis, so far as we have any record or information.

This weekend-turnaround shows the "power" of the psychiatrist, or indeed the staff of one particular hospital, regarding a defendant's insanity.[66] Note, that this weekend-turnaround had to do with what was considered a mental disease, rather than with the term "product." Yet, without further criteria (such as *M'Naghten*'s nature, quality, and wrongfulness), it all hinges upon the presence of a mental disease; at least, this is how the standard apparently worked out in practice.

The standard became unpopular. Apart from the factors already mentioned—having to do with vagueness and (perceived) psychiatric dominance in the courtroom—there may have been another relevant factor for its unpopularity: under *Durham* the number of successful insanity defenses increased "dramatically" (Gerber 1975). Perhaps the increase was such that people felt that, at least in practice, the standard was overly broad.

In my view, the value of this standard lies in the fact that it recognizes the variety of ways in which mental disorders may influence a person's actions. However, the standard is problematic because the term "product" is unclear, and because, in legal practice, it may be overly inclusive. In addition, the product test apparently resulted in blurred borders between psychiatry and law—which should be avoided.

2.6 Norway: "Medical Principle"

According to many legal standards, a relationship must be established between the disorder on the one hand and the criminal behavior on the other. For instance, according to *M'Naghten*, to be exculpatory, a mental disease must result in a lack of knowledge regarding the nature, quality, or wrongfulness of the act, while the product test, at least in theory, requires that the disorder *produce* the crime. In Norway, however, the situation is different. Section 44 of the Norwegian General Civil Penal Code states: "A person who was psychotic or unconscious at the time of committing the act shall not be liable to a penalty. The same applies to a person who at the time of committing the act was mentally retarded to a high degree."[67] This means that: "Being psychotic at the time of committing the act will unconditionally exempt the person from punishment, regardless of whether the offence is a result of the psychosis. This is often referred to as the medical principle."[68]

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[66]Note that, in *Blocker*, Judge Burger also recognized that "Of course legal rules should be flexible enough to embrace the bona fide, and scientifically recognized developments and discoveries of medicine."

[67]Translation taken from Syse (2014), which is identical to the English translation of the Breivik verdict Lovdata TOSLO-2011-188627-24E. Since the section does not mention the terms "responsibility", "liability" or a related concept, it is not completely clear to me that it concerns *insanity*. Still, since it is considered to concern insanity, I will refer to it as an insanity standard.

[68]Taken also from Lovdata TOSLO-2011-188627-24E, see also Syse (2014).

Notably, as Melle (2013, p. 17) writes, "'Psychotic' is here simply defined as 'a condition that meets the criteria in the current diagnostic manuals.'"

This Norwegian criterion is an interesting addition to our list of standards, for two reasons. First, the mere *presence* of a mental disorder a the time of the act is sufficient—no other standard we discussed unconditionally exempts a defendant just because a mental disorder was present at the time of the act. Second, this standard defines the legally relevant *type* of mental disorder: psychosis.[69] So, only if a person suffers from psychosis, can he be exculpated. This is remarkable as well. Although "psychotic illness," as Elliott (1996, p. 12) puts it, "seems to be the paradigm for an insanity defense,"[70] in other legal systems, non-psychotic disorders may also result in a successful insanity defense, for instance dementia, delirium,[71] and PTSD.[72] In any case, Section 44 of the Norwegian General Civil Penal Code makes clear that we cannot take it for granted that insanity standards require a *relationship* between the disorder and the crime—other than a temporal relationship.

There are several problems with this insanity test. The first is a lack of consistency between the test and our common morality. Morally, people suffering from non-psychotic illnesses (e.g., people suffering from dementia) may also be excused, whereas not everyone suffering from psychosis will be morally excused for his actions (e.g., a psychotic person who evades taxes). Another problem with this standard could be that patients know that as long as they are psychotic, they will be unconditionally exempted from punishment. Some people are in chronic psychotic conditions, hearing voices, or suffering from a delusion. Strictly interpreting Section 44, these people would be relieved of legal responsibility for whatever acts they commit in their lives—regardless of whether those acts relate to the

[69]Unconsciousness is added, but this probably refers to highly exceptional cases. Committing crimes and being unconscious is a rare combination.

[70]See also Packer (2009, p. 30) on the U.S. context, "most successful insanity defenses involve a psychotic disorder."

[71]See, e.g., Janofsky et al. (2014, S29) on the types of disorders that may be accepted for insanity defenses in the U.S. context: "There are clear trends in the courts' acceptance of some diagnosable mental disorders and syndromes. Psychotic disorders, such as schizophrenia, schizoaffective disorder, and mood disorders with psychotic features are diagnoses that typically qualify as serious or severe mental disorders or mental disease. Other diagnoses differ in outcome, depending on the facts of the case, the degree and nature of the symptoms, and the jurisdictional precedent. For example, personality disorders, paraphilias, impulse-control disorders, dissociative identity disorders, and developmental disorders can vary widely in terms of acceptance. Certain cognitive disorders, such as dementia or delirium, may also qualify as mental disease or defect, depending on circumstances and jurisdiction."

[72]On Post-traumatic stress disorder (PTSD), see Appelbaum et al. (1993), Berger et al. (2012), Packer (2009). As Berger et al. (2012, p. 512) write, "Shortly after its introduction into DSM-III in 1980, PTSD itself became the basis for successful insanity defenses. In *State of New Jersey v. Cocuzza*, the defendant, a Vietnam veteran who assaulted a police officer was found to be not guilty by reason of insanity. Mr. Cocuzza maintained that he believed he was attacking enemy soldiers, and his claim was supported by the testimony of a police officer that Mr. Cocuzza was holding a stick as if it were a rifle."

psychosis. Furthermore, the fact that these people are unconditionally exculpated may give the impression that psychotic people are generally incapable of making competent decisions about their lives. This may obstruct the social inclusion of psychotic psychiatric patients; it may hamper the recognition of their autonomy in shaping their own lives. Perhaps unsurprisingly, Syse notes that "The Norwegian insanity defense has been questioned for years" and he suggests that changes may be made.[73]

There is an advantage of this standard as well: psychiatric assessments may be more reliable. Diagnosing a psychotic disorder may be less challenging than assessing, on top of that, whether, due to that disorder, the person did not know that what he was doing was wrong.[74] In fact, in Norway, psychiatrists are asked to do what they normally do, and what they have been trained for years to do: assess whether a disorder is/was present—without answering further, less common, and legally motivated questions about, e.g., knowledge or control related to the crime (such further questions depend on the legal test in that particular jurisdiction).

2.7 No Standard

In the Netherlands, there is no legal standard with criteria guiding judgments regarding a defendant's criminal responsibility, such as the *M'Naghten* Rule or the Modal Penal Code standard.[75] According to Section 39 of the Dutch Criminal Code: "A person who commits an offence for which he cannot be held responsible by reason of mental defect or mental disease is not criminally liable."[76] This section merely tells us that if a defendant cannot be held responsible due to a mental disorder, he is not criminally liable. But it does not tell us *under what conditions* a defendant cannot be held responsible.

Dutch psychiatrists and psychologists who evaluate a defendant answer a fixed set of questions:

1. Is the defendant currently suffering from a mental disorder?
2. Was the defendant suffering from a mental disorder at the time of the crime?
3. If so, did the disorder influence the defendant's behavior?

4a. If so, in what way?

4b. If so, to what extent?

[73]Syse (2014, p. 405). For criticism regarding the Norwegian criterion for insanity, see also Bortolotti et al. (2014).

[74]See also Penney (2012).

[75]Tak (2008). This situation is different from that in Sweden, where the insanity defense has been abolished. It is available in the Netherlands, but no specific criteria for legal insanity have been formulated to guide courts in ascertaining a defendant's insanity, see also Meynen (2013b), Radovic et al. (2015).

[76]Section 39 of the Dutch Criminal Code, translation from *The American Series of Foreign Penal Codes* (Netherlands 1997, p. 73).

4c. What conclusions can be drawn from this regarding an advice concerning the defendant's criminal responsibility?[77]

Apparently, according to the format of these questions, the influence of the mental disorder or defect on the defendant's behavior is important, or even crucial. Yet, it remains unclear what *type* of influence will result in insanity or diminished[78] criminal responsibility. This is not defined. In practice, in their reports, psychiatrists and psychologists describe what they themselves consider relevant with respect to the question of legal insanity. For instance, the psychiatrist or psychologist may reason that the defendant "did not act of his own free will but based on his psychotic beliefs,"[79] and that, therefore, the defendant should be considered insane. Alternatively, they may state that the defendant "most probably due to a manic episode lost control of his behavior and was not able to foresee the consequences of his behavior,"[80] and that therefore the defendant is insane. So, behavioral experts develop their own arguments about a defendant's legal insanity in which they use the criteria they consider relevant to criminal responsibility in that particular case, rather than evaluating a defendant in light of the criteria of a legal standard. In fact, in practice, not having a standard is likely to result in *several*—more or less "improvised"—standards guiding the expert's advice to the court. The outcome of the psychiatric and psychological evaluation of a defendant, therefore, depends not only on the psychiatric and psychological findings, but also on the criteria a particular expert uses when drawing a conclusion about the defendant's sanity. This entails that the expert's own view of what insanity comes down to is likely to be important here. Notably, in the Dutch legal context, behavioral experts also give explicit advice to the Court (there is no jury, but professional judges, usually three) about the degree of the defendant's criminal responsibility. Eventually, the Court decides whether—or to what extent—it will follow the psychiatrist's advice. In a vast majority of the cases, the expert's advice is followed.

Interestingly, Van Esch (2012) has criticized some psychiatrists and psychologists in the Netherlands for not describing the exact relationship between the mental disorder and the crime in their reports about the defendant's insanity. Although such criticism is understandable, we should note that the requirement of such a description *may or may not* be formulated by the law or other rules or codes. Given the fact that no criteria for legal insanity have been specified in the Netherlands, the law provides no clear point of reference from which to criticize

[77]Partially adapted from Van Kordelaar (2002). There are other questions about the risk of recidivism and possible ways to reduce that risk, but these have been omitted here. As of September 2016, the Netherlands Institute of Forensic Psychiatry and Psychology (NIFP) will use an adjusted format of three degrees of criminal responsibility.

[78]In the Netherlands, there are five degrees of legal responsibility: responsible, slightly diminished responsibility, diminished responsibility, strongly diminished responsibility, insanity—see also the introductory chapter.

[79]Cited and translated: District Court Haarlem, 2 February 2006, ECLI:NL:RBHAA:2006:AV0882.

[80]Cited and translated: District Court Utrecht, 19 October 2011, ECLI:NL:RBUTR:2011:BT8735.

these behavioral experts.[81] Suppose that these experts had prepared their reports in Norway: there would be no problem at all if they just diagnosed a psychotic disorder at the time of the crime and concluded that, therefore, the defendant was insane. The reason is that the Norwegian legal standard only requires the presence of a psychotic disorder (see previous section). This emphasizes the fact that *not* formulating clear criteria for insanity in principle allows experts a great deal of leeway.

Several points of criticism have been formulated regarding the forensic psychiatric and legal practice in the Netherlands just described. For instance, it has been argued that forensic psychiatrists and psychologists should not render an opinion on insanity because legal insanity is a legal concept that falls outside the realm of psychiatry and psychology.[82] Of course, this point is, basically, the "ultimate issue" question (Buchanan 2006). However, concerns about behavioral experts rendering an explicit opinion on a defendant's criminal responsibility may be based on a variety of motives. There may be legal concerns about experts entering the legal domain because this may affect the integrity and quality of legal decision-making—a justified concern.[83] But there is another concern as well; it has to do with the "integrity" of psychiatry as a medical discipline. Psychiatrists will be taken seriously as long as they themselves take the limits of their professional expertise seriously. Knowing and respecting the limits of one's expertise is a mark of the expert witness. To remain within the boundaries of one's profession, therefore, is in the interest not only of the individual psychiatrist giving testimony before the court, but also in the interest of psychiatry as a medical discipline dealing with grave issues in a scientific and responsible manner.

The fact that no criteria for legal insanity have been defined in the Netherlands has also been criticized (Meynen 2013b). Recently Bijlsma showed that, indeed, judges have used different criteria for insanity, which is a problem for equality of justice (Bijlsma 2016). In addition, if psychiatrists and psychologists were to stop rendering opinions on insanity as long as no criteria for insanity have been defined, judges may find it difficult to interpret psychiatric findings in view of the legal question of insanity. A legal standard, defining what is relevant with respect to insanity, may assist the translation of medical findings to the legal norm. In their reports and evaluations, experts may even specifically address those aspects of mental functioning that are included in the legal standard. As the *AAPL Practice Guideline for Forensic Psychiatric Evaluation of Defendants Raising the Insanity Defense* writes, "The ability to evaluate whether defendants *meet a jurisdiction's test* for a finding of not criminally responsible is a core skill in forensic

[81]When evaluating Dutch legal and forensic practice, case law must also be taken into account.

[82]Beukers (2005), Hummelen and Aben (2015), Meynen and Kooijmans (2015).

[83]Buchanan (2006, p. 19) mentions a "longstanding and widespread concern that psychiatric testimony is more likely than other evidence to intrude into the jury's realm."

psychiatry."[84] The jurisdiction determines the criteria, while psychiatrists and psychologists enable the court to reach a decision regarding the question of whether these criteria are met in a particular case.

Another reason for introducing a standard for insanity is that it would make legal decision-making more transparent (Meynen 2013b). All parties concerned, as well as the general public, would know beforehand which criteria would be used to determine the defendant's insanity. In its verdict, the court will also be able to explain its judgment by referring to that standard's criteria. Based on these considerations, in my view, it would be preferable to have a legal insanity standard.

Still, we may ask: why would we need such a standard specifically for legal insanity? One reason is that the final judgment on legal insanity is in part based on the evaluation of the defendant by a non-legal discipline, psychiatry or psychology. So, in principle, a translation will have to be made from one discipline (psychiatry or psychology) to the legal domain. A standard would be a valuable tool to ensure that this translation is clear and consistent. Another, related reason is that the views on the criteria for legal insanity diverge to such an extent that a standard is needed to ensure equality before the law within a legal system. Finally, one could argue that the quality of an official standard is likely to be higher than that of "improvised" standards.

In sum, in this chapter we have examined several legal insanity standards. They all have problems of their own, but not using a standard (the current situation in the Netherlands) is not a good solution either. The matter of insanity is too important, too complicated, and too much open to interpretation not to define the criteria for insanity in a standard. In any case, the Dutch approach to insanity underscores the variety of ways in which legal systems deal with insanity.

2.8 Conclusion

The intuition that mental disorders sometimes excuse a defendant may lead to very different rules or standards for insanity—or to no standard at all (the Dutch situation). The variety becomes even more pronounced if we take into account that there are also *variants* of the *M'Naghten* Rule and the Model Penal Code standard. Each of the approaches to insanity has strengths and weaknesses. *M'Naghten* covers a morally and legally relevant issue (knowledge about the act) and many feel

[84] Janofsky et al. (2014, emphasis added), see also Knoll and Resnick (2008) on the United States context. The 2014 AAPL Guideline reads, more specifically: "The forensic psychiatrist performing an insanity defense evaluation must answer three basic questions:

1. Did the defendant suffer from a mental disorder at the time of the alleged crime? (retrospective mental state evaluation)
2. Was there a relationship between the mental disorder and the criminal behavior?
3. If so, were the criteria met for the jurisdiction's legal test for being found not criminally responsible?"

that it can be reliably tested—but isn't too strict? Is it fair to fail to take control problems into account? The Model Penal Code test does more justice to the many ways in which mental disorders may seriously affect mental functioning, but isn't its control prong overly inclusive? Moreover, can it be reliably tested? Irresistible impulses, if they occur due to a mental disorder, may be a very good reason for exculpation—such behavior seems to resemble epileptic seizures. Still, how can we distinguish between irresistible impulses and impulses that are simply not resisted? Is a "substantial" incapacity to control one's actions sufficient for insanity, or should a complete incapacity be required?

Furthermore, it makes plausible sense that criminal behavior can be excused because of the presence of a mental disorder, but only if that disorder *played a decisive role* in the commission of the crime, and somehow "produced" that criminal act. Still, the product test was not considered a success in legal practice.

In principle, it could be wise to restrict exculpation as a result of a mental disorder to those cases that are often considered the clearest regarding insanity: psychotic disorders. This is the Norwegian approach. But the mere *presence* of such a severe mental disturbance at the time of the crime does not seem to be sufficient to consider the defendant legally insane. People who are psychotic may well be able to bear responsibility for the decisions they make in their lives. Finally, not formulating a standard, and leaving it up to psychiatrists and psychologists to formulate an argument about a defendant's insanity based on concepts and facts considered relevant by that psychiatrist, may result in tailored advice to the court about a defendant's insanity, but it may also cause serious problems regarding equality before the law.

These are questions and issues that arise when we take a closer look at insanity in different legal systems, as we did in this chapter. In fact, we are confronted with profound disparities regarding the question of how criminal law should do justice to the deep impact mental disorders may have on a person's responsibility.

Basically, two types of concerns can be distinguished: theoretical and practical. Examples of theoretical concerns are: does the standard correspond to moral intuitions? To what extent are grounds for moral exculpation relevant in the context of criminal law? Examples of practical issues are: Is the standard clearly formulated? Can its components be reliably tested? Both types of concerns are highly relevant, and both may lead to different answers regarding the same topic. For instance, many feel that, theoretically, a lack of control is relevant to responsibility. At the same time, some of those who endorse that view believe that a lack of control cannot be reliably tested in forensic and legal practice. Practical qualms may outweigh the theoretical argument.

Developing a good standard for insanity has proved to be no easy task—and not having a standard is not a good option either. Then, why not abolish the insanity defense entirely, just as, for example, Idaho and Utah did in the U.S.? The next chapter considers arguments for such a drastic measure, as well as some responses to them.

Chapter 3
Arguments Against the Insanity Defense and Responses

3.1 Introduction

Although the insanity defense is an element of many legal systems, there continue to be debates about whether it should be part of a legal system at all. In fact, "many prominent scholars have advocated abolition"[1] of the defense. Various arguments can be formulated against it. In this chapter, such arguments are considered and responses offered. Even if we feel that none of them is compelling as an argument for abolishing legal insanity, they may still be of interest when evaluating, revising, or shaping the insanity defense in a jurisdiction.

Recent developments in the U.S. have shown the relevance of arguments for and against the insanity defense. In November 2012, the U.S. Supreme Court declined to grant *certiorari* in a case testing whether the availability of an insanity defense is a constitutional right. The case was *Delling v. Idaho*, Idaho being one of the four U.S. states that has abolished the defense.[2] John Joseph Delling suffered from schizophrenia and "believed that his victims were stealing his essence by shrinking his brain and that he had to kill them to save his life" (Morse and Bonnie 2013). It is assumed that the insanity defense would have been successful in Delling's case, if available. Morse and Bonnie were among 52 law professors who submitted an *amicus* brief in *Delling* "urging the Supreme Court to grant *certiorari* and to decide the constitutional question in Mr. Delling's favor" (Morse and Bonnie 2013). However, the U.S. Supreme Court refused to consider the

[1]Sinnott-Armstrong and Levy (2011, p. 322). In a footnote, they refer, for example, to Thomas Szasz and Alan Dershowitz. Another example is A.L. Halpern, a professor of psychiatry, who wrote: "The exculpatory insanity concept is inapplicable to our criminal law. There is no place to go in the quest for an insanity formulation, no matter how narrow. Every insanity definition is irrelevant and essentially meaningless. In almost thirty years of psychiatric practice, I have never seen a deserving case of acquittal by reason of insanity that could not have been dealt with in a more humane and compassionate manner by other means available to the jury and sentencing judge. Operationally, the insanity defense is a tribute to our hypocrisy rather than to our morality. Abolition of the exculpatory insanity rule is the only rational path." (Halpern 1984, p. 68).

[2]The other states are Utah, Kansas, and Montana.

G. Meynen, *Legal Insanity: Explorations in Psychiatry, Law, and Ethics*,
International Library of Ethics, Law, and the New Medicine 71,
DOI 10.1007/978-3-319-44721-6_3

Table 3.1 Arguments against legal insanity, and responses to them

Argument against legal insanity	Response
Assessing a past mental state is too difficult	It may be challenging, but it is often done in psychiatry as well as in criminal law (e.g., *mens rea*, intent)
Expert testimony is indirect, complicating the straightforwardness of the legal judgment	Expert testimony is anything but unusual in criminal cases
Deterrence is significantly undermined	Clear scientific evidence for this claim is lacking
	Even if deterrence were undermined, belief in the fairness of the legal system could be increased
Guilty defendants escape punishment by faking psychopathological symptoms	A successful insanity defense is rare, so even if faking is an issue, not many defendants are escaping punishment by faking
	A more compelling response may be that forensic psychiatric expertise also concerns detecting signs of faking and malingering
	There is no empirical evidence that a large percentage of those considered insane are faking
Legal insanity is only for the rich	In general, having financial resources will be to a defendant's advantage. Legal insanity is no exception
	There is a partial solution: not having the defendant bear the burden of proof
The criteria for insanity are under debate	Many aspects of criminal law are topics of debate
Legal insanity creates stigma	True, this is a negative aspect of insanity (and mental disorder in general), but in itself not a sufficient reason to abolish it
Partiality of behavioral expert testimony affects the profession	This is a genuine risk, particularly in adversarial systems where insanity is a defense that has to be raised and proven by the defendant. It may also be relevant to inquisitorial systems when the defense has its own expert(s). The issue may be remedied by professional ethics, training, and health law
The insanity defense is "too rare to be worth the trouble"	The basic issue is not rareness but fairness, and the defense isn't *that* rare

matter. In response, Morse and Bonnie plead their case in an article in which they examine important arguments against the insanity defense. Clearly, the debate about the availability of the defense is not over.

In what follows, I consider eleven objections to the insanity defense, most of which were formulated by influential scholars, in particular by Morse and Bonnie.[3] In addition, responses to the challenges are formulated (see also Table 3.1).

3.2 Past Mental State

The insanity defense requires an assessment of the defendant's mental state at a point in time in the past, often weeks or months ago. Obviously, this is a challenging task. Evaluating a person's mental state when he or she is sitting in front of the

[3]Some of the arguments have already been discussed in Morse (1985).

psychiatrist is difficult enough without having to assess a bygone mental state.[4] Morse and Bonnie respond that proving *mens rea* implies a similar challenge, because this concerns a past mental state, too.[5] If one does not object to proving *mens rea*, consequently, one should not favor abolishing the insanity defense merely on the ground that it involves a retrospective evaluation. Unless, of course, evaluating a mental disorder would be a bigger challenge than evaluating *mens rea.* But Morse and Bonnie (2013, p. 493) believe that the "severe mental disorder that is necessary for practical support of an insanity defense is in most cases easier to prove than ordinary *mens rea*." I would like to add that, usually, insanity does not have to be proven "beyond a reasonable doubt" but by, e.g., a preponderance of the evidence (see also Chap. 7 on the burden of proof). This means that there need not be a high degree of certainty about the mental state of the defendant at the time of the crime.[6]

Still, we have to distinguish between two things: first, establishing the *presence* of severe mental disorder in the past and, second, evaluating the *specific effect* of that disorder—as required by the legal standard—related to the crime at the time of the crime.[7] Establishing such an effect may be more difficult than just evaluating the presence of a disorder (see also the previous chapter). There is another issue. The time of the crime may be a period of several seconds, minutes, perhaps hours, but usually not much longer. This is different from standard psychiatric assessments, in which a condition in the past is being diagnosed—e.g., a depressive episode—where such a high temporal resolution is not achieved. And it may be much easier to assess whether a patient experienced commanding auditory hallucinations over a certain period of weeks than to establish whether such an auditory hallucination immediately preceded the crime. In other words, when it comes to forensic psychiatric and psychological assessments, it is often not just about diagnosing a disorder, but also about establishing the impact of specific symptoms.

[4]Morse uses the term "past mental state" in his writings; I will use it here as well. On the complexities of evaluating a bygone mental state, see also Packer (2009, p. 77).

[5]See also Morse (1985) on this issue.

[6]One could object, in principle, that although it is possible to reach a legal judgment about a bygone mental state, it is not possible to reach a *scientific* judgment. See Slobogin (2007, p. 46): "To put the point another way, even if research relevant to past mental state can be characterized as science, it is science that is so likely to be tainted by methodological flaws that, in effect, it is no different from interpretation and storytelling. In contrast, research conducted to assist in proof of acts would not need to determine the strength or existence of slippery phenomena like beliefs, emotions, or urges in the past." See also Slobogin (2007, p. 44): "So what can mental health professionals tell us, based on scientific study? For obvious reasons, crimes cannot be replicated in the lab, where variables such as degree of psychosis or the amount of precrime battering by the victim can be controlled for variance. Even if we could do so, accurate measurement or even approximation of degrees of awareness, fear, or compulsion is not possible." I find this an overly critical position, since there are many varieties of scientific inquiry. In addition, there are many research data that inform psychiatric evaluations. Yet, it is true that crimes, serious or otherwise, cannot be replicated in the lab.

[7]For instance, impact on a defendant's knowledge and/or control of his behavior. As we have seen, Norway is an exception, because it only requires the presence of a psychotic disorder at the time of the crime.

Meanwhile, it is not unusual for a psychiatrist to evaluate a past mental state and its precise relation to an act at a specific moment in time. Consider a psychiatrist assessing a patient who has just been brought to the ER because of a suicide attempt six hours ago (Meynen 2013c). The psychiatrist is likely to reconstruct the reason for the attempt: was it, for instance, psychosis-based, or rather the result of depressed feelings? I have to say that, as a clinician, I hear very little skepticism regarding the possibility of such an assessment and recommendations for treatment and (perhaps compulsory) interventions based on such an assessment. But people tend to be more skeptical when it comes to assessments of defendants. The time that has passed may be a factor, and the specific context in which the risk of malingering and faking is increased could be another factor. But if it is possible to reconstruct a person's mental condition as related to a suicide attempt, why would it suddenly be impossible to say something about the role mental illness has played in a crime committed three weeks ago?

In sum, an insanity assessment is more challenging than ordinary psychiatric diagnostic practice for three reasons: first, it concerns a *past* mental state; second, it often concerns a *short* period of time; third, most jurisdictions require assessing a *specific effect* of that mental disorder regarding the criminal act. The presence of a particular *symptom* (e.g., a hallucination), rather than the presence of a disorder such as schizophrenia, may be highly important here. Still, in practice, things are often less complicated than this analysis may suggest: for example, a paranoid delusion is often present for a long period of time, and preparations for a certain crime may have taken place over a longer period of time as well. And it is true, as Morse and Bonnie emphasize, that *mens rea* also requires high temporal resolution assessments of past mental states. In my view, we have to recognize the problems regarding past mental states in psychiatric evaluations without becoming overly critical about the possibility of making meaningful statements about people's states of minds (pathological or otherwise) at the time of a crime.[8]

[8]In fact, one should note that the presence of consciousness in another human being is also something that may be hard to determine (scientifically). Other human beings behave as I do, but are they conscious, do they actually experience pain, happiness, etcetera, like I do? Or, is it just their brains and bodies behaving *as if* they do? Questions like these are known in philosophy as the "zombie problem" or the "other minds" problem. According to Alec Hyslop (2014) in the *Stanford Encyclopedia of Philosophy*, "The problem of other minds is the problem of how to justify the almost universal belief that others have minds very like our own. It is one of the hallowed, if nowadays unfashionable, problems in philosophy. Various solutions to the problem are on offer. (…) What is clear is that there does not seem to be what might be called a received solution to the problem. It has been argued that the problem cannot be removed, nor can it be made easier to solve, by embracing any particular philosophy of mind." I briefly mention this profound problem here just to make clear that, philosophically, there may be no end to our skepticism regarding knowledge about other people's mental states. We may not only doubt the nature of other people's past mental states, but also their present mental states, and we may even doubt the existence of those states altogether. So, if one starts to profoundly doubt the possibility of knowledge about other people's minds regarding legal insanity, one may have to bite the bullet and acknowledge that knowledge about other people's states of mind is, as such, uncertain, problematic, unreliable, etcetera—which would have consequences far beyond psychiatric, psychological, and neuropsychological evaluations and research.

3.3 Expert Testimony

Insanity judgments require *expert* evaluation and testimony, which may be considered a complicating factor. Let us look at a quote from Morse and Bonnie, who emphasize that:

> There is no evidence that the factual determinations concerning whether a defendant has a severe mental disorder incapacitating him from understanding the wrongfulness of his conduct are especially prone to error. Expert evidence on these concerns is routinely admitted and is subject to the usual rules of cross-examination. The ultimate value judgments that the insanity defense requires, such as the question of whether the defendant is incapable of understanding the wrongfulness of his conduct, are *no more intractable* or unreliable than the many other value judgments that the criminal law asks finders of fact to make, such as whether the defendant grossly deviated from the standard of care to be expected of a reasonable person, or whether an intentional killer was reasonably provoked.[9]

Still, there is the issue that *expert* evidence is used in insanity cases. This is different from, e.g., assessments of *mens rea*. To evaluate *mens rea*, judges or jurors can, in principle, rely on their own knowledge of human actions as well as their own observations, police reports, witness testimony, inferences, and common sense. But for a judgment about insanity, relying on an expert and his or her knowledge, evaluation, observations, analysis, interpretation, and conclusions, is necessary. Even if the mental disorder is "obvious" in a particular case, it may be obvious to a psychiatrist or psychologist, but not to a layperson. The psychiatrist has had the opportunity to talk to the patient, and has been in the position to decide what to talk about and how to talk about it. In addition, the expert has interpreted the interaction between the defendant and himself or herself. Furthermore, the report is not just an interpretation but also a selection of what happened. The selection was made by the expert. So, in these ways, the judgment about insanity is likely to be less transparent for a judge or jury than a judgment about *mens rea*. The presence of an intermediary—the expert—makes judgments about insanity indirect.[10] The situation may be further complicated when two experts reach different conclusions. How is one to decide who is right?

True, experts provide information about many issues in a court of law. Still, there is a difference: in cases of insanity, the expert evidence is used not to determine actions, facts, or events in the outside world, but to assess a state of mind. Fingerprinting, DNA, etcetera, all require expert knowledge, but it is not knowledge about a state of mind. Fingerprinting and DNA do not require the kind of personal interaction required for psychiatric and psychological evaluations, in the

[9]Morse and Bonnie (2013, p. 494) discuss this issue under the heading "wrong verdicts." I do not consider this a separate issue so much as an overarching concern. Emphasis was added.

[10]This point is not addressed by Morse and Bonnie (2013) or Morse (1985) in this way.

way explained above. There is thus a difference here between the judgment about insanity and "many other value judgments that the criminal law asks finders of fact to make."[11]

In addition, Morse and Bonnie state: "Finally, mental health evidence is routinely admitted in a vast array of civil and criminal contexts, including all the criminal competencies and sentencing." This is a good point, but competency assessments usually concern evaluations of *present* mental conditions, rather than past mental conditions. In other words, even if people are normally willing to rely on mental health experts, they may be reluctant to do so when it comes to assessing past mental states (see the earlier point). Suppose, for the sake of the argument, that a person is always a bit hesitant when it comes to psychiatric assessment and diagnosis, but is willing to give it the benefit of the doubt, and therefore to rely on the expert. Despite this, when psychiatrists and psychologists start to evaluate *past* mental states within the context of an insanity defense, that person may feel that this is just a bridge too far. This objection to legal insanity may thus become stronger when it is considered in conjunction with another concern than when it is considered separately.

3.4 Deterrence Undermined

Criminal law has several ends. One of them is to use the threat of punishment to deter people from performing acts that are considered "crimes". If some of those who commit crimes remain unpunished, deterrence may be reduced. Couldn't the availability of the insanity defense have such an effect? Morse and Bonnie write:

> Successful insanity defenses are so rare that deterrence will not be undermined, because few legally sane defendants will believe that they can avoid conviction by manipulatively and falsely raising the defense. (…) Further, it is best estimated that the insanity defense is raised in less than one percent of federal and state trials and is rarely successful (…) Insanity acquittals are far too infrequent to communicate the message that the criminal justice system is soft or fails to protect society.[12]

[11]Morse and Bonnie (2013, p. 494). In this context, a comment made by Appelbaum, chair of the APA Council on Psychiatry and Law, on a 5–4 U.S. Supreme Court ruling that "allowed states to bar psychiatrist testimony" may also be of relevance. He says: "Ultimately they seemed to rest the justification on the grounds that there is something about expert testimony on psychiatric issues that is inherently less reliable and more confusing than other sorts of testimony, and therefore it was not unreasonable for the state to seek to exclude it in these circumstances." (Quotes taken from *Psychiatric News* 2006, Vol. 41, No. 15, pp. 13–14, by Rich Daly.)

[12]Morse and Bonnie (2013, p. 494). They discuss these issues under the headings "public safety" and "beating the rap."

In other words, the insanity defense would not convey the message that you can get away with serious crimes. Still, the mere fact that Morse and Bonnie explicitly mention the low success rate of the insanity defense may suggest that not everyone is familiar with it. Deterrence may be undermined if people know about the defense but not about the low success rates. Deterrence, at least in part, is not about facts, but about what people believe to be the case. It might even be that, psychologically, the mere possibility of an insanity defense is what people pick up on, and what might diminish deterrence. What Morse and Bonnie basically say is that it is not rational, given the low success rates, to consider insanity an easy way out, and, therefore, that there is no justification for considering the insanity defense as diminishing deterrence—but not all people are always rational, and, moreover, not all people are well-informed.

Morse and Bonnie (2013, p. 494) appear to be aware of this when they talk about the symbolic value of successful defenses: "It is impossible to measure precisely the symbolic value of these acquittals, but it is also hard to believe that they have much impact on social or individual perceptions." True, to measure the symbolic value precisely may be impossible, but it may not be impossible to study the public perception of the defense via a survey or interviews. One may not only survey the general public, but people who have been convicted as well. How did, and do, they feel about the insanity defense as a way out? What success rates did they have in mind? Did it somehow affect their decision to commit a crime? Such research might provide some clues about whether deterrence is diminished by the insanity defense, and if so, to what extent.

An article by Daftary-Kapur et al. (2011) is of interest here. They studied laypersons' knowledge regarding the insanity defense. In fact, they developed an instrument, the KIDS (Knowledge of the Insanity Defense Scale), to measure knowledge and misconceptions about the insanity defense. There appear to be many inconsistencies between knowledge and reality. For instance, both the plea rate for insanity and the success rate are much lower than people think it is. In addition, people tend to think that those who plead insanity are usually faking, while this is not supported by the available evidence.[13] If these laypersons were jurors, their ignorance could have consequences for the verdict. Daftary-Kapur et al. (2011, p. 60) state: "Attorneys can make use of the KIDS to identify jurors who harbor misconceptions about the insanity defense. This could be useful in trial strategy as attorneys can call experts to educate them as well as tailor their case with an understanding of these myths and how they might affect the verdict." But, of course, "laypersons" may not only be jurors, they may commit crimes as well. In such a case, deterrence may be undermined by misconceptions about the insanity defense. In support of the findings by Daftary-Kapur et al., Hans and Slater (1983, p. 209) concluded, based on a telephone survey of 434 respondents shortly

[13]The study also showed that people tend to think that pleading insanity entails no risk to a defendant, while the opposite is true: raising the defense implies admitting he committed the crime—of course this depends on the jurisdiction.

after the *Hinckley* verdict: "Despite intense media coverage of the Hinckley case, knowledge of the insanity defense was not extensive, supporting previous research showing that the public is not well informed about the insanity defense."[14]

To show that deterrence is not significantly undermined, Morse and Bonnie (2013, p. 494) also write: "More important, every jurisdiction provides for commitment to a secure mental facility after a defendant has been acquitted by reason of insanity and the Supreme Court has approved the constitutionality of indefinite confinement (with periodic review) of such acquittees as long as they remain mentally disordered and dangerous." However, such commitment (as well as its length) may depend on the case and the legal system. For instance, in the Netherlands, there are cases in which there was no commitment to a forensic psychiatric hospital after the defendant was acquitted on grounds of insanity; the defendant was "free to go." Such cases are rare, but media coverage may be extensive and it may affect people's perception of legal insanity. Another point is that, with the availability of proper treatment, some defendants who have been acquitted on the grounds of insanity and committed to mental hospitals will be released after a short period of time.[15] Furthermore, Daftary-Kapur et al., found that the public also underestimates the amount of time those acquitted on the grounds of insanity spend in custody. So, people may still perceive the defense as a way out.[16]

In sum, although a well-informed and rational judgment based on the actual success rates most probably leads to the conclusion that the insanity defense should not significantly undermine deterrence, it may still do so, at least to some extent.

Diminished deterrence, however, need not always be wrong. People may be more deterred if draconic sentences await them for all kinds of minor offences, but is that desirable and fair? People may also be less deterred because they have the right to remain silent and to have an attorney. But we feel this is fair—good—so this is part of the legal system *even if* it may result in less deterrence. Fairness and doing justice are important to the legal system as well. The insanity defense could increase belief in the fairness of the system.

Probably, whether or not people are less deterred depends, in part, on whether they believe they can mislead behavioral experts by faking symptoms of mental illness. The possibility of successful faking will be considered in the next section.

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[14]See also Hans and Slater (1983, p. 207): "The question asking for people's definitions of legal insanity indicated very little knowledge of the elements of the test for legal insanity. Only one of our 434 respondents gave a reasonably good approximation of the Model Penal Code definition of legal insanity which was used in the Hinckley case and was employed here in Delaware at the time of the Hinckley trial."

[15]Morse and Bonnie (2013, p. 494): "It is of course true that acquittees may be released earlier than if they had been convicted and imprisoned…" See also Sinnott-Armstrong and Levy (2011, p. 321).

[16]Not much information is available about recidivism of insanity acquittees following release from supervision (Norko et al. 2016). Of a sample of insanity acquittees in Connecticut discharged from the Psychiatric Security Review Board, 16 % were rearrested, "a rate that compares favorably with other discharged populations of offenders," according to Norko et al.

3.5 Escape Punishment by Faking

Another argument against the insanity defense is that defendants may fake their symptoms. In response, Morse and Bonnie (2013, p. 494) write: "Few defendants who are actually legally sane in some objective sense beat the rap with the insanity defense. Experts using the proper diagnostic tools can reliably distinguish people who are faking major mental disorder."[17] Interestingly, Morse and Bonnie do not cite studies on the percentage of cases in which defendants successfully fake or exaggerate their symptoms. In order to counter this objection effectively, some figures would be helpful.[18] To be sure, the fact that the insanity defense is rarely raised—and even more rarely successful—does not invalidate the objection that a considerable percentage of those who are exculpated may have been faking their symptoms. If people are acquitted on the grounds of insanity because they faked symptoms, no justice is done. This is true, even if the number of cases is small.

In fact, it is not only about the possibility of faking a major mental disorder. It is also about faking a particular effect of that mental disorder. Many legal systems require a certain type of influence of the mental disorder, such as impact on a person's knowledge about the nature, quality, or wrongfulness of the act, or the inability to control one's actions. Perhaps a person who actually suffers from a mental disorder, such as schizophrenia, is still "faking" a certain legally relevant type of impact of that disorder. Even if the presence of schizophrenia is well established in a particular defendant—e.g., corroborated by information from previous treating healthcare professionals—this does not necessarily imply that the disorder influenced the behavior in a legally relevant way.

It seems reasonable to acknowledge that, even if the standard for insanity is very strict, there will always be cases in which a defendant is successfully faking insanity. The fact that the criminal law requires the prosecution to prove guilt beyond a reasonable doubt suggests that, at least to a certain point, society is willing to exculpate the occasional guilty person rather than risk convicting innocent people. Similarly, it can be argued that adopting far-reaching safeguards against malingering at the risk of inculpating the insane would be undesirable.

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[17]So far, the responses formulated by Morse and Bonnie are very much in line with Redding (2006, p. 111, references omitted): "Finally, concerns often voiced about the insanity defense generally—that defendants can readily fake insanity and that there are too many insanity acquittals, are myths that have long since been debunked. Research has consistently shown that: (1) insanity rarely is feigned (in fact, feigning *sanity* is far more common), and malingering (faking) is almost always detected; (2) insanity is pled in less than one percent of all felony cases; (3) less than twenty-five percent of those who plead insanity are found Not Guilty by Reason of Insanity (NGRI); (4) many defendants found NGRI spend as long or longer in a mental hospital than the prison term they would have received if found guilty; and (5) when NGRI acquittees ultimately are released, their recidivism rate is less than that of convicted felons. Moreover, a 2005 national study found statistically identical success rates of insanity pleas when comparing *ALI-MPC* (a test that includes both cognitive and control prongs) and *McNaghten* jurisdictions."

[18]Daftary-Kapur et al. (2011) cite some studies that support their claims.

In any case, in the absence of a "gold standard" test for insanity, it is hard to arrive at specific numbers or percentages of faked insanity. Adaptations regarding the alleged strictness of the defense may therefore be the result of public nervousness about defendants getting away with their crimes by faking insanity, rather than decisions made based on solid data. On the one hand, the multitude of publications on detecting malingering and faking by defendants in forensic psychiatry suggests that faking and malingering are real dangers in evaluations of insanity.[19] On the other hand, psychiatrists and psychologists are generally well aware of this risk and specifically try to detect signs indicative of malingering and faking.

Faking and malingering are certainly not limited to mental illness. Yet, it is worth noting that, probably more than in other parts of medicine, psychiatrists have to rely on anamnesis (a patient's own words) and behavioral observation. For instance, there is no EEG or MRI that can be performed to help clarify the presence of psychosis. Meanwhile, forensic experts use so-called collateral information, if available, as well. This is information from other sources than the defendant's own words and behavior. The AAPL Guideline (2014) provides the following list of collateral information sources:

1. Written Records: a. Police reports; b. Psychiatric, substance abuse, and medical records; c. School records; d. Military records; e. Work records; f. Other expert evaluations and testimony; g. Custodial records; h. Personal, communication, and social media records; i. Psychometric testing, hypnosis, brain imaging, and other special procedures.
2. Photographs, Audiotapes, and Videotapes;
3. Collateral Interviews;
4. Physical Evidence;
5. Visits to the Crime Scene or Other Relevant Locations.[20]

Although this list does not invalidate the comments made above about the central role of history taking and behavioral observation in psychiatry, it makes clear that other and relevant sources of information may be available as well. These may well limit the risk of defendants successfully faking insanity.

3.6 Mental Disorder as Myth or At Least Conceptually Unsound

One of the great critics of psychiatry is professor of psychiatry Thomas Szasz (1920–2012). Szasz argued that "mental illness is unlike medical illness" (1991, p.103), and is, in fact, a myth. Clearly, such criticism also affects the insanity

[19]Publications on detecting malingering in forensic psychiatric evaluations include (Drob et al. 2009; Feuerstein et al. 2005; Rogers 2012).

[20]These are the exact words used in Janofski et al. (2014).

defense. Szasz (1991, p. 100) writes: "All tests of criminal responsibility rest on the premise that people 'have' conditions called 'mental diseases,' which 'cause' them to commit criminal acts. The value of these tests thus hinges on the soundness of this underlying concept. What kind of illness is 'mental illness'?"[21]

According to Szasz, no satisfactory answer to this question can be provided: mental illnesses are not real illnesses, hence their mythical nature. Although Szasz takes an extreme position, even today there is much debate about how to define mental disorder. Without going too deep into this discussion in the philosophy of psychiatry and elsewhere, it may be good to consider some diverging viewpoints.[22]

First, mental disorder has been defined as a brain lesion or pathophysiological change. This can be considered the "medical" model of mental illness: a phenomenon is a "disease" if a cluster of signs or symptoms is the result of a circumscribed *lesion*. If there are no pathological changes whatsoever, there is no disease. As long as there is just a cluster of symptoms, but no "underlying substrate," we consider a phenomenon a syndrome. One of the exceptions is trisomy 21, in which the genetic change is known, but the condition is still called Down "syndrome." The view that mental disorder is basically a brain lesion is often considered the dominant view of mental disorder. It entails that if no pathophysiological substrate for mental disorders can be found, there is no disease. One might argue that such brain lesions do not have to be immediately observable. As long as a brain lesion can reasonably be supposed to be there, the constellation of signs and symptoms can still be rightfully considered a mental disease. Interestingly, at present, the DSM-5 does not contain biological criteria—brain lesions, or biological markers—for any disorder except neurocognitive disorders. In that sense, a great deal must be supposed to be there without any direct evidence. One strength of the definition "mental disorder = brain lesion" may be that it is generally in line with somatic medical disciplines, such as pulmonology, cardiology, and dermatology: a disease comes with pathological changes. So, approaches, methods, and tools used in medicine in general, are, in principle, also applicable to psychiatry—if not now, then they will be in the future. Psychiatry is, in the end, just "normal," "objective" medicine. However, Thomas Szasz has criticized psychiatric illness based on this lesion-model, arguing, briefly, that since no bodily lesions can be shown in mental disorder, mental illness is not a real disease, but a myth.

We may ask whether a brain change correlating with a mental state *proves* that the mental state is a disease. That does not seem to be the case at all. The presence of physical changes accompanying mental states does not, in itself, imply that the mental state is pathological. For example, sleep is accompanied by EEG changes compared to waking, but sleep is not pathological. Another example: we assume that our visual experiences are accompanied by continuous changes in occipital

[21] See Szasz (1987) for his views on mental disorder and criminal law.

[22] The definitions or conceptualizations of mental disorder I discuss are mainly based on Meynen and Ralston (2011).

brain areas (and there are solid neuroscientific data to support that assumption). But such changes do not render vision pathological. A brain change, therefore, may be a necessary condition for "illness," but it is not a sufficient condition. In sum, the brain lesion model of mental illness is problematic for at least two reasons. First, we know very little about brain changes in psychopathology. Second, a brain change in itself does not make an "accompanying" mental state a "disorder." Consequently, brain changes are difficult to use as *the* criterion to consider a particular mental state a disorder.

A very different view of how mental disorder can be defined is as "breakdown of meaning" (Bolton 2008; Bolton and Hill 2003). Under this theory, mental disorders are states or conditions in which there is a loss of meaning. The things a person says or does do not make sense.[23] Normal, non-pathological behavior is meaningful, while pathological behavior has lost this natural characteristic of human action. For example, we may ask: Why does John accuse his neighbor of conspiring against him? It does not make sense at all! (John turns out to be suffering from a delusion.) Why isn't Peter happy with the beautiful present? (He is depressed.) Why does Helen check whether the door is locked thirty times before leaving the house? (Helen suffers from obsessive-compulsive disorder (OCD).) So, if a person's behavior no longer makes sense, if there is a breakdown of meaning, there is probably a mental disorder. Note that it may also be that the patient does not understand his or her own behavior, as may be the case with Helen, who checks the door thirty times. She may ask herself: Why do I continue to check the door, even though I have just established twenty-nine times that it is locked?

There is some attractiveness in defining mental disorder as a breakdown of meaning: it is in line with our everyday responses. If a person behaves in a strange or bizarre manner, the police may well call in a psychiatrist to do an evaluation. If a person commits a serious crime and behaves in a strange way during the crime or after the arrest, or if the crime itself cannot be explained—there is no apparent motive, etcetera—a defendant may be evaluated by a psychiatrist or psychologist. As long as we understand why a person behaves or talks as he does—even if we do not agree with him or her at all—there is meaningful behavior, no disorder. So, one strength of this viewpoint on mental disorders is that it fits well with everyday responses and does not rely on supposed brain lesions that have yet to be found. It relies firmly on what is there right before us: behavior that just does not make sense.[24] The serious weakness of the "breakdown of meaning" approach is clear as

[23]A reason to consider this view here in this section is that it is so different from the "medical" view just discussed.

[24]And is it actually true that there is a breakdown of meaning in psychopathology? Some may argue that Freud has shown that psychopathological phenomena may be very meaningful, although the meaning may not be immediately clear. According to Freud, even a "slip of the tongue" may be full of meaning—although the meaning may require some analysis. If one shares Freud's view of the richness of meaning of psychopathological phenomena, then the term "breakdown" would be unfitting (Bolton 2008; Meynen and Ralston 2011).

well. Although our judgment that another person's behavior does not make sense may provide a reason for psychiatric evaluation, it is not, in itself, *sufficient* to diagnose a mental disorder. Furthermore, although a person's behavior may not be meaningful or understandable to me, it may be understandable to someone else. In other words, this criterion for mental disorder appears to be quite subjective.

A third perspective on mental disorder is "harmful dysfunction," an influential view advocated by Wakefield (1992, 2007). According to this approach, mental disorder has two components: dysfunction and harmfulness.[25] In Wakefield's view, the dysfunction component is factual, not value-based or value-laden; it is based on science, and more particularly, on evolutionary science (Wakefield 2003). Meanwhile, whether or not a dysfunction is also harmful depends on our societal context and values, he claims. For example, dyslexia can be considered a dysfunction, but it is only harmful in societies in which reading is important (i.e., valued). In such societies, it can be considered a disorder. The harmful dysfunction view of mental disorder has had considerable impact on recent discussions on the concept of mental disorder. At least two problems can be identified. First, it may be hard to distinguish between function and dysfunction in biology without any reference to values—much harder than Wakefield's analysis seems to suggest. The notion dysfunction may itself not be value-free, and evolutionary theory, it has been argued, cannot provide a clear answer to the question of whether or not something should be considered "dysfunction" (Houts 2001). Second, it seems strange that we would have to do evolutionary research about the remote past in order to be able to say, here and now, that a person suffers from a mental disorder (Meynen and Ralston 2011).

These are just three views or definitions of mental disorders. More can be said about them, but it should already be clear that, given these diverging definitions, the concept of mental disorder is not easy to demarcate.[26] The *DSM-5 Guidebook* (Black and Grant 2014, p. 12) reads:

> Although no definition can capture all aspects of all disorders, each disorder identified in Section II must meet the DSM-5 definition of mental disorder:
>
> A mental disorder is a syndrome characterized by clinically significant disturbance in an individual's cognition, emotion regulation, or behavior that reflects a dysfunction in the psychological, biological, or developmental processes underlying mental functioning. Mental disorders are usually associated with significant distress or disability in social, occupational, or other important activities. An expectable or culturally approved response to a common stressor or loss, such as the death of a loved one, is not a mental disorder. Socially deviant behavior (e.g., political, religious, or sexual) and conflicts that are primarily between the individual and society are not mental disorders unless the deviance or conflict results from a dysfunction in the individual, as described above.

[25] An interesting characteristic of Wakefield's approach is that he distinguishes between "facts" (dysfunction component) and "values" (harm component).

[26] See also Bolton (2008), Fulford et al. (2006), Phillips et al. (2012).

This quote nicely illustrates not just the multifaceted nature of psychiatric conditions, but also the difficulties of providing a clear definition.[27]

Given the problems related to delineating the concept of mental disorder, what conclusions can be drawn regarding the insanity defense? Does the profound difficulty regarding a sound and generally accepted definition of mental disorder really undermine the insanity defense? Or, should we, in retrospect, conclude that the requirement of a sound concept of mental disorder is too demanding? In my view, having a sound concept of mental disorder would most probably help to further secure the basis of legal insanity. On the other hand, the fact that providing a definition of the concept of mental disorder is so difficult does not undermine the insanity defense as such. At least two reasons can be given. First, anyone familiar with the *philosophy of mind* is aware that, in general, providing definitions and concepts regarding the human mind is difficult (McLaughlin et al. 2009). Topics such as consciousness and intentionality are the subject of extensive philosophical debate. A medical discipline dealing with illnesses of the mind would, in my view, be overburdened if it were required not only to diagnose and treat such illnesses, but to come up with a philosophically sound definition of mental disorder. Notably, the conceptual complexity of the mind does not reduce the value of its health—and the need to treat disorders should these occur.

Second, it is not just the concept of mental illness that is troublesome: the concept of illness is difficult to define itself. This becomes clear in a title such as "The concept of disease—vague, complex, or just indefinable?" by Hofmann (2010).[28] In my view, just as surgeons should not be asked to provide philosophically sound definitions of physical illness before we allow them to treat a person suffering from acute appendicitis, psychiatrists should not be asked to provide conceptually clear definitions of mental illness before they are allowed to treat panic disorder.

In fact, the question about the conceptual nature of mental disorder brings together two conceptual puzzles: the puzzle about the mind and about illness. But medicine is, in essence, a practical discipline; its justification lies in diagnosis,

[27]See also the definition of mental disorder in the DSM-IV, American Psychiatric Association (1994): "In DSM-IV, each of the mental disorders is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom. In addition, this syndrome or pattern must not be merely an expectable and culturally sanctioned response to a particular event, for example, the death of a loved one. Whatever its original cause, it must currently be considered a manifestation of a behavioral, psychological, or biological dysfunction in the individual. Neither deviant behavior (e.g., political, religious, or sexual) nor conflicts that are primarily between the individual and society are mental disorders unless the deviance or conflict is a symptom of a dysfunction in the individual, as described above."

[28]See also Kendell (1975), showing the intertwinement of the problem of the concept of disease in general and mental disorder in particular.

cure, and care, rather than in providing conceptual clarifications. In general, we do not visit doctors for conceptual consultation but for effective diagnosis, treatment, and care. To be sure, a conceptual elucidation of mental disorder would be very valuable. But that statement is different from declaring that there can be no basis for an insanity defense until a sound concept of mental disorder is available.

3.7 Only for the Rich

Some feel that the insanity defense is a way for rich people to get away with serious crimes:

> After millions of television viewers watched Hinckley shoot President Reagan in 1981 and then be found not guilty by reason of insanity, many people thought that he got off at least partly because he was rich and had tricky lawyers and psychiatrists on his side. Whether or not this widespread belief was true, the impression that rich, devious people get away with crimes can decrease people's respect for the law and thereby their motivation to obey the law.[29]

The objection that insanity is "a rich person's defense" has been addressed by Morse (1985). Morse (1985, p. 799) provides a realistic response to it: "Wealthier defendants can almost always retain the best attorneys and experts in all types of cases, both civil and criminal." Yet, he adds that "few defendants of any economic status succeed with" the insanity defense. The argument of the small number of successful insanity defenses returns several times in the responses Morse (and Bonnie) formulate to the challenges to the insanity defense. To Morse's reply that, indeed, rich people are, in general, better off in the criminal justice system, one could respond that the insanity defense provides yet another way to support this inequality in criminal law (because of the high costs of a successful insanity defense), and that it should therefore be abolished. In Morse's (1985, p. 799) view, the solution is not to abolish the insanity defense, rather to make "reasonable attempts… to ensure all defendants decent representation." But to this solution one might respond that *until* such attempts have been successful, the defense just increases money-based inequality and, therefore, that it should be abolished for the time being.

Notably, this objection is especially relevant in those legal systems in which insanity is an affirmative defense *with the burden of proof on the defendant*. In other legal systems, especially inquisitorial ones, insanity may not have to be proven by the defendant, and the costs of the psychiatric and psychological evaluations may be borne by the state. Therefore, in principle, another solution to the problem might be to abolish it as a defense *for which the defendant has to pay*. Still, even if the psychiatric evaluation is court-ordered, a rich defendant may have considerably more resources to successfully challenge an unfavorable outcome.

[29]Sinnott-Armstrong and Levy (2011, pp. 320–321).

3.8 Lack of Clarity About the Criteria for Insanity

Based on the previous chapter, we can say without exaggeration that there is a considerable lack of clarity regarding the criteria for legal insanity. For example, quite a few oppose the inclusion of a control prong, because whether a defendant could not control or just did not control an action, allegedly, cannot be reliably assessed. In addition, they may point to a theoretical lack of clarity regarding *irresistible* impulses. Meanwhile, others argue that this must be part of the insanity test since behavioral control is crucial in moral theories about blame and responsibility. So, the validity and value of the control prong are subject of debate—still, in many jurisdictions such a control prong is included. This lack of clarity can be added to the list of possible objections to the insanity defense.

In fact, if a person accepts the insanity defense as part of a legal system, the next question will always be: *which* insanity defense? And because this follow-up question raises many complicated issues, enthusiasm for the defense may be substantially tempered. Of course, the lack of clarity does not mean that nothing sensible can be said about the criteria for insanity, so, in that sense, it is not a knock-out argument against the defense. Moreover, in response to this lack-of-clarity objection to the defense, one may say that many other topics and concepts in criminal law are under debate. Finally, one could reply that a widely shared position concerning insanity is that the defense *as such* is a valuable component of a legal system.

3.9 We Are All Caused to Act as We Do

Is singling out those suffering from mental disorders and excusing *them*, while holding others responsible, justified? Moore (2010, p. 488) writes: "For example, recent arguments for the abolition of the insanity defence have often been based on the assumption that insane criminals, who are excused, are no more strongly caused to act than are normal criminals, who are not excused." People may cite many "causes" of criminal behavior, such as genetic, psychological, and social factors, and argue that these people should also be excused (Moore 2010). As Moore points out, the causal challenge thus described may challenge criminal responsibility *as such*. If we accept that all events, including actions, are caused, and if causation is the reason for excuse in criminal law—as many appear to hold—nobody should be held criminally accountable.[30]

[30]See Moore (2010, pp. 490, 599); see also the next chapter on free will as well as Chap. 6 on neurolaw.

Moore describes two kinds of response that may be the result of such a line of thought. First, people may feel that although retribution has no longer a place in criminal law, utilitarian principles may still justify punishment. Second, others will doubt the grounds of substantive criminal law altogether. Interestingly, Moore adds (2010, p. 599), "Psychiatrists in particular are prone to accept without question the thesis that determinism is incompatible with responsibility."

It is true that if one accepts causal determinism, then one must accept that all actions—and indeed all other events—are caused. In addition, *if* causation were the justification for legal insanity, then we could just as well abolish insanity, because then we are all "insane"—not criminally responsible. Looking at the standards discussed in the previous chapter, the irresistible impulse test could be the most vulnerable to this line of argument (see also Moore 2010).

Morse (e.g., 2007) has strongly argued against a causation-based justification for legal insanity. While accepting determinism, he holds that a distinction can and should be made between the usual defendant on the one hand and a small group of defendants who suffer from a severe mental disorder. The rationale for the distinction, he explains, is not causation, but a lack of rationality.[31]

Qualms about the existence of causal determinism and its implications for responsibility are a topic of ongoing debate (see the next chapter, on free will). Therefore, "causality" as such does not provide a watertight argument against legal insanity. For instance, many philosophers currently take the position that even if determinism is true, there can still be moral and legal responsibility, as well as grounds for exculpation.

3.10 Stigma

On the stigma associated with mental disorder, John Sadler writes: "If, in medicine, any historical universals exist, the stigmatizing of the mentally ill would be among them."[32] Concerns about stigma provide another argument against the insanity defense. Sarkar argues that, in fact, legal insanity results in a dual stigma: "Although in theory the NGRI [not guilty by reason of insanity] verdict results in an acquittal, in practice, the acquittees are always sent to psychiatric facilities, often without limit of time, and suffer the *dual stigma of being mad and bad*."[33]

Halpern (1984, p. 65) formulates an argument for abolition in which stigma is one of the concerns:

> Abolition [of the insanity defense] benefits the defendant because it protects him from the stigma, which lasts long after he has recovered from his insanity, of the label "criminally insane," and relieves him of the heavy burden of proving his restoration to sanity in order that he might obtain his release from confinement following his acquittal.

[31]For more on this concept, see the previous and next chapter.

[32]Sadler (2009, p. 413).

[33]Sarkar (2010, p. 405, emphasis added).

In fact, according to Acorn (2011), defendants may be reluctant to plead insanity because of the stigma related to mental disorder.

The stigma that comes with legal insanity may thus be a good reason not to favor it.[34] Still, in itself, the issue is not sufficient to justify the conclusion that insanity should be abolished. Not everything that is associated with some form of stigma should therefore be abolished. The diagnosis of a mental disorder and seeing a healthcare professional may also be associated with stigma, but I do not think it is sufficient reason to abolish either of them. Nevertheless, the battle against stigmatizing the mentally ill—no matter the context—is of utmost importance.

3.11 Concerns About the Profession in an Adversarial System

Another concern, related to the earlier point about expert testimony, regards the independence of psychiatric testimony, in particular in an adversarial system.[35] Expert witnesses as "hired guns"[36] and the "battle of experts"[37] are concepts com-

[34]A related issue is the following. Some patients or client groups have argued for abolishing the insanity defense, for example the World Network of Users and Survivors of Psychiatry: "WNUSP agrees… that the insanity defense should be abolished, and should be replaced with measures that do not discriminate based on disability. Various possibilities exist to ensure fairness and take account of circumstances in the commission of the crime that relate to disability, while not treating psychosocial disability as an excuse for crime or a condition that puts a person beyond the reach of the law. We believe that accepting responsibility is an important part of legal capacity and full membership in society, and we embrace the need to make substantial changes to the prison system including consideration of its abolition." (Downloaded, October 15, 2014, http://wnusp.rafus.dk/mental-health-and-prisons-a-usersurvivor-perspective-and-why-it-is-needed.html) See also Szasz (1989, p. 137): "Either we regard offenders as sane, and punish them; or we regard them as insane, and, though excusing them of crimes officially, punish them by treating them as beings who are less than human. It seems to me that there is a more promising alternative. Let us not consider mental illness an excusing condition. By treating offenders as responsible human beings, we offer them the only chance, as I see it, to remain human."

[35]Black's Law Dictionary online (http://thelawdictionary.org/adversary-system) defines "adversarial system" as follows: "The court system where a judge decides on a case argued by a prosecutor who is suing the plaintiff and the defense attorney who defends their plaintiff. A jury has also been used to decide such cases. AKA accusatorial procedure."

[36]See Beran (2009, p. 133, references omitted) about expert testimony in adversarial systems: "All too often expert witnesses are described as "hired guns" whose "expertise" is sold to the highest bidder. They are considered biased and a blight on the legal process which relies upon their contribution to assist the court. Such contribution is considered depreciated, thereby casting aspersions upon all expert witnesses who are tainted by the acts of a few."

[37]Van der Leij et al. (2001).

monly associated with the adversarial system. And such terms are at least indicative of a serious risk of violation of the boundaries of professional ethics in these systems. A.A. Stone (2008, p. 167) writes, that for behavioral experts "there is the danger that one will prostitute the profession, as one is alternately seduced by the power of the adversarial system and assaulted by it." So, the integrity of the psychiatric profession is jeopardized, since psychiatric testimony may be influenced by which party is hiring the expert. This may undermine the ethos of psychiatrists, and, it does not seem unfair to add, their image in the public's eye may be adversely affected.

Denno writes about a possible solution: "Some legal scholars have recommended that judges appoint experts approved by both sides to avoid the potential biases that arise because of the experts' partisanship."[38] In fact, regarding expert testimony, an inquisitorial system may well be preferable, but even in an inquisitorial system, a defendant may seek a "second opinion" from another forensic psychiatrist if he disagrees with the court-ordered psychiatric evaluation. Therefore, the risk of partiality is not limited to psychiatric testimony in an adversarial system.

In sum, the issue is serious, it needs to be recognized and dealt with by, at least, professional ethics, training, and health law. Still, it does not seem to provide a compelling argument against the insanity defense as such and it is likely to be less of a problem in an inquisitorial system.

3.12 Too Rare to Be Worth the Trouble

In their replies to arguments against the insanity defense, Morse and Bonnie emphasize how rarely the defense is raised. But this response may turn against the insanity defense as well. As Morse (1985, p. 799) recognizes: "One might argue that the insanity defense is raised too infrequently to be worth the trouble it causes." Morse responds that "other defences such as duress and necessity are also raised infrequently and are also difficult to 'adjudicate.'" If a defense is morally required then it should be retained, even if only a few defendants qualify for it. Because it is unfair to punish those who are legally insane, society should bear the cost of avoiding such injustice." Still, one may argue that the energy put into the insanity defense should be proportionate to its societal and legal benefit. And it could be that the theoretical and practical complexities and debates regarding legal insanity greatly surpass those related to duress and necessity.[39]

[38]Denno (2003, p. 59) adds: "Those skeptical of the contention that any expert can be unbiased, however, have other suggestions."

[39]If it is true, as Morse writes, that "society should bear the cost of avoiding such injustice," then society could, perhaps, also pay for the defendant's evaluation (see Sect. 3.7 "Only for the rich").

Finally, the defense it is rare,[40] but not *that* rare.[41] Figures often mentioned with regard to the U.S. are: insanity is raised in 1 % of the felony cases and successful in a quarter of these cases (Daftary-Kapur et al. 2011; Morse and Bonnie 2013). Although these percentages are not high, we should remind ourselves that there are many felony cases. So, it is a small percentage of a huge number. Furthermore, it may be raised in very serious and high-profile cases, which adds to its relevance.

3.13 Conclusion

This chapter analyzes a variety of arguments against the insanity defense (Table 3.1). While there is some merit to each of them, they do not necessarily lead to the conclusion that insanity must be abolished. One reason is that the substance of many of the objections is not founded on empirical data, yet this does not prove those objections' futility. Notably, many issues we discussed—in particular laypeople's perceptions of the defense—can in principle be empirically tested, which will be an important thing to do in the future. Another reason is that counterarguments can be provided to each of the critical points made that at least soften the attack on the insanity defense. In sum, I do not think that any of the arguments provides a compelling reason in itself to abolish the insanity defense.

But the critical points we discussed do not merely serve as arguments for abolishing the defense. They also have something valuable to say to those who support the insanity defense and to those jurisdictions in which the defense is, and will continue to be, available. In fact, this chapter articulates relevant weaknesses in forensic and legal practice, as well as some inconvenient truths (e.g., the difference money can make). Efforts must be made to remedy the exposed weaknesses to the extent possible.

The present chapter thus explores and evaluates eleven critical considerations about the insanity defense, most of them practical, some conceptual in nature. Yet the conceptually most pressing and basic question regarding legal insanity has not yet been discussed. Why is it, theoretically, that mental disorders may exculpate a person? The next chapter considers two classical answers to this question.

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[40]See Mackay (2012), reporting that, over a ten-year period (2002–2011), the total number of not guilty by reason of insanity (NGRI) cases in England and Wales was 223.

[41]Steadman et al. (1993). See also H.L.A. Hart (1957, p. 446): "In England insanity, defined even by the stringent legal criteria used (until this year) for assessing criminal responsibility, plays a very great part: of the total of 3,129 persons committed to trial for murder during the fifty years 1900–1949, 428 were held unfit to plead and 798 adjudged guilty but insane under the McNaghten rules. The combined figures for these two categories of insanity (1,226) was slightly greater than the total of those convicted and sentenced to death for murder (1,210) during this period. The relevant figures for the United States apparently are not available."

Chapter 4
Lack of Free Will and Irrationality

What is so special about mental disorders that they can exculpate defendants? This chapter considers two classic answers to this fundamental question: free will and rationality.[1] The answers are theoretical in nature, transcending the context and boundaries of individual jurisdictions and their standards for insanity. This is what makes these answers particularly powerful: they may be relevant to many legal systems. Still, their theoretical nature is a weakness as well, as they do not take the specific legal contexts into account.

As we will see, although both "free will" and "rationality" have *prima facie* relevance to exculpation due to mental disorder, they have problematic aspects as well.

4.1 Free Will

Arguably the most-often heard answer to the question of why mental disorders sometimes excuse a defendant, is that they may affect a person's free will.[2] Professor of psychiatry Walter Reich makes exactly this point: "the law recognizes that insanity compromises free will, and classifies someone without free will as legally not responsible for his or her actions."[3] In the same vein, Sarkar (2010, p. 405) writes: "Anglo-American criminal law is based on the premise that an individual who chooses to do an illegal act is morally blameworthy. The severely mentally ill defendant is not so blameworthy because he does not have the free will to form the intent to commit a criminal act." These are just two examples of the many instances in which the concept of free will is referred to in order to explain the theoretical ground for the insanity defense.

[1] See also Meynen and Oei (2010).
[2] This section on free will is, in part, based on Meynen (2008, 2009b, 2010a, 2013f, 2015a).
[3] Reich (2005, p. 206).

G. Meynen, *Legal Insanity: Explorations in Psychiatry, Law, and Ethics*,
International Library of Ethics, Law, and the New Medicine 71,
DOI 10.1007/978-3-319-44721-6_4

Moral philosophy provides us with support for this view. Mental disorders feature as a class of conditions that, just like external compulsion, excuse agents for their actions.[4] For instance, according to Watson, "Addiction… is commonly invoked as a kind of paradigm of unfree will."[5] According to Levy, compulsions as they occur in obsessive-compulsive disorder (OCD) are not freely willed actions. Levy writes:

> We understand that a person suffering from obsessive-compulsive disorder, spending all day washing his hands and checking dozens of times that he remembered to lock the front door, cannot be thought of as having free will. His actions are mechanically dictated by stereotyped scripts, from which he cannot escape. Thus, obsessive-compulsive disorder is a malady of free will….[6]

In fact, many passages in philosophical publications that explicitly link mental disorders to the lack of free will (partial or otherwise) provide support for Reich's quote at the beginning of this section.

But the philosophy of free will not only provides support to the view that mental disorders undermine free will and therefore may diminish a defendant's criminal responsibility, it confronts us with some serious complications regarding free will as well.

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[4]The British philosopher Peter Strawson (2003, p. 73) wrote the following about the view of some compatibilists (compatibilists support the view that free will and determinism are compatible): "What 'freedom' means here is nothing but the absence of certain conditions the presence of which would make moral condemnation or punishment inappropriate. They [these compatibilists] have in mind conditions like compulsion by another, or innate incapacity, or insanity, or other less extreme forms of psychological disorder..." See also Galen Strawson (1994, p.16), who states the following about compatibilists: "Compatibilists believe that one can be a free and morally responsible agent even if determinism is true. Roughly, they claim, with many variations of detail, that one may correctly be said to be truly responsible for what one does, when one acts, just so long as one is not caused to act by any of a certain set of constraints (kleptomaniac impulses, obsessional neuroses, desires that are experienced as alien, post-hypnotic commands, threats, instances of *force majeure*, and so on)." See also Scanlon (1988).

[5]Watson (2003, p. 20). Kalis et al. (2008, p. 409) explain that in philosophical discussions on free will, "[a]ddiction and compulsion are… presented as two different manifestations of the same thing—namely, unfree actions or actions caused by irresistible desires." On addiction and responsibility, see also Wallace (1999).

[6]Levy (2003, p. 214). See also Patricia Churchland (2002, p. 208): "A patient with obsessive-compulsive disorder (OCD) may have an overwhelming urge to wash his hands…. OCD patients often indicate that they wish to be rid of hand-washing or footstep counting behavior, but cannot stop. Pharmacological interventions, such as Prozac, may enable the subject to have what we would all regard as normal, free choice about whether or not to wash his hands." As a final example regarding OCD, in his article *Neurobiology, Neuroimaging, and Free Will*, Glannon (2005) writes: "The more general upshot is that, in severe cases at least, OCD impairs the cognitive and emotional processing necessary for one to choose and act freely."

4.1.1 The Problem of Free Will in Philosophy

The problem of free will and determinism is a classic in philosophy and notoriously complicated (Kane 2011).[7] Determinism can be conceived of as the idea that the future is fixed. The problem has known different forms. For centuries it was basically a theological problem, because of a theological type of determinism: divine foreknowledge or omniscience. It was argued that, since God knows everything that happens in advance, everything that happens, including our actions, has to be determined. There does not appear to be any room for human freedom to do otherwise than God already knew that would be done. Later in history, another type of determinism emerged: determinism because of the laws of physics. If everything happens in accordance with the laws of nature, can there ever genuinely be free choice? There are other types of determinism as well, such as psychological determinism. Nicole Vincent (2013b, p. 5) draws attention to the many meanings of the notion "determinism" in the philosophical debate: "causation, necessitation, sufficiency, entailment, explanation, prediction, inevitability, fate, and predestination", adding between parentheses, "this list is intended to be demonstrative not exhaustive."

In recent decades, neuroscientific findings have come to play an increasingly important role in the "free will versus determinism" debate. But it is good to remind ourselves that, as Morse (2011a, p. 534) puts it, "Neuroscience is simply the most recent mechanistic causal science that appears deterministically to explain behaviour." Nevertheless, the neuroscientific findings are changing something in that debate as well. While, for a philosopher like Immanuel Kant, the problem of human freedom was about abstract and universally valid physical laws, the neurosciences have approached the issue in a new, focused, and experimental way.

Benjamin Libet and his group (1983) probably produced the most widely discussed neuroscience finding regarding the topic of free will. In the 1960s, Kornhuber and Deecke observed that voluntary motor acts were preceded by a characteristic electrical signal, the *Bereitschaftspotential* or the *readiness potential* (RP). Such an RP can be detected using an electroencephalogram (EEG). Remarkably, the RP can already be detected about 800 ms before the action occurs (Radder and Meynen 2013). Because of this long period of time, almost a second, Libet started to wonder whether, perhaps, the RP even preceded the conscious intention to act (Libet 2004). Libet developed a study design to test the temporal relationship between (1) the start of the RP, (2) the conscious urge or intention to perform an action (in this case, flexing one's wrist or fingers), and (3) the actual occurrence of that action. In 1983, Libet reported that about half a second before a subject becomes aware of the urge to act, an RP was visible in EEG recordings.[8] Based on this observation, Libet (1999, p. 51) writes: "The initiation of the freely

[7] This section is partially based on Meynen (2015a).

[8] Libet (1999), Libet et al. (1983), Radder and Meynen (2013).

voluntary act appears to begin in the brain unconsciously, well before the person consciously knows he wants to act! Is there, then, any role for conscious will in the performance of a voluntary act?" According to some, the answer to this question is simply: No, free will is an illusion. Characteristic brain activity starts before we aware that we are about to act—and it is thus decisive for the act, they argue (Spence 1996; Wegner 2002). Still, others contend that the results have to be interpreted with caution and that definite conclusions cannot be drawn from the data as presented (Mele 2009). For instance, on close examination, the data do not provide conclusive evidence that the readiness potential is necessary and/or sufficient for an action to occur (Radder and Meynen 2013). Some, however, emphasize that Libet's findings should be considered together with the multitude of other scientific data that, from a variety of perspectives, allegedly, point in the same direction: that free will is illusory. Such a line of thought can, for example, be found in Daniel Wegner's *The illusion of conscious will* (2002) as well as in Davies (2013). And it is true that, for instance, findings in line with Libet's results have been reported using different experimental designs.[9]

Philosophers have developed different answers to the question about the compatibility of free will and determinism. Basically, there are three positions on this matter: compatibilism, libertarianism, and hard determinism (the latter two are incompatibilist positions) (Kane 2011). Compatibilists hold that even if determinism is true, we can still have free will, or, as some would argue, at least moral responsibility. Philosophers who have developed influential compatibilist accounts include Strawson (2003), Frankfurt (1969, 1971), Fischer and Ravizza (1998), Wallace (1994), and Dennett (2003). Currently, compatibilism is the most popular position.[10] Still, it is worth noting that compatibilists may not agree with each other on why determinism and free will (or responsibility) are compatible.

Libertarians hold that free will is incompatible with determinism *and* that free will is possible in our universe. Consequently, they have to show that not all events in our universe are determined. For instance, Kane as well as Searle have provided such arguments in which they refer to quantum indeterminism to allow leeway for free will (Kane 2011; Searle 2007).[11] Alternative libertarian lines of thought, not relying on quantum indeterminism, have been developed as well.

The third position, hard determinism, holds that determinism is true, and, therefore, that free will is impossible. Although the claim that determinism is true may appear unproblematic at first sight—because many sciences presuppose or confirm certain types of determinism—there is a significant problem here. Quantum mechanics mentioned above is one of the most successful scientific theories and, based on a common interpretation of it, it is indeterministic (whether that helps

[9]See, for instance, Fried et al. (2011), Soon et al. (2008).

[10]I do not take a position on the compatibility of free will and determinism (see Meynen 2010a).

[11]Others strongly disagree that quantum indeterminism supports free will (Pereboom 2001).

free will is another matter). Hard determinists will have to respond to this. Ted Honderich, a hard determinist, formulates two responses. First, he argues, quantum mechanics is still problematic as a theory, so no definite conclusions can be drawn from it. The problem with this response is that quantum mechanics is a highly successful scientific theory, and that, even though there are deterministic explanations of quantum mechanics, the indeterministic explanations are less controversial. Second, Honderich claims that although indeterminism may apply to the microlevel of elementary particles, determinism appears to be true for the macro world we live in (and of which our brains are parts) (Honderich 2002). However, this response by Honderich is not very satisfactory either, since quantum mechanics is relevant to the macrolevel as well, superfluidity and superconductivity being examples of macroscopic quantum phenomena (Caldeira 2014).

This is a brief sketch of the three main positions on free will and determinism. Pereboom (2001) provides an interesting argument for *hard incompatibilism*, a non-standard position. This entails that both determinism and quantum indeterminism are incompatible with free will.[12] Random, indeterministic quantum events are just as problematic for free will as deterministic events, he argues. Clearly, references to quantum mechanics make the philosophical discussion on free will even more complicated, because few people have real grasp of quantum physics.

Free will, in sum, is one of the hardest problems on the philosophical table, which is nicely phrased by the American philosopher John Searle (2007, p. 11): "The problem of free will is unusual among contemporary philosophical issues in that we are nowhere remotely near having a solution."

4.1.2 Free Will not Relevant to Legal Responsibility?

The famous neuroscientist Gazzaniga asserts that brain-determinism is compatible with moral responsibility, because responsibility is a *social* concept and construct, not something to be found in the brain (Gazzaniga 2005). Morse agrees that neuroscientific determinism does not threaten responsibility, but his argument is somewhat different. He is worried by the fact that free will is often considered central to criminal responsibility, as he explains in his paper "The Non-Problem of Free Will in Forensic Psychiatry and Psychology" (Morse 2007). In summary, he argues that "free will" is not a term used in any relevant legal doctrine (in the

[12]Pereboom (2001, p. 40, emphasis added) also discusses "agent-causal libertarianism": "According to agent-causal theory, freedom of the sort required for moral responsibility is accounted for by the existence of agents who possess a causal power to make choices *without being determined* to do so." Pereboom's fundamental problem with *this* position, however, is that "we have no (theoretical) evidence that it is true" (2001, p. 197).

U.S.), and that, therefore, it is irrelevant in the context of forensic psychiatric and psychological evaluations of defendants.[13] Moreover, Morse urges forensic psychiatrists and psychologists "to avoid all usage of free will in their forensic thinking and work product because it is irrelevant and spawns confusion."[14] Instead of free will, Morse proposes, forensic psychiatrists and psychologists should rely on the "capacity for rationality."[15] He adds that, also at the deeper, philosophical level, determinism does not threaten responsibility (as long as we adopt a compatibilist position). So, according to Morse, from both a legal and a philosophical perspective, criminal responsibility is unaffected by determinism—and thinking about free will merely confuses the matter.

Three points have to be considered here. First, Morse's argument is made within the context of the U.S. legal system. At least in principle, other systems may mention freedom of will in their legal doctrines, documents, or other relevant legal sources regarding insanity. For instance, in the Netherlands, "free will" is mentioned in some verdicts where the court explains why a defendant is not criminally responsible.[16]

[13]In principle, one might not only ask whether free will (or determinism) is presupposed or foundational in criminal law, but also whether free will or determinism are presupposed or foundational in forensic psychiatry (Juth and Lorentzon 2010). According to Simon et al. (2005, p. 178), "psychiatric theories of human behavior are deterministic, whereas the law envisions mankind as possessing free will." Even though it is true that psychological and biological theories in psychiatry are generally "deterministic" in nature, it is much less clear that the general view of a human being in clinical psychiatry would be deterministic and that, generally, psychiatrists would view people as not free and not responsible. For instance, it is considered crucial in medicine that patients can *freely* choose between treatment options (see also Chap. 5). In addition, even if psychiatrists were to accept determinism, they could still be compatibilists and thus endorse the freedom of the will. Still, we should recognize a relevant difference between the relationship of psychiatry to neuroscience and that of law to neuroscience. Neuroscience is often considered a science basic to psychiatry (much psychiatric research is neurobiological in nature), and therefore it may be difficult for psychiatrists to ignore neuroscientists' claims that free will is illusory. Psychiatrists would also pay attention if the same neuroscientists were to say something about, e.g., the pathophysiology of depression. This is different in the relationship of neuroscience to the law: neuroscience is not considered a basic science for the law. It may, therefore, be easier for lawyers than for psychiatrists to just "shrug their shoulders" about neuroscientific findings that allegedly prove the nonexistence of free will (Meynen 2011b).

[14]Quote from abstract Morse (2007).

[15]See also the next section on irrationality. Interestingly, the 1983 American Psychiatric Association Position Statement on the Insanity defense (Insanity Defense Work Group 1983, p. 683) says: "The American Psychiatric Association, speaking as citizens as well as psychiatrists, believes that the insanity defense should be retained in some form. The insanity defense rests upon one of the fundamental premises of the criminal law, that punishment for wrongful deeds should be predicated upon moral culpability. However, within the framework of English and American law, defendants who lack the ability (the capacity) to rationally control their behaviour do not possess free will."

[16]See, e.g., ECLI:NL:GHAMS:2011:BP6664.

Second, even if free will is not mentioned, as Morse claims, this does not necessarily mean that it is irrelevant.[17] O'Connor (2010) writes in the *Stanford Encyclopedia of Philosophy*: "Most philosophers suppose that the concept of free will is very closely connected to the concept of moral responsibility. Acting with free will, on such views, is just to satisfy the metaphysical requirement on being responsible for one's action." If, indeed, the metaphysical requirement for being responsible must be satisfied by free will, then the concept of responsibility implies or presupposes free will. And if we take criminal responsibility to be sufficiently similar to responsibility in this philosophical sense, free will appears to be implied in criminal responsibility as well. From this perspective, if a legal doctrine mentions "criminal responsibility," then free will need not be explicitly mentioned to be relevant because it is already implied (Meynen 2009b). Mentioning it would be superfluous.

Finally, not everyone may agree with Morse's analysis that free will is irrelevant to U.S. legal doctrines regarding criminal responsibility or insanity. For example, Harris (2012) writes in *Free Will* (p. 48):

> The U.S. Supreme Court has called free will a "universal and persistent" foundation for our system of law, distinct from "a deterministic view of human conduct that is inconsistent with the underlying precepts of our criminal justice system" (*United States v. Grayson* 1978). Any intellectual developments that threatened free will would seem to put the ethics of punishing people for their bad behavior in question.[18]

In sum, free will is often considered fundamental to criminal responsibility. Even if "free will" were not mentioned in legal documents, this would not prove its irrelevance to issues of legal responsibility; free will may be implied or presupposed. Still, its relevance is not endorsed by all legal scholars.

4.1.3 Three Meanings of Free Will

Suppose that a lack of free will is central to legal insanity, as at least some have claimed. Is it clear what free will means and how it relates to mental disorder? This twofold question is addressed below.[19]

There is an enormous variety of approaches to free will.[20] My approach is based on an account by Henrik Walter, a philosopher, neuroscientist, and

[17] See also Morse (2007).

[18] See also Green (2015) on freedom and free will in American legal thought and, for example, Warren Burger in *Blocker v. United States*, 288 F.2d 853 (D.C. Cir. 1961), who emphasized the importance of the concept of free will to U.S. criminal law.

[19] This section is partly based on Meynen (2010a, 2013d).

[20] For an overview, see Kane (2011), Widerker and McKenna (2003), Russell and Deery (2013).

psychiatrist, who distinguishes between three meanings of free will that feature in the philosophical debate.[21] These senses of free will are, first, acting for reasons, second, being able to do otherwise, and third, being the source of an action. The meanings can also be considered components of free will, depending on one's concept of free will. According to some philosophers, all three notions are required for genuine free will, while others hold that, e.g., only "acting for reasons" and/or "being the source of an action" are required. I explain how these notions can be understood with respect to psychopathology.

Acting for reasons. This refers to the fact that the action was sensitive to reasons (Müller and Walter 2010). So, "acting for reasons" does not necessarily mean that the agent acted for good reasons. The reasons may, but need not, be good. So, if acting for reasons is a notion of free will, then in order for free will to be lacking in mental illness, the patient's action should not be motivated by reasons (if behavior is motivated by reasons, it is sensitive to them). Does such a lack of reason-sensitivity actually occur in mental illness? Usually, psychiatric patients will continue to act for reasons even if they suffer from a severe mental disorder, such as major depression. Not acting for reasons, therefore, is an exceptional phenomenon in mental illness, but it does occur. For example, in Tourette's syndrome, a neuropsychiatric disorder, tics may arise without the patient having any reason for performing that action (Meynen 2010a). The eyebrow just moves, for no reason at all.[22] Now suppose that, due to a tic, a Tourette's patient harms or insults another person. Then we may excuse the patient because it "just happened." The person didn't do it for a reason, it was unintentional.

The *inability to do otherwise* can also be related to mental disorder. A good example of "no alternatives" is the phenomenon of commanding voices that cannot be disobeyed. Although rare, *if* they occur, these commands apparently block all alternatives: the command has to be obeyed. Such voices are considered grounds for insanity in cases where obeying such a voice led to a crime, at least in some jurisdictions (Mooij 2012). So, the *ability to act or choose otherwise* may be undermined by mental disorder and can be a ground for insanity.

Not being the real source of the action is an interesting sense of free will—and it may be relevant regarding mental illness as well. Suppose that a Parkinson's patient is treated by deep brain stimulation (DBS). As a result of the stimulation, he becomes manic.[23] If, in a DBS-induced manic episode, the patient performs actions that are harmful to other people, we may say: this person was not himself when acting like this, and therefore he is not responsible. He may have acted for reasons, and behavioral alternatives may have been available, but still, he wasn't himself.

[21]See Meynen(2013d), Müller and Walter (2010) Walter (2001). Meynen (2010a) provides a more detailed analysis of Walter's (2001) account. In certain respects, the interpretation in this section is somewhat different from Meynen (2010a), as well as from Meynen (2013d).

[22]Not all tics occur involuntarily, however; see Bliss (1980), Verdellen et al. (2008).

[23]As reported by, e.g., Leentjens et al. (2004), see also Glannon (2009) on this case.

Rather than the patient himself, the source of the harmful actions appears to be the DBS that resulted in a manic episode during which the patient acted as he did.[24]

Apparently, each of the three meanings of free will is relevant regarding excuse in at least one type of psychopathology. We may even feel that there is a certain redundancy in this tripartite approach to free will.[25] For instance, excuse because of tics in Tourette's may be explained by each of the three meanings. First, using the "acting for reasons" sense of free will as we did above. But, second, we may also reason as follows: the patient did not have an alternative because the tic just happened without the patient being able to provoke, suppress, or stop it. Third, we may explain the excuse in this way: the patient wasn't the genuine source of the action, it just happened to him. So, apparently, in Tourette's syndrome all three notions of free will make sense.[26] Although such redundancy may be an issue of theoretical concern, in practice, it doesn't matter so much as long as the cases that should lead to excuse are covered by one of the three senses.[27]

Based on these examples, we may feel that the three meanings of free will are indeed helpful in explaining exculpation in a range of psychopathological conditions. Of course, we may have concerns as well. For instance, we may feel that the three senses are imprecise or unclear, which may complicate their interpretation and application regarding people who perform harmful actions while suffering from a mental disorder. But even if we accept the helpfulness of this account of free will, there are important limitations regarding its explanatory power.

Suppose a person commits a crime because of a paranoid delusion. The person himself believes he was acting in self-defense: he was in imminent danger, and he merely acted to protect himself.[28] In fact, the patient contemplated various

[24]The subject of being the genuine source of an action will be revisited in Chap. 5, when we consider authentic action.

[25]See Meynen (2010a, 2013d).

[26]We may wonder whether more can be said about the cases in which all three senses of free will are helpful to explain why a patient is excused, as in the case of Tourette's. I posit that these are cases in which the decision-making process is *bypassed* by the disorder (Meynen 2015b). This means that no actual decision is made by the patient. Such bypassing, however, rarely occurs in psychiatric conditions. It is more likely to occur in neurological illnesses, e.g., during an epileptic seizure.

[27]It may also be that people have diverging opinions about what sense of free will is helpful in explaining why a person is excused in a particular case, or which of the senses is *most* helpful in explaining why he is exculpated. But note that as long as people agree that one or more of the three senses are undermined, the result is probably the same: the person is excused (as long as free will is considered required for responsibility).

[28]Such "self-defense" cases are not uncommon scenarios in successful insanity defenses. See, e.g., Mackay et al. (2006, pp. 406–407) on insanity in England and Wales, where *M'Naghten* is followed: "Once again in many of the reports the "wrongness" limb was interpreted to cover whether the defendant thought his/her actions were legally/morally justified, and/or whether the actions were in perceived self defence of themselves or others, in the sense of protecting their physical or spiritual well-being."

responses to the threat. After weighing the options, he finally considered this particular response the best course of action. Looking at this case in view of the three senses of free will, we may conclude the following. His actions are motivated by reasons. Since he apparently acted for reasons, it is hard to explain why he would be excused using the first sense of free will (acting for reasons). Next, he has considered several options to defend himself. Given the fact that, as it appears, different options were open to him it is not clear that the second sense of free will (ability to act or choose otherwise) is undermined either. Finally, let us consider the third sense: not being the genuine source of the action. At first glance, we may find it helpful to state that because of this delusion he was not the genuine source of the action. However, *he* has made a certain decision about how to respond to a situation, weighing the pros and cons, and *he* came up with a certain solution, which constituted a crime. Perhaps another person would have made another decision in that situation (using the same distorted knowledge). In this sense at least, it appears to be *his* decision. He was, for instance, not commanded to do so by an alien voice (hallucination), or manipulated by someone who hacked his DBS device (if he had one, and if this were possible). Consequently, although the notion of "not being the source of an action" may be flexible enough to cover this particular case, it may not be sufficiently *straightforward* to explain why this patient would be exculpated in a court of law. In my view, the most straightforward justification for excusing this person concerns the delusional "knowledge" itself. Due to the paranoid delusion, his view of reality was seriously distorted, and he made his decision based on this seriously distorted view.

This explanation relies on the *epistemic* component of responsibility and excuse. Aristotle recognized the relevance of ignorance—as well as lack of control—to excuse in *Nicomachean Ethics*, book III. *M'Naghten* famously covers the epistemic requirement for responsibility. According to this standard, if, due to a mental disorder, the defendant *did not know* the nature, quality or wrongfulness of the act, he is legally insane. Therefore, *M'Naghten* is better able to explain straightforwardly why the deluded person is exculpated than are any of the three senses of free will: This person believed that his action was self-defense, because of seriously distorted knowledge, and therefore he is excused.

In fact, the three senses of free will appear to differentiate between three aspects of *control*. Did the person act *for reasons* of *his own*, while other *options were open* to him? If so, the action can be considered under the person's control. Suppose he did not act for reasons (tics in Tourette's), or no options were open (because of a commanding voice), or he was not the source of the action (a problem with the DBS device led to a manic episode), then we may say that the action was not under his control.

Perhaps unsurprisingly, in philosophy, the concept of control is considered central to free will, as O'Connor writes: "Our survey of several themes in philosophical accounts of free will suggests that a—perhaps *the*—root issue is that

of *control*."[29] Free will and control are not identical or synonymous. For instance, the notion of control is less fraught with metaphysical complexities, and less controversial than free will. It is more down to earth. In my view, this is an advantage of the notion of control over free will, also in legal practice.

Given this, the control prong in the Modal Penal Code can be considered related to the notion of free will, even though free will is not mentioned. Still, we have to keep in mind that there are different interpretations of free will as well as of its senses. So, the fact that the control prong in the Model Penal Code can be linked to the notion of free will does not imply that, for example, the Model Penal Code relies on a libertarian conception of free will. Meanwhile, *M'Naghten* focuses exclusively on a lack of knowledge. Since knowledge can be distinguished from free will as a requirement for responsibility, free will is not a component of *M'Naghten*.[30]

In his 2007 paper on free will in the U.S. legal context, Morse writes: "This article demonstrates that there is no free will problem in forensic psychiatry by showing that free will or its lack is not a criterion for any legal doctrine and it is not an underlying general foundation for legal responsibility doctrines and practices."[31] On our account, although, indeed, the notion of free will does not appear to be a component of *M'Naghten*, it may be considered very much related to the Model Penal Code's control prong.[32]

In conclusion, free will has different meanings. When distinguishing between the three notions of free will, each of the notions is helpful in explaining why some mental disorder excuses a person for a harmful action. Still, as we interpret it, the helpfulness of the notion of free will is limited. One respect in which it falls short has to do with knowledge. This should not surprise us, because, since Aristotle, there have been *two* classical components of responsibility: the control element and the epistemic element.[33] Consequently, two aspects must be taken

[29]O'Connor (2010). An influential account of responsibility and the notion of control—which distinguishes between regulative and guidance control—was formulated by Fischer and Ravizza (1998). See also Benson (1987, p. 477): "It is true that most writers [philosophers] have assumed as a matter of course that freedom consists in nothing more than control." On control, free will and psychopathology (obsessive-compulsive disorder), see also Meynen (2013e, f).

[30]Nevertheless, one could argue that a person's delusion may significantly impact his perception of the behavioral options that are open to him, and in that way, knowledge is *indirectly* related to alternative options and, therefore, to one of the senses of free will.

[31]Quote taken from the abstract (Morse 2007).

[32]Note that the account of the three senses of free will is not committed to, or based on, a libertarian view of free will, which appears to be what Morse has basically in mind in his paper when discussing the "non-problem" of free will.

[33]See also Andrew Eshleman (2014) in the *Stanford Encyclopedia of Philosophy*, writing that, according to Aristotle, there are two requirements for being responsible for an action: "First, there is a control condition: the action or trait must have its origin in the agent. That is, it must be up to the agent whether to perform that action or possess the trait—it cannot be compelled externally. Second, Aristotle proposes an epistemic condition: the agent must be aware of what it is she is doing or bringing about." On the relevance of ignorance and lack of control to legal excuse, see also the earlier quote from Moore (1984, p. 221).

into account with regard to excuse: lack of control and ignorance (or distorted knowledge). It has become clear that both of these widely recognized components of excuse are relevant to psychopathology. On the one hand, this means that, "free will"[34] is relevant to exculpation due to mental disorder, because of its intimate relationship with the notion of control. On the other hand, it implies that lack of free will is not the whole story: epistemic factors are relevant as well, and they are to be distinguished from the notions of control and free will. Remarkably, although the idea that lack of free will is central to insanity is widespread, the most influential legal standard for insanity, *M'Naghten*, focuses exclusively on the other classical requirement for responsibility: knowledge.

Still, there appear to be two factors that can be distinguished from "lack of free will" and "ignorance," but that may also diminish a person's responsibility: extreme urges and moral insensitivity (Meynen 2013d). Let us consider to what extent they really add something to the account of why mental disorders excuse.

4.1.4 Urges and Free Will

Psychiatric conditions are sometimes characterized by uncommon and extreme urges, such as the urge to leave a supermarket when experiencing a panic attack. Some may phrase this in slightly different terms, like the "impulse" or "desire" to flee from the supermarket. I will not distinguish, however, between urges, impulses, and desires in this section. Impulse control is a much-debated topic regarding legal insanity. Often the focus is on the ability to control, but the phenomena that *need to be* controlled are of interest as well: the urges or impulses. Their nature, strength, and relevance to criminal responsibility are the topics of this section. The main questions that will be addressed are, first, the extent to which such urges may be relevant to excuse, and, second, whether we should phrase this relevance in terms of diminished or lacking free will. To be sure, we are not talking about *irresistible* impulses[35] here, which would completely undermine free will. The urges we focus on may be extreme, but they are not irresistible.

[34]One might want to formulate the "free will" element more loosely as "freedom," see, e.g., John Martin Fischer (2010, p. 232): "I accept the traditional view that moral responsibility involves a *freedom* or *control* component and an *epistemic* component."

[35]Some would argue that it is impossible, or at least very difficult, to distinguish reliably between strong and irresistible impulses in individual cases (see above, on the irresistible impulse test). This section does not concern the issue of whether the strength/irresistibility of an urge can be reliably assessed. The issue is that such urges apparently occur in some mental disorders and that if they occur, they appear to be relevant to moral responsibility.

Kleptomania may be a good example of a mental disorder accompanied by strong urges.[36] What is the impulse or desire kleptomaniacs experience? At first glance, it may look as if they experience a common urge: they want to obtain something they need by stealing that object. But on closer examination, these people do not steal what they need or desire; usually they steal objects they do not need at all. Moreover, the objects may have very little monetary value, and the person may have ample financial resources simply to buy the object. In fact, there is an extreme urge to *steal*, rather than to possess an object (the latter being the common situation in which theft may occur). In other words, in kleptomania it is not the case that the person has a common urge he is unable to control; the person has an *abnormal* urge. If we realize this, it becomes clear that for people who do not suffer from kleptomania, it may be hard to really understand the nature and quality of the urges and what it takes to resist them.

The urge becomes legally relevant at the moment control of the urges fails. Preventing such legally relevant behavior may be achieved by two avenues. First, by increasing a person's control capacity, second, by reducing the urge.[37] Let us first look at the ability to control. Although it may be relatively easy to defy some urges for a short period of time, it may be very hard to resist them over *longer periods of time*. Baumeister has performed various studies that indicate that the capacity to control one's behavior may become depleted over time (Baumeister 2003; Baumeister et al. 1998).[38] In addition, the capacity to resist an urge may be situation-dependent.[39] Suppose a person has a binge-eating disorder. In some situ-

[36]See also Meynen (2013d). The DSM-5 criteria for kleptomania are: A. Recurrent failure to resist impulses to steal objects that are not needed for personal use or for their monetary value. B. Increasing sense of tension immediately before committing the theft. C. Pleasure, gratification, or relief at the time of committing the theft. D. The stealing is not committed to express anger or vengeance and is not in response to a delusion or a hallucination. E. The stealing is not better explained by conduct disorder, a manic episode, or antisocial personality disorder (American Psychiatric Association 2013). Note that "irresistibility" of the impulses is not a criterion.

[37]Sinnott-Armstrong and Levy (2011, p. 308) provide an analysis of what could make an impulse irresistible. This applies *mutatis mutandis* to those instances in which urges are resistible, but still extreme: "One reason why she might be unable to stop herself is that the tension mounts until it is too great to resist. A second reason for her inability to stop herself might be that the tension does not increase but her willpower weakens, so her ability to resist the continuous tension diminishes. On a recent view, willpower is like a muscle that can get tired when it is used. Yet a third possible reason why she might be unable to avoid misconduct is that the pressure is unrelenting for long periods and fighting it requires more attention and hope than she can keep up for long enough. After all, I can raise ten pounds easily, but I cannot keep it raised for an hour. The weight does not get heavier, and I might not get so tired that I literally cannot hold it up any more, but I always eventually let it down because my attention lapses or I lose hope and become resigned to the inevitable. Likewise, some forms of mental illness might create persistent urges that can be resisted for a while but not forever. Such mental diseases might make people unable to avoid certain acts without either weakening the will or causing any irresistible urge."

[38]There is debate about the theory, see Inzlicht et al. (2014).

[39]The social context may be important as well (Uziel and Baumeister 2012).

ations (where no food is available) it is easy not to give into the urge to eat, while in a situation with a stuffed fridge, it may be extremely hard.

What could be the relevance of these urges for responsibility? Suppose the kleptomania patient fails to resist the urge to steal a cheap key ring she does not need. Some may argue that the person's free will was lacking or at least diminished. But others may object that since the urge was strong but not irresistible, she could have resisted it, and in that relevant sense she had free will—and therefore she is still blameworthy.[40] How to respond to such an objection? I suggest the following approach to excusing such a kleptomania patient. We may partially excuse her for stealing the key ring, because it is *so much harder* for her than it is for us not to steal such an object.[41]

It may be helpful to distinguish between two types of urges: positive and negative ones. Urges may be "positive" in the sense of pleasure-seeking, like some sexual urges, or "negative" in the sense of avoiding negative emotions, which occur, e.g., in anxiety disorders. In phobias, patients experience, for example, the urge to flee from a high place, or to run away from a certain object or animal, like a spider. Both types of urges may provide incentives for certain behaviors that are difficult to resist.

The fact that behavioral alternatives[42] are, in principle, open to an anxiety patient, is illustrated by the fact that cognitive behavioral therapy (CBT) may be helpful. In CBT, anxiety patients are motivated not to give into the anxiety driven urges, but to expose themselves to what they fear. An example is the arachnophobia patient who is motivated by the therapist not to flee from the spider but to approach it instead. Although the patient may experience an almost overwhelming urge to flee, she may force herself to walk to the spider, eventually even touch it, because she strongly believes that the therapy will be helpful in the end. The fact that alternative behavioral options are in principle open to anxiety patients is the basis of behavioral therapy for a variety of mental disorders of which strong urges are a central component. Disregarding that, in general, these patients have alternative possibilities open to them may therefore deprive them of a particularly effective form of therapy (Meynen 2013d).

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[40]Of course, if she knows she suffers from kleptomania, we may blame her for not taking precautions to avoid situations in which she may experience and act on such an urge to steal.

[41]*Cf.* Wallace (1994, p. 171): "But even if addictive desires are not literally irresistible, it is plausible to suppose that they are very difficult to resist. If this is right, then it seems safe to conclude that addiction would, at the very least, involve a substantial (if possibly selective) reduction of one's capacity to regulate one's conduct in light of the moral obligations that the addictive impulses incline one to breach. Recalling that general capacities admit of degrees, we might say that addiction largely impairs one's powers of reflective self-control. Hence addition would seem to make it unreasonable to hold the agent *fully* accountable for the range of behavior that it affects, even if it does not deprive the agent altogether of accountability for that behavior." Wallace interprets such hard-to-resist impulses in terms of reduced powers of reflective self-control.

[42]Having alternatives is one of the senses of free will.

In sum, strong pathological urges may excuse people because resisting the urges is *so difficult*—not because free will is lacking. Yet, even if we acknowledge that some mental disorders entail extreme urges that are difficult to resist, we may be reluctant to excuse a defendant because of such an urge. The reason could be that the nature of the actions that are considered *crimes* in a society is such that they have to be avoided *even if* one experiences an extreme urge to perform such an action. Threats of severe punishment are specifically meant to make people refrain from such actions *even if* it costs them a lot of effort. We do not want people to kill each other—even if they feel a very strong urge to kill. Therefore, in my view, it is not immediately clear what the consequences of giving into extreme urges should be in terms of *criminal* responsibility—and this is one reason to distinguish them from lack of free will, that, in principle, exculpates a defendant.[43]

Perhaps the severity of the crime is a factor here. If the crime did not cause much harm, and the urge was very strong, we may feel that a person can and should be legally excused. For example, a patient with kleptomania steals a toothbrush. If the action causes much harm to another person, then we may feel that even an extreme urge is no excuse, because such actions have to be avoided at all costs. For example, a person with pyromania sets fire to a house in which people are sleeping. Extreme urges may be relevant to full or partial exculpation, but only if the crime did not involve serious harm inflicted on others. When the crime becomes more serious, the urges have to become stronger (i.e., more extreme) for the person to be excused, even partially. Above a certain threshold of severity of a crime, even extreme urges may no longer exculpate a defendant. Such a ceiling to excuse would be interesting, because, in principle, the insanity defense has no limit as far as the harmfulness of the crime is concerned.

The differences in strengths of urges may also give rise to using degrees of criminal responsibility. Alternatively, urges may be taken into account in the mitigation phase. In that phase, not just mental illness, but other relevant factors about the defendant and the circumstances, may also be taken into account. The insanity defense could then be reserved for those cases in which there is complete exculpation because of the impact of a mental disorder.

[43]However, one may feel that urges can also be understood from the perspective of alternative possibilities (a sense of free will). A kleptomania patient's alternatives can be considered *diminished*, because her extreme urges lead to a certain focus or tunnel vision. Other options, although in principle open to the patient, will present themselves as much less appealing or convincing (see, on options and decision-making, Chap. 5). From a different angle, we may argue that the person who gives in to an extreme urge is not really *herself* at that particular moment. Her behavior and mental activity are to a considerable extent "dominated" by an urge that she may experience as alien. This shows that these senses of free will (having alternative options and being the source) may be interpreted in a way that encompasses the phenomenon of pathological urges (Meynen 2013d). But I think these explanations are *less straightforward* than recognizing the relevance of the phenomenon of strong urges, as such, to responsibility.

In this section, we explored a puzzling group of mental disorders as far as exculpation is concerned: disorders in which strong but resistible urges occur. The group includes impulse control disorders but also, e.g., addictions and anxiety disorders. Some people may explain exculpation in this group in terms of a partial or total "lack of free will." I have suggested excusing people suffering from these disorders in terms of "very hard to resist" rather than "lack of free will." Although the two perspectives are not mutually exclusive, they are a bit different. While the "diminished free will" perspective emphasizes an inability to control, the "very hard to resist" perspective emphasizes the enormous effort a person has to put into resisting the urge. One reason to use the latter perspective is to acknowledge the fact that, generally, many such disorders can be treated by CBT, where the patient chooses between alternative behavioral options. This makes it difficult to say that these disorders render patients unable to act otherwise. Still, how we can do exact justice to these urges in a court of law remains an open question.

4.1.5 Moral Insensitivity and Free Will

Even if we take free will, knowledge, and urges into account, we still may not be able to explain all instances in which mental disorders may excuse a person for his or her behavior. In fact, we may overlook that people require some moral sensitivity in order to be candidates for blame. Suppose a person has alternative possibilities open to him, acts for reasons, is the source of the action, has correct knowledge, and does not have extreme pathological extreme urges, but he lacks moral sensitivity. To such a morally insensitive person, the moral domain does not appear to be accessible.[44] Could holding that person responsible be justified? *M'Naghten* apparently does not cover such insensitivity. Knowing that something is morally wrong does not necessarily imply *sensitivity* to such knowledge. The Model Penal Code uses the term *appreciation* of the wrongfulness, which could well include sensitivity. A person may know that something is wrong, but still not appreciate its wrongfulness because he lacks the required sensitivity.

In the literature, lack of moral sensitivity has been discussed regarding psychopaths and some feel that their responsibility is diminished as a result of such a lack.[45] As Schneider and Nussbaum (2007, pp. 223–224, emphasis added) write:

[44]See Meynen (2013d). The term "moral insensitivity" can be unpacked in different ways, for instance a lack of moral feelings, responses, etcetera. The phenomenon has also been studied in neuroscience, see Decety et al. (2012).

[45]On the psychopath's moral responsibility, see Fine and Kennett (2004), Haji (2010a), Kinscherff (2010), Levy (2007), Litton (2010), Maibom (2008), Malatesti and McMillan (2010).

> The hallmark of psychopathy is an accused's inability to comprehend and be governed by the moral dimensions of his world. As mentioned above, the psychopath's antisocial behaviour is not a product of him voluntarily setting aside society's moral code and carrying on with his own, thereby freeing himself from the impact that his conscience might otherwise have. He is oblivious and *insensitive to affective/moral valences* and therefore the prospect of being governed by those aspects of life is not even a possibility.

Still, the nature of psychopathy is controversial and the relationship between psychopathy, moral sensitivity, and knowledge is a thorny issue because it also has to do with the relationship between morality and beliefs.[46] Note that, generally, psychopathy is not a condition that will lead to a successful insanity defense (Nadelhoffer and Sinnott-Armstrong 2013). Finally, in the DSM-5, psychopathy as such is not classified as a mental disorder, although it can still be considered a psychopathological phenomenon.

In sum, apart from lack of free will, ignorance, and extreme urges, there may be another issue relevant to exculpation: moral insensitivity. The topic may also make us realize that moral sensitivity as such is *not affected by many* mental disorders. Psychotic patients may act in dramatic ways, not because their moral sensitivity is temporarily suspended, but rather because they, for example, have false beliefs or because they hear a commanding voice. Moral sensitivity remains intact in almost all disorders. In addition, *if* it is compromised by mental disorder, it appears to be compromised *in general*: psychopathy is not limited to a certain area of human action. Still, how moral insensitivity should be understood, and what its consequences should be regarding criminal responsibility, remains unclear, and certainly a topic of debate. Such insensitivity may nevertheless be considered a relevant issue, and perhaps even a target for future moral enhancement (Faust 2008; Shook 2012).

4.2 Irrationality

The notion of irrationality or lack of rationality has been considered as the conceptual ground of legal insanity by prominent legal scholars.[47] In this section, we will discuss the views of Morse, Elliott, and Moore, and draw conclusions about the helpfulness of this notion to understanding legal insanity, both theoretically and in a court of law.

[46]Maibom argues that the problem psychopaths face has to do with certain "moral beliefs" (Maibom 2008). See also Moore (2010, p. 615) on "emotional capacities helpful to moral insight" and psychopaths.

[47]See also Sinnott-Armstrong and Levy (2011, p. 317).

4.2.1 A Case for Irrationality as Excusing Condition

According to Morse, "Lack of capacity for rationality is the best and most workable non-responsibility standard."[48] More precisely, "irrationality is the underlying basis for the insanity defense."[49] Morse (2000, p. 253) explains his position referring to the legal view of a person, which flows from the nature of the law:

> The law's concept of responsibility follows from its view of the person and the nature of law itself. Unless human beings are rational creatures who can understand the applicable rules and standards, and can conform to those legal requirements through intentional action, the law would be powerless to affect human behavior. (…) Indeed, it is my claim that lack of the general capacity for rationality explains precisely those cases, such as infancy or certain instances of severe mental disorder or dementia, in which the law now excuses agents or finds them not competent to perform some task.

Morse refers to humans as "rational creatures" and to their general *capacity* for rationality. He (2000 p. 254) makes clear that such capacity for rationality does not imply that people always use it: "People often engage in legally relevant behavior for nonrational, irrational, and foolish reasons, but this does not excuse them or render them nonresponsible if they are generally capable of rationality." According to this quote, it is not the actual irrationality of a person's behavior, but the agent's *incapacity* for rationality that is relevant. If one acts completely irrational, but still had the capacity for rationality, one is responsible for the action.

Carl Elliott does not refer to a capacity for rationality but just to rationality. According to him (1996, p. 109), "The most straightforward condition for moral responsibility, and one that is often put forward in the criminal law, is rationality."[50] In fact, Elliott (1996, p. 105) distinguishes between different ways in which moral responsibility may be compromised by mental disorder:

> On the one hand, psychiatric illness might be seen as an excusing condition in itself: mentally ill people are different from ordinary adults, and therefore they are not subject to our ordinary moral conventions regarding responsibility. On the other hand, one might argue that psychiatric illness excuses because it is a subclass of another type of excusing condition, such as ignorance or compulsion. (…) A psychiatrically ill person might then be excused from responsibility for her actions, but only if her illness made it the case that she acted in ignorance or under compulsion.

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[48]Morse (2002, p. 1077). Or, as Morse (2000, p. 253) puts it: "The general capacity for rationality in a particular context is thus the primary criterion of responsibility and its absence is the primary excusing condition."

[49]See Morse (1998, p. 335): "nonculpable irrationality is the underlying basis for the insanity defense." See also Morse (1998, p. 352): "What the delusional defender and the child have in common is not 'pathological causation'; they have in common the absence of full capacity for rationality. Irrationality is the genuine excusing condition that is operative."

[50]Elliott (1996) does not, however, discuss the specific implications for criminal responsibility, or, more specifically, the insanity defense, as Morse does.

Meanwhile, although certain patients do not act in ignorance or under compulsion due to mental disorder, they may still not be morally responsible because they "fall below the threshold" for responsibility (Elliott 1996, pp. 106–107).[51] To describe *this group* of people, Elliott introduces the notion of rationality: "I will… turn to the main criterion put forward as the gauge for determining whether a person falls below the threshold, the criterion of rationality."

It is clear that Elliot does not use the notion of rationality to explain *all* the cases in which mental disorders may excuse a person, but only to explain exculpation in a particular subclass. This means that Elliott uses the term rationality quite differently from Morse. While Morse argues that rationality covers what criminal responsibility is basically about, Elliott distinguishes between the excusing conditions of ignorance and compulsion on the one hand, and irrationality on the other. Apparently, there are quite different views of what the concept of irrationality actually covers.

Elliott provides some examples of patients whose actions qualify as "irrational." Some of these patients exhibit strange, incoherent, chaotic behavior, and experience delusions and hallucinations. Although, indeed, these patients may show behavior that differs greatly from what people ordinarily do—why, exactly, should we consider this behavior "irrational?" Elliott answers that this cannot be defined: "I will argue... that this threshold of mental ability is not, and cannot be, sharply defined, and that we cannot point to any specific ability or characteristic that is sufficient to place a person above or below this threshold of moral responsibility." (1996, p. 106).

I agree that, when it comes to everyday excuses, we may feel that a person is "simply too ill" to be held accountable. But in a court of law, when serious harm has been done, we must provide a more solid and better-argued reason for why a person is excused. Although Elliott may be right that giving a clear definition of the threshold of legal insanity is difficult, a serious effort should be made to define

[51]Elliott (1996, pp. 123–124) writes in his final remarks: "Following on Aristotle's account of voluntariness, there are two types of condition where a person may have "acted" but where that connection between agent and action is absent: conditions where the agent has acted in ignorance, or where he has acted under compulsion. Now, the general stance I have tried to argue for is one in which judgments about the responsibility of mentally ill offenders are based roughly on this broad scheme of responsibility. Accordingly, there are three general ways in which person's mental illness can excuse her from responsibility: if she has acted in ignorance, if she has acted under compulsion, or, as I have argued in this last chapter, if her illness is so severe that we can no longer consider her a morally responsible agent. This is an oversimplification, of course, as the preceding chapters will have made abundantly clear. How things play out for actual mental disorders is much more complicated." Elliott adds, on the same page (1996, p. 124), that personality disorders should not lead to excuse, with the possible exception of the psychopath. As far as his endorsement of the basic Aristotelian scheme is concerned, I agree. I find the third category confusing, and I am not sure how to distinguish it from the Aristotelian categories.

the conditions in which defendants are exculpated. We owe an explanation to the defendants who are either considered sane or insane, as well as to victims and the general public. In other words, if the concept of rationality does not enable us to go further than giving examples of people who behave very strangely, it is not sufficiently helpful as an actual criterion for legal insanity.

4.2.2 Vagueness and Craziness

As Elliott proceeds, his analysis makes it increasingly clear that the concept of rationality is ambiguous.[52] For instance, he (1996, pp. 109–110) distinguishes between different meanings of rationality: reasonableness, self-interestedness, and comprehensibility. This shows that rationality has very different meanings. In fact, some consider religion "irrational" and others think of altruism as "irrational."[53] Such a variety of meanings may cause confusion in a court of law.

Morse acknowledges that rationality is hard to define, but he argues that the concept is nevertheless helpful:

> No consensual, technical definition of the capacity for rationality exists in law, morality, philosophy, or the behavioral sciences, but this does not compel the conclusion that the law should abandon the common sense, everyday understanding of the capacity for rationality that we all apply routinely and successfully in the ordinary course of daily affairs, including in moral evaluation.[54]

Elliott (1996, p. 109), however, has a slightly different view. He feels that the vagueness of the concept of rationality complicates its use as a criterion for responsibility: "Unfortunately, however, the notion of rationality is complex and vague enough to make its practical interpretation rather puzzling, and as a consequence, it is particularly difficult to use as a criterion for moral responsibility." Although I agree with Elliott, there are still instances in which the notion of irrationality can be used without much ambiguity. Severe incoherence as it may occur in schizophrenia or dementia is a good example of irrationality. And if such severe incoherence results in a crime, this appears to be an instance of insanity. The same may be true for people with a very low IQ who commit a crime. In these cases, therefore, the notion of irrationality could be helpful. Nevertheless, these are not

[52]See also Buchanan (2015): "There has been no uniformity, however, on how rationality should be defined."

[53]See, e.g., the sentence (Sober and Wilson 2010, p. 147): "Decision theory says that it is irrational to co-operate (to act altruistically) in one-shot prisoners' dilemmas."

[54]Morse (2002, p. 1067). See also Morse (2000, p. 256): "Because I claim that rationality best explains our doctrines of responsibility, the concept of rationality must do a great deal of work. One might therefore desire a more precise, uncontroversial definition of irrationality, but such a desire would be unreasonable."

the paradigm cases of the insanity defense. Few defendants who are considered insane suffer from severe incoherence.

Also from Moore's (1984) perspective, the notion of irrationality is central to legal insanity. This should not lead to any further specifications of criteria for legal insanity, such as ignorance or lack of control, he argues. In the end, the basic legal question is whether the defendant was *crazy* or *mad*. Moore (1984 p. 223):

> On reflection we should see that the insane, like the very young, are not sufficiently rational to be fairly blamed or punished. If this is so, then lawyers should give up their attempts to define legal insanity in a way that collapses into some traditional excuse. Crazy people are not responsible because they are crazy, not because they always lack intentions, are ignorant, or are compelled.

And Moore (1984, p. 245) concludes: "No amount of attempted 'conceptual imperialism' by psychiatry should convince us to draw the line between the sick and the bad any differently than it is drawn by excusing only those who are so irrational that we can accurately describe them as crazy or mad."

If the term irrationality were not fraught with vagueness and ambiguity, perhaps this might be workable. However, irrationality is inherently ambiguous and vague. Therefore, Moore's view is not really helpful if we are seeking clarification of the theoretical grounds of legal insanity. In addition, given the pluriformity of psychopathology, simply considering defendants "crazy" is unsatisfactory. Notably, a defendant may be exculpated for one crime he committed because of a delusion (e.g., attacking his neighbor) and be held accountable for another crime he committed at the same point in time which was not influenced by a delusion (e.g., tax evasion). If he were just "crazy," then he would be exculpated for both crimes.

4.2.3 Model Penal Code and Rationality

There is an additional point here. *M'Naghten* is usually considered to be a rationality standard, focusing on epistemic factors.[55] Still, one might also use a more comprehensive view of rationality, as we discussed in Sect. 2.4. Based on such a broader interpretation, rational behavior may be considered to consist of at least two components: the person, first, acts *on the right information and appreciation* and, second, is able to *guide* his action according to this information and appreciation. If a person has the right knowledge/appreciation but cannot guide his behavior according to that knowledge/information, irrational behavior occurs. In contrast, if a person is able to guide his behavior according to his knowledge/appreciation, but his knowledge/appreciation is flawed or distorted, irrational

[55] See also Sect. 2.2.

behavior occurs as well. Such a line of thought would also be in accordance with the following remark by Sinnott-Armstrong and Levy:

> What removes responsibility, if anything, is a lack of the *capacity* to be rational. People lack this capacity if they cannot form rational beliefs or rationally consider the criminality or wrongfulness of their acts (a defect in theoretical rationality) or if they cannot act according to the reasons that they have (a defect in practical rationality). These are exactly the lacks that remove responsibility according to the MPC [Model Penal Code] rule.[56]

This means that while Elliott considers rationality separate from ignorance and compulsion, Sinnott-Armstrong and Levy interpret irrationality in terms of ignorance and a lack of control. Based on this interpretation, considering irrationality as the ground for legal insanity may well lead us to endorse the Model Penal Code as a rationality standard—which would, however, contradict Moore, who opposes any further definition of irrationality or craziness.[57] In any case, the concept of rationality is flexible enough to be interpreted in various ways, with correspondingly various consequences for legal insanity.

A final remark: focusing exclusively on the term rationality may give the impression of an unduly rationalistic view of the human being as such, neglecting other core elements of mental life, such as emotions, sensitivity, etc. Of course, a broad notion of rationality may incorporate many of these aspects. Yet, as we discussed, a broad notion would most probably fail to provide the clarity required in a court of law.

In sum, given the many meanings of "rationality," it is a problematic concept as an actual criterion for legal insanity.[58] This does not necessarily imply that it cannot play a role in a *theoretical* framework for insanity. Since various scholars refer to the concept as central, albeit in dissimilar ways, it may be a helpful heuristic tool for identifying criteria for insanity. But it is too vague to be used as a criterion in a court of law.

4.3 Conclusion

In this chapter, we consider two classical theoretical grounds or justifications for legal insanity: lack of free will and irrationality.

Lack of free will is often mentioned as the conceptual ground for legal insanity. Because mental disorders may undermine free will, it is argued that some defendants should be exculpated. Free will, however, is a contested concept and philosophical discussions on free will tend to be complicated—and different notions of

[56] Sinnott-Armstrong and Levy (2011, p. 317).

[57] See also Sect. 2.4 on rationality and the Model Penal Code test.

[58] *Cf.* Sinnott-Armstrong and Levy (2011, p. 317) who write about the United States: "Still, no jurisdiction has officially adopted this suggestion or defined insanity directly in terms of irrationality. This omission might be because the term "rational" is vague and controversial. Still, it might be possible for the rationality approach to be developed in fruitful ways."

free will feature in such debates. In order to get a grip on this thorny concept, we looked at three senses of free will: acting for reasons, having alternative options, and being the source of the action. Understood in these terms, it turned out that free will may indeed be helpful in explaining why mental disorders may exculpate defendants in a court of law. In my view, the three meanings of free will can also be considered as aspects of control. Acting of one's free will, therefore, can be loosely understood as having control over one's actions. This implies that the often-assumed relevance of free will to responsibility could be used as an argument for including a control prong in the insanity defense.

However, we observed that "lack of free will" only provides an explanation of excuse in *some* cases. Most importantly, "lack of free will" does not straightforwardly cover the impact of mental disorders on epistemic factors. Note that the knowledge prong is often considered a valuable and relatively uncontroversial element of legal insanity standards. In addition, a lack of moral insensitivity may also have impact on criminal responsibility, at least theoretically, and it is not straightforwardly encompassed by "lack of free will" either. Still, moral sensitivity can also be considered part of "knowledge/appreciation": a person without moral sensitivity may have serious problems with genuinely appreciating the wrongfulness of an action. Free will, therefore, could provide a partial justification of legal insanity at best. Furthermore, the notion of free will may bring metaphysical qualms to the table, which would probably be unhelpful in a court of law. I conclude that our analysis of "free will" underlines the relevance of a control prong in a legal insanity standard. But free will cannot serve as *the* conceptual ground for legal insanity.

We also discussed extreme but resistible urges that may occur in mental illnesses. Some might feel that these urges or impulses diminish a person's free will, thus reducing his or her responsibility. This is one possible view. I offered an alternative perspective that focuses on the *effort* it takes to control these urges. This view may be better in line with the phenomenology of these impulses and the fact that an effective therapy—CBT—makes use of the fact that, for at least some of such urges, patients can often resist the impulses—although this may be very difficult. The extreme efforts on the part of the patient may be relevant for exculpation, although the precise implications these urges would have in the courtroom remain unclear.

Irrationality is considered central to legal insanity by Morse, Moore, and Elliott (among others). But the problem with the notion of rationality is its vagueness and ambiguity. Irrationality has very different meanings, which are more likely to confuse than to clarify discussions about legal insanity in the courtroom. Therefore, although rationality may theoretically be a helpful heuristic tool, it is not a suitable criterion for legal insanity.

In sum, while both standard views of the grounds of insanity have their merits, they are problematic as well. In addition, the picture of responsibility that has emerged in this chapter is basically Aristotelian insofar as it consists of two components: control and an epistemic (knowledge/appreciation) factor. This Aristotelian framework appears to be a more viable approach to legal insanity than either free will or rationality.

Chapter 5
Competent and Compromised Decision-Making

In this chapter, we further explore the grounds for legal insanity, using two partially related approaches to the impact mental disorders have on a defendant's responsibility. The link between the approaches is that decision-making is central to both of them.

In the first part of this chapter, I compare legal insanity with patient decision-making competency in health care. As it turns out, there are several interesting similarities between insanity and incompetency. Based on the parallel, I will explore the extent to which the criteria for legal insanity could be based on the established criteria for patient competency.

The second part considers the impact of a mental disorder on a person's behavior from the perspective of a stage model of decision-making. The stages are the generation of options, the selection of one of the options, and, finally, the initiation of the action. Each of these stages can be influenced by psychopathology. Meanwhile, the consequences of such impact for responsibility and excuse may differ. The value of this model for legal insanity is assessed.

5.1 Analogy Between Patient Incompetency and Legal Insanity

A powerful parallel exists between assessments of legal insanity and those of patient incompetency. Alternative terms for patient competency are decision-making competency, decision-making capacity, or just competency or competence (note that competency to stand trial is another matter).[1] Health care professionals

[1]There are also similarities between insanity and competency to stand trial. However, competency to stand trial is much more focused on the particular circumstances of being a defendant in a criminal case and on understanding the roles of courtroom participants. Because of this particular and limited scope, it is very different from evaluations of insanity. Situations in which crimes occur are much more open and less controlled than courtroom proceedings. This may well be the reason why developing criteria for competency to stand trial has proven to be less of a challenge than developing a satisfactory insanity standard (see Packer 2009, p. 77). The comparison between insanity and competency to stand trial is, therefore, less promising.

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Table 5.1 Similarities and differences between (assessments of) patient incompetency and legal insanity

Similarities		
1	At the intersection of medicine and law	
2	Concern a mental state related to a specific act or choice	
3	Psychiatrists are considered experts	
4	Performed because of immediate practical consequences	
5	Free will considered relevant	
6	Considered related to responsibility	
7	Considered related to autonomy	
8	Normative threshold judgments	
9	Most are sane and competent	
Differences		
	Incompetency	Insanity
1	Health care context	Criminal law context
2	Patient makes *lawful* decision on treatment	Unlawful act (offense)
3	Here and now	Retrospect
4	Medico-legal concept	Legal concept

are obliged to obtain informed consent from their patients (Appelbaum 2007).[2] Informed consent can only be obtained if the patient is competent to choose between treatment options. If there is doubt about a patient's competency, an evaluation must take place. Such evaluations are performed much more often than assessments of legal insanity. Moreover, patient competency has been widely studied in medicine, particularly in medical ethics, and health law across many jurisdictions. Comparing evaluations of insanity and of competency, and drawing a parallel between them, may provide a helpful perspective on insanity.[3] In fact, since both concepts and assessments have much in common, the way in which incompetency is conceptualized and operationalized could serve as an example of how to conceive of, and operationalize, insanity. I aim to make use of the analogy in exactly this way. Notably, it is not just the similarities that are of interest here, but also the recognition and analysis of the differences.

In this section, I first consider nine similarities as well as four differences (see also Table 5.1). I then explore the possibility to use the established criteria for patient competency as criteria for legal insanity. Finally, I examine how the notion of authenticity fits into the picture.

[2]Still, in emergencies, doctors may have to act before the patient can give such consent.

[3]On the similarities and differences between patient competency and insanity evaluations, see Meynen (2009a, 2010b, 2011a, 2012b), on which this section is partly based; see also Dekker et al. (2011).

5.1.1 Similarities and Differences

The parallels between incompetency and insanity are many. Some have to do with the type of evaluation, others with the concepts themselves. We consider nine relevant similarities.

First, both evaluations are performed at the intersection of medicine and law. While competency is a central element of health law, legal insanity is an element of criminal law. The outcome of the evaluation, therefore, has legal consequences (see below).

Second, both evaluations, in principle, concern a person's *mental state related to a specific* act (in insanity evaluations) or decision (in competency evaluations). For example, it is not a general characteristic of a person to be legally insane; insanity is related to a particular offence. Likewise, in medical practice, competency evaluations are performed regarding a particular choice about medical treatment. It may well be that, at a specific moment in time, a patient is competent to make decision A about his treatment, but incompetent to make decision B about his treatment. So, both evaluations are in this sense similar, and, for instance, very different from the assessment of IQ, which is a characteristic of a person that is unrelated to a particular act or decision.

Third, psychiatrists are considered experts with respect to both evaluations. Competency evaluations are often performed by other health care professionals as well, but in complicated situations, psychiatrists may be consulted as experts (Meynen 2009a). In assessments of legal insanity, the specific expertise of psychiatrists—together with psychologists—is even more outspoken.

Fourth, both incompetency and insanity have far-reaching practical consequences. In fact, they are performed because of their *immediate practical* consequences. Some measurements or assessments can be done now or in a couple of months, but these two evaluations are immediately relevant because a decision has to be made: either a decision about medical treatment in the case of competency assessments or a legal verdict in the case of insanity assessments.

Fifth, the concepts of free will and free choice are associated with both legal sanity and patient competency. The link between free will and sanity/insanity was discussed earlier, in Chap. 4. Therefore, I now focus on the connections between free will and patient competency. One way to show the connection between competency and free will is to look at autonomy, a concept considered foundational to competency.[4] According to Macciocchi and Stringer (2001), "Respect for auton-

[4]Meynen (2011a). According to Beauchamp and Childress (2009, pp. 113–114), "Although *autonomy* and *competence* differ in meaning…, the criteria of the autonomous person and of the competent person are strikingly similar.… Standards of competence feature mental skills or capacities closely connected to the attributes of autonomous persons, such as cognitive skills and independence of judgment."

omy is a core ethical construct, and it is often equated with other concepts, such as self-governance, free will, and choice." In the same vein, Al Mele (1995, p. 4) writes in *Autonomous Agents*, "Autonomy, as I understand it, is associated with a family of freedom-concepts: free will, free choice, free action and the like." Therefore, since competency is closely related to autonomy, it is associated with free will and free choice. Another way of showing the relationship is to examine the direct connections between decisional competency and free will in the literature. For example, according to Mackenzie and Watts (2011): "Medical decision making by patients is respected as a lawful exercise of free will and agency unless patients are found to lack 'competence.'"[5] Similarly, Bradbury et al. (2014) write, "Decisional capacity refers in this context to the mental competence of a person to make his or her own health care decisions. Legally and ethically, it is argued that competence is essential for autonomy, as only competent decisions reflect a person's free will." In conclusion, free will is associated not only with legal sanity, but also with patient competency.

Sixth, the notion of responsibility appears to be relevant not only to insanity, but also to incompetency. Welie and Welie (2001, p. 129, emphasis added) point out that

> it is generally believed that patients… carry final *responsibility* for their own health care (or at least the acceptance or refusal thereof). If a patient refuses much needed medical care, no one but the patient is *responsible* for that decision. Patients have a right to be left alone. But we can only hold persons responsible if they could have made a different decision, if they were free and able to reach a different decision. Competence is the patient's ability to make a choice about the various medical interventions offered to her by the caregiver, and to bear *accountability* for that choice.

The fact that the notion of responsibility is thus considered central to competency shows a profound similarity between competence and sanity.

Seventh, while autonomy is intimately related to competency, it has been considered central to criminal responsibility as well. In response to the discussions about free will and criminal responsibility, Juth and Lorentzon (2010) developed an argument stating that *autonomy* is what criminal responsibility is really about.[6] They write, "One can pose the question of responsibility and accountability in terms of control and control in terms of a conception of autonomy…"[7] This is the first part of their argument. Next, they (2010, p. 5) interpret autonomy in terms of decision-making competency: "Another factor determining the autonomy of an individual is the capacity to make decisions from one's desires: decision

[5]Often, "free will" is also related to *voluntariness* in informed consent. For example Altman et al. (1992, p. 1698): "The third criterion of informed consent is that the decision must be made voluntarily. From a psychological perspective, this legal element may be paramount because it touches directly on cherished and psychologically central values of autonomy, selfdetermination and free will—that is, on individuals' perceived control."

[6]See Meynen (2010b, 2011a).

[7]Juth and Lorentzon (2010, p. 5). In their view, their concept of autonomy is *neutral* to the issue of free will. This is remarkable, because autonomy has been considered related to free will (see this section and Meynen 2011a).

competence." So, Juth and Lorentzon interpret responsibility in terms of control, and control in terms of autonomy, and, finally, autonomy in terms of decision competency. In sum, while Welie and Welie consider the concept of responsibility—usually linked to sanity—relevant to competency, Juth and Lorentzon consider the concept of autonomy—usually linked to competency—relevant to criminal responsibility.[8]

Eighth, both evaluations are basically normative judgments, unlike, e.g., assessments of height or weight. There is a certain *norm*—competency and sanity—and the crucial question is whether the norm is met. Assessments of height will result in a figure, not in a normative judgment (even though the figure may, in a subsequent step, be related to a norm, e.g., for a particular age group). In fact, evaluations of competency and sanity are threshold assessments: a person must meet a certain normative standard.

Finally, both incompetency and insanity are exceptions. By far, most patients are competent and most defendants are sane. We may add that, in many jurisdictions, competency as well as sanity are presumed: patients are considered competent and defendants are considered sane until proven otherwise.

In sum, there is a profound and multifaceted analogy between patient incompetency and legal insanity.

However, if we want to make use of the analogy, we should also be aware of the relevant differences between incompetency and insanity.

First, the setting is different. Insanity evaluations are conducted in the context of a criminal case; the person who is evaluated is a defendant. As far as competency is concerned, the person who is evaluated is a patient, and the context is one of treatment and care and, thus more "benign" than a criminal case: there is no victim, no prosecution, no defense, and no threat of punishment. It appears safe to say that, due to the differences in setting, the reliability and credibility of competency assessments is less an issue than the reliability and credibility of insanity evaluations, especially in an adversarial legal system (see Chap. 3).

Second, and related to this first point, the nature of the choice/act is different: in one case lawful (competency), in the other unlawful (sanity). Unlike competency evaluations, insanity evaluations take place because of an alleged *violation of a legal norm*. This is a crucial difference. The defendant has acted against the law. An incompetent decision by a patient about his treatment may be stupid, unwise, etcetera, but it is, in principle, not against the law. The reason is that doctors provide the set of options from which the patient can choose and doctors are surely not allowed to propose a treatment option that constitutes a crime—and refusing treatment is not a crime either. Consequently, whatever the patient's choice about treatment options, it is not a crime—in fact, we hope patients make the *best*

[8] *Cf.* Shuman and Gold (2008, p. 725) who state on autonomy and accountability: "Autonomy, used in this text, refers to the capacity of individuals to choose how to act and, consequentially, whom the criminal law should hold accountable (i.e. the impact of age, illness, and intelligence on choice and consequentially criminal responsibility)."

decision about their health. Any approach to insanity that is inspired by research on competency, has to acknowledge this difference. More precisely, the violation of a legal—and usually also a moral—norm must be reflected in the evaluation and criteria for insanity.

Third, the time frame is different. While insanity assessments are performed in retrospect, evaluations of patient competency are performed in the period of time in which the patient is making the decision.[9] In general, assessments of past mental state pose a greater challenge than assessments of present mental state (see Chap. 3). However, in my view, this should not make much difference for the criteria. Note that patient competency may sometimes be assessed retrospectively as well. For instance, in legal cases concerning inheritances.

Fourth, looking more closely, the domains of these concepts are different. Although both assessments are performed, as said, at the intersection of medicine and law, patient competency lies within the realm of medicine,[10] whereas insanity lies outside of the medical domain. Whether or not a patient is competent to make a decision about his or her treatment is key to *medical* treatment. It is, in principle, central to all instances in which patients and doctors deliberate about treatment options and other medical interventions. Therefore, whether or not a patient is competent is a profoundly *medical issue and interest*. Doctors assess it—and only in rare cases (when evaluations are disputed) will a judge decide about a patient's competency. The fact that judges decide in rare cases should not lead us to believe that it is not a medical issue.[11] Yet, since competency is also assessed by the courts, it is fair to say that competency is a *medico-legal* concept.

Legal insanity, however, is not a medical interest. It is an interest that arises in the realm of criminal law, where people may be *punished* (an activity alien to medicine).[12] Insanity has to do with exculpation in *criminal law*. Surely, the legal decision about insanity will be *informed by* the results of psychiatric and psychological evaluations, but both the interest and the notion itself are legal. Parties in a legal process—not psychiatrists or psychologists—initiate the evaluation of insanity,[13] whereas healthcare professionals who intend to treat a patient initiate

[9]See also Buchanan (2015) on the role of the term "capacity" in criminal and non-criminal contexts, in particular regarding legal insanity.

[10]Competency to stand trial is another matter.

[11]In general, if parties disagree with another, judges may eventually be asked to consider the matter and render a final decision (this is how our society works). In some cases, a judge may have to consider how a doctor performed an operation (e.g., in a malpractice case), but this does not make performing operations a legal issue *instead of* a medical issue. The fact that judges may make decisions about actions performed in the medical domain does not make these actions non-medical, even if the legal verdicts define new standards for medical conduct, procedures, etcetera.

[12]As Gillon (1994, p. 186) notes, "it is not my role as a doctor to punish patients."

[13]Of course, there are societal and moral interests underlying the legal interest in insanity. When a defendant is considered legally insane, and admitted to a mental hospital, his treatment, of course, falls within the realm of medicine.

the evaluation of competency in the standard case. Moreover, whenever a doctor assesses a person's sanity, a judge or jury will make the final judgment. This is different from decisions about patient competency, which in almost all cases are decided by healthcare professionals, without court involvement.

In sum, while insanity is a legal concept, patient incompetence is a medico-legal concept.[14] The latter term refers to the fact that the concept lies in both the medical and legal domains.

These considerations about the medical and legal domains have at least one important implication: eventually, the criteria for insanity will have to be defined by lawyers (or legislators), not by medical ethicists, doctors, or other healthcare professionals, because the concept lies outside their professional domain and therefore beyond their professional expertise. Thus, the role of medical ethicists and mental health experts in the development or revision of criteria for insanity is advisory—they are not in the driver's seat.[15] Nevertheless, the advisory role should be taken seriously.

In sum, insanity evaluations differ from competency evaluations in at least four ways. Two related differences are particularly relevant: insanity evaluations, unlike competency assessments, are performed after an alleged *criminal* act and they take place in a *criminal law context*. We will now consider the *criteria* for competency.

5.1.2 The Four-Capacities Approach to Competency

Competency has been extensively studied in medicine, particularly in medical ethics. There are various views on how to conceive of patient competency and on how it should be evaluated, but the most influential approach is an "abilities approach" to competency (Meynen and Widdershoven 2012). This approach defines four capacities a patient should possess in order to be considered competent.[16] These are the capacities:

(1) to communicate a choice (consistently).[17]
(2) to understand the relevant information.
(3) to appreciate the situation and its consequences.
(4) to reason about treatment options.

[14] A term that others also use with regard to competency; see Owen et al. (2009), Van den Hooff and Buijsen (2014).

[15] Although I consider it very important to respect the domain difference between these two concepts, it is not a major concern within the context of this chapter.

[16] As developed by Appelbaum and Grisso (Appelbaum 2007; Appelbaum and Grisso 1988).

[17] If the patient constantly changes his mind/decision, he is not consistently expressing a choice and he is considered incompetent to make a decision.

The four-capacities approach has become an influential and helpful framework in many countries. In addition, these abilities have been elaborated on in an assessment tool, the MacCAT, which is available for both clinical and research settings.[18] There is no formal "cut-off" point for competency or incompetency in the MacCAT, it is basically meant to structure and guide the assessment. About the threshold for competency, Appelbaum (2007, p. 1836) writes:

> The level of impairment that renders a patient incompetent to make treatment decisions should ideally reflect a societal judgment about the appropriate balance between respecting the patient's autonomy and protecting the patient from the consequences of a bad decision. When physicians perform competence assessments, they should attempt to strike the same balance that would result if a court in the jurisdiction decided the case. In that regard, the presumption intrinsic to a modern democracy is that the vast majority of persons are capable of making their own decisions. Hence, only patients with impairment that places them at the very bottom of the performance curve should be considered to be incompetent.

Appelbaum does not define a threshold other than formulating what we may consider to be a rule of thumb: "only patients with impairment that places them at the very bottom of the performance curve should be considered to be incompetent." This means that judgments about competency should be informed by not only the criteria as such, but apparently, also by knowledge of "the performance curve." Appelbaum is probably right; at this point it makes no sense to further specify the criteria for incompetency.[19]

Using this model for competency, valuable studies and publications in high-impact journals have been generated[20] in a way that is unparalleled by any model or format for evaluating legal insanity (Meynen 2010b). In this chapter, I therefore concentrate on this view of competency.

Note, first of all, that this standard for competency identifies abilities without mentioning disease or defect.[21] This is different from the standards for legal insan-

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[18]Apart from the MacCAT-T (for treatment decisions) and the MacCAT-CR (for clinical research decisions), the MacCAT-CA has been developed for competency to stand trial assessments (Pinals et al. 2006). On competency to stand trial assessments, see Resnick and Noffsinger (2004).

[19]Competency assessments, meanwhile, have an interesting feature: the sliding scale. When the decision about medical treatment becomes more important (i.e., more severe risks are involved), the threshold for competency rises. To my knowledge, a sliding scale in this sense is not explicitly used in assessments of insanity.

[20]See, e.g., Appelbaum (2007), Owen et al. (2008).

[21]Meanwhile, it is worth noting that a four-capacities approach to incompetency has also been *combined* with the requirement of mental disorder. In the Mental Capacity Act (U.K.) four abilities, which partially overlap with those discussed above, are used as criteria for patient competency. But there is an additional criterion for incompetency: dysfunctioning of the brain or mind. Nicholson et al. (2008, emphasis added) explain how competency should be assessed according to the Mental Capacity Act: "Assessing capacity is a two stage process. For a person to lack capacity, he or she must have an impairment of or *disturbance in the functioning of the brain or mind*, and this defect must result in the inability to understand, retain, use, or weigh information relevant to a decision or to communicate a choice." According to Nicholson et al., the Mental Health Act thus imposes a "diagnostic threshold." Apparently, inabilities in themselves do not constitute incompetence; they must be the result of an impairment of or disturbance in the functioning of the brain or mind (see Sect. 6.4).

ity we considered in Chap. 2. The fact that no disease or defect is required for incompetency is often considered an advantage of this model, because if the criteria were to include a medical diagnosis, the evaluation would be "medicalized" (Meynen and Widdershoven 2012). We may ask ourselves, could deleting "mental disorder" also be an option for the insanity defense? Interestingly, the philosophers Matthews and Vincent have argued for a capacity-based approach to legal insanity. In the next subsection we discuss their arguments.

5.1.3 Incapacities Instead of Mental Disorder

The philosophers Matthews (2004) and Vincent (2008) both propose an incapacity-based, rather than a mental disorder-based, approach to criminal responsibility.[22] I deliberately avoid the word "insanity" here, because both authors advocate for replacing the insanity defense with what can be considered an incapacity defense. According to Matthews and Vincent, morally, it is irrelevant whether certain incapacities were brought about by a mental disorder or by some other factor. Therefore, the reference to "mental disorder" must be omitted. If no such reference is made, the term *insanity* would no longer appear to be appropriate. I consider this is an interesting proposition, which clearly entails criticism towards current insanity standards.

Matthews (2004) starts his argument with a simple thought experiment. Suppose Ben, a young child, is playing on a freeway overpass and he "gleefully throws rocks over the wall and into the path of oncoming traffic. A fist-sized rock smashes through the windscreen of a car seriously injuring the occupant." Ben will not be blamed. How to explain this exculpation? We might simply respond: Ben is a young child. Matthews, however, is not satisfied by this reply. Ultimately, he argues, there is a deeper reason for not holding Ben—and young children in general—responsible. The buck does not stop with their young age. The reason why they are exculpated is that they lack the *capacities* required for being held responsible (Matthews 2004). Referring to their age is, in a way, just shorthand for the lack of such relevant capacities.[23]

The same is true for cases of insanity, Matthews argues: moral responsibility is withheld because of a lack of relevant capacities on the part of the defendant. Let us consider the *M'Naghten* Rule. If a person did not know the nature, quality, or

[22]This section is partially based on Meynen (2012b).

[23]*Cf.* Honoré (1999, p. 123, references omitted) on capacity in English law: "In English law the link between capacity, blame and punishment underlies several features of the criminal process: the defense of insanity, the law relating to 'abnormality of mind' (resulting in 'diminished responsibility'), the treatment of infanticide as less serious than murder, and many matters that are routinely put forward in mitigation (that the offence was conduced to by domestic tension, emotional stress, financial pressures, addiction to alcohol or drugs)."

wrongfulness of the crime due to *incapacity*—shouldn't that be sufficient? Do we really have to know that the incapacity came about as a result of a mental disorder or some other type of pathological defect?[24]

According to Vincent (2008), we should realize that a mental disorder is "neither necessary nor sufficient for reduced responsibility." That the disorder is not necessary for exculpation is demonstrated by the fact that young children—not suffering from any mental disorder—are excused for their actions, she argues. That the disorder is not sufficient becomes clear, Vincent adds, if we consider that people who suffer from a mental disorder—she refers to hypomania—can still fairly be held responsible. And of course, it is true that the mere fact that a defendant suffers from a mental disorder is never sufficient for a successful insanity defense.[25] The insanity standards make clear that something more is required than just the presence of a mental disorder, e.g., in *M'Naghten*: lack of knowledge about the nature, quality, or wrongfulness of the action. Or in the product test: a relationship between the mental disorder and the crime, such that the crime can be considered its product—whatever that may mean in the context of an actual criminal case.

Why should we explicitly include a "mental disorder" in the insanity defense in the first place? Even if, in practice, "insanity" occurs only in those cases in which defendants suffer from severe mental disorders, the legal criterion could still be solely defined in terms of the detrimental *effects* of these disorders in terms of incapacities. Matthews shows how an insanity standard can be rephrased in such terms. He takes the Australian legal context—the Commonwealth Criminal Code Bill, which requires the defendant to have been "suffering from a mental impairment"—as a starting point. Matthews adds: "Mental impairment here includes senility, intellectual disability, mental illness, brain damage, and severe personality disorder." (Matthews 2004, p. 420, emphasis added) He reformulates the standard as follows:

> A person is not criminally responsible for an offence if at the time he or she carried out the conduct constituting the offence he or she failed the test of responsible agency. This test is failed if any one of the following three conditions is satisfied: (a) the person *lacked the capacity* to understand the nature of what he or she was doing; or (b) the person *lacked the capacity* to understand that what he or she was doing was wrong (that is, the person's conduct was insufficiently reasons-responsive, constitutively speaking, to conventional, moral or legal codes of behavior; or (c) the person *was unable* to control his or her conduct.

[24]Note, however, that whether or not this incapacity was knowingly/intentionally brought about by the defendant may be legally relevant. Serious mental conditions—such as states of intoxication—may have been brought about by the defendant, e.g., by taking drugs or alcohol. In such a case, a mental condition may not exculpate a defendant because of *culpa in causa*, or prior fault (depending on the legal system). The legal maxim *culpa in causa* is used to refer to those situations where the defendant created a situation in which a crime was more likely to occur (e.g., voluntary intoxication, provoking an attack). In these cases, the defendant's culpability with regard to the offence that he committed is viewed in connection with his earlier behavior (e.g., drinking alcohol, provoking the victim).

[25]An exception is Norway, see Chap. 2. Still, in the Norwegian system, not just any mental disorder can result in exculpation, only psychosis.

Basically, Matthews has replaced the criterion of "a mental impairment" with that of "failed the test of responsible agency," which is understood in terms of three kinds of incapacity. *M'Naghten* could, in principle, undergo a similar revision, omitting "from disease of the mind" and replacing "as not to know" and "did not know" with "lacked the capacity to know."

Still, there may be a good reason for including "mental disorder" in a legal insanity standard. According to Morse (2011b, pp. 895–896, emphasis added):

> One could jettison the mental disorder criterion in mental health laws, the presence of a mental abnormality … but the presence of a mental disorder allegedly provides *an objective marker* that the person genuinely lacks the required rational capacity. The mental disorder criterion for mental health laws achieves this goal only imperfectly at best…

In other words, mental disorder may not so much add another requirement as add objectivity to the other criteria. For example, the finding that a person suffers from a paranoid psychosis may add objectivity, and thus reliability, to the conclusion that he did not know that what he was doing was wrong.

Yet, as we have seen, the most influential framework for patient competency does not contain such an "objective marker." Perhaps such a marker is needed more in the context of a criminal case than in the healthcare context (see our earlier discussion, Sect. 5.1.1). One reason could be that, in a criminal case, harm has been done to another person, and that it may be unacceptable to a victim or his relatives and loved ones, and society, if the defendant escapes punishment due to a successful insanity defense, without such an "objective marker." The risk of faking in the criminal law context may also be a factor here.

But we may ask ourselves: How objective is mental disorder as a marker? Symptoms of a mental disorder tend to be subjective in nature. Think of depressed mood, anxiety, and craving—these are all subjective mental states. Generally, psychopathological core symptoms and phenomena are only immediately accessible from a first person perspective. *I* (first person) feel depressed. Such a depressive state is not immediately accessible to other people, e.g., to a psychiatrist or psychologist. This is different from a broken leg: although *I* am in pain, the brokenness of that leg is clearly visible and objectifiable for others. The patient doesn't have to tell the doctor that the leg is broken in order for the doctor to know that it's broken. Subjective symptoms, however, must, in principle, be *reported* by the patient. As Casey and Lee (2013) state regarding a DSM-diagnosis: "…a DSM-informed psychiatric diagnosis is based mainly on self-reports of feelings and experiences by patients with diverse backgrounds and on clinicians' understanding of psychiatric terms or observation of behaviour."[26] Clearly, there are also more objective elements of DSM-criteria, such as weight loss in depression and anorexia nervosa. Nevertheless, subjectivity plays an important role in diagnosing mental illness, and, therefore, in establishing the presence of the "objective

[26]Surely, the relevance of the first-person perspective as a core phenomenon of the illness is not limited to psychiatric illness (for instance, a headache, which is a neurological condition).

marker." So, regarding the goal of objectivity, Morse is probably right that, "The mental disorder criterion for mental health laws achieves this goal only imperfectly at best."[27]

Finally, it can be argued, that if something merely adds objectivity to the finding that the defendant did not know the wrongfulness of his act, it need not become a criterion in itself. It may be part of the behavioral expert's argument, and it may be helpful convincing a jury, but it need not be a criterion of its own.

In conclusion, the parallel between incompetence and insanity shows that the most generally accepted framework for patient competence does not include mental disorder or defect as a criterion. This is different from the standards for legal insanity we considered. As it happens, deleting mental disorder as an insanity criterion has already been proposed by two philosophers, and for good reasons. Nevertheless, the setting of an insanity defense may require mental disorder as an objective marker, even though it is a somewhat subjective objective marker. Yet, in principle, our analysis opens up the possibility for another, future objective marker—perhaps a neuro-marker (see Sect. 6.4).

5.1.4 An Insanity Standard Based on Criteria for Patient Incompetency?

Earlier, we discussed the profound similarities between assessments of legal insanity and patient competency. It then became clear that the most common approach to patient competency distinguishes between four required capacities: expressing a choice, understanding information, appreciating the situation, and reasoning about treatment options. Could these four capacities provide a model for a capacity-based standard for legal insanity?[28] What might that model look like?

Tentatively, if we transfer the four capacities of patient competency to the context of evaluating legal insanity, psychiatrists and psychologists would have to assess whether the defendant, at the time of the crime,

1. was able to express his choice in action;
2. understood the relevant information;
3. appreciated the situation and its consequences; and
4. could reason about the options open to him.

[27]We will revisit the issue of objectivity regarding mental disorder in Chap. 6, on neuroscience and psychopathology.

[28]*Cf.* Elliott (1996, p. 122), who links criteria for patient competency—other than, but not unrelated to those formulated by Appelbaum and Grisso—to those regarding moral responsibility within the context of discussing how moral responsibility can be undermined by mental disorder.

As is clear, adaptations were made because of the forensic context. The ability to express a choice has been replaced with the ability to express one's choice in one's action (Meynen 2011a). The reason is that criminal law, in general, is about actions, not about expressing choices. If we phrase this capacity in these terms—the ability to express one's choice in one's action—this criterion can be understood as a control element, because being able to translate one's decision into action is a form of control. Therefore, it is probably better to phrase this element straightforwardly as "was able to control his actions by his decisions," which I will do from now on. In addition, because of the forensic context, in the fourth element, "treatment," was omitted.

A further adaptation should be made. This concerns the second element, understanding information. In the context of obtaining consent for a medical intervention, it is crucial that the patient be able to understand the information provided by the health care professional. Patients are not usually familiar with the relevant medical information, so they have to be able to pick up the information as provided to them by their doctor. This is not the case in everyday situations in which crimes may occur. People do not "get specialist information" from some doctor-like figure in daily life before they decide to commit a crime. There are several options for dealing with this second element in the forensic context. First, the "understanding information" element can be omitted, because it is not really relevant. Information is, of course is, always relevant in life, but in everyday situations it is already implied in the appreciation of the situation itself (covered by element 3). Second, the "understanding information" element could be specifically focused on whether the defendant was able to understand the morally or legally relevant aspects of the situation, as I will do from now on.[29]

If we were to make these two further adaptations, then the criteria for legal insanity could be: a defendant is legally insane if, at the time of the crime, he lacked one or more of the following abilities:

1. to control his actions by his decisions;
2. to understand the legally/morally relevant information;
3. to appreciate the situation and its consequences; and/or
4. to reason about the behavioral options that are available.

How could these four abilities be compromised by psychopathology?

Re 1: The element of control was examined in Chap. 4. It turned out that control could be undermined by various disorders, one example of which is Tourette's syndrome: a patient who hits another person without any prior decision to do so.[30] The notion of control is present in many standards, although it is an issue of debate.

[29]See also Hondius (2009).

[30]Interestingly, Gullucayir et al. (2009) describe a case in which a Tourette's patient's criminal responsibility was evaluated after the patient swore at a referee.

Re 2: Delusions may compromise this second ability to *understand* the morally/legally relevant information. Suppose a manic psychotic person believes that God is commanding him to perform a certain act that constitutes a crime. He feels that he has to obey such a command since it overrides our legal norms. In this case, due to psychopathology, there is a change regarding the normative framework: a divine factor is introduced. So, the person still recognizes that what he does is against the law, but he acts in accordance with another, divine order (at least this is what he delusionally believes). Another example might be a person who, due to intellectual disability, does not know that certain behavior constitutes a crime.
Re 3: A defendant who suffers from dementia may have done harm to his wife, but it turns out that he is no longer able to *reason* coherently about behavioral options. His cognitive functioning has been severely affected by the disease in this respect. Interestingly, this element of reasoning is not clearly reflected in the legal insanity standards we considered. Why would it be relevant in patient competency and not regarding insanity? The reason might be that, in the healthcare context, a patient has to choose between a set of options provided by the doctor. We hope the patient will choose the *best* of them. In order to do so, the patient's reasoning capacity must be fairly good. Note that other people cannot determine what the best option is for that patient: the patient must determine that for herself using her reason. In the case of committing a crime, however, as far as culpability is concerned, we are not interested in the defendant's ability to choose the best option in that particular situation, but in the question of whether or not the defendant was able to *recognize* and *avoid* a criminal act—a *bad* option. Clearly, the inability to recognize and avoid the criminal act may be the result of reasoning problems, but ultimately these are only relevant as far as they led to the inability either to recognize the wrongfulness of the act or to avoid the crime. From this perspective, it is no accident that the element of reasoning is not reflected in the standards we considered earlier. Others, however, have argued that practical reasoning is relevant to excuses in general and insanity in particular.[31] So, it may be good to incorporate a reasoning element into an insanity standard.

[31]According to Moore (1985, p. 1148), the capacity for practical reasoning is highly relevant to excuses: "If moral pluralism were true, there would be a group of isolated moral truths about the nonresponsibility of the insane, of those who are coerced, and so on. Although this is possible, my own view is that there is a hidden unity to the excuses. I have hinted at tentative thoughts about that unity throughout this Article: the excuses are all related to the exercise of the actor's practical reasoning capacities." And he writes on p. 1149: "In one or another of these ways, our legal and moral excuses all reflect the moral judgment that responsibility can only be ascribed to an individual who has both the capacity and the opportunity to exercise the practical reasoning that is distinctive of his personhood. No doubt this account of the excuses is pretty sketchy. But it is also a topic for another occasion."

Re 4: The capacity to appreciate one's situation may also be seriously compromised by mental illness. Consider a paranoid woman who believes her neighbor is going to attack her any minute; she has a profoundly distorted appreciation of her situation. She is convinced that this is a situation of self-defense, which is legally justified. She then attacks her friendly and completely innocent neighbor who was just putting out the garbage. Note that there may be some overlap between the second and fourth elements. But there is a clear difference as well. In the case of the paranoid woman, there is no change in the perception of the normative framework, she still recognizes the authority of criminal law, and tries to conform to it. Yet, she has misjudged the situation entirely because of psychopathology. In the first case, however, the manic psychotic patient who believes he received a direct command from God, the delusion introduces a new, divine norm, the patient feels he has to follow, *even though* it is against the law.

Regarding this fourth element, we may also consider the question whether psychopaths would have substantial "situation appreciation" problems. Schneider and Nussbaum (2007, p. 221–222, emphasis added) write:

> In the general sense, we have presented empirical evidence demonstrating a special deficit in psychopaths' capacity to encode and process moral issues in ways that would suggest *moral appreciation of the situational issues* that might guide their behaviour. These deficits do not occur in isolation of other intellectual, emotional and linguistic information-processing difficulties, and neural substrates add further credibility to this emerging consensus. The preponderance of the data also shows that these processing and *moral appreciation impairments* exist independent of intellectual levels.

On this view of psychopathy, the fourth element of an incompetency-based insanity standard may even result in considering psychopaths insane.[32] Note that, according to some authors, psychopaths are already candidates for insanity, depending on the insanity test (Schneider and Nussbaum 2007). However, there is much debate about the nature of psychopathy and whether or not psychopaths should be considered criminally responsible (Maibom 2008).

The *appreciation of the situation* is not directly reflected in the insanity standards we discussed earlier. Appreciation is mentioned, but only with regard to the criminal act itself and its wrongfulness. In my view, the divergence of the competency standard and the insanity standards can be understood along the same lines as the difference regarding the reasoning element. Appreciation of the situation as such is very important if a patient must choose the best of various treatment options. In the context of legal insanity assessments, however, the central issue concerns the appreciation of the one option the defendant did choose: the criminal act, rather than the situation as such. Nevertheless, this fourth criterion of patient competency (appreciation) highlights the relevance of appreciation—not

[32]See also Sect. 4.1 on moral insensitivity.

just knowledge—to decision-making. In my view, this is a relevant point to keep in mind for an insanity standard as well.

In conclusion, it looks like the four capacities for patient competency can be transferred to the context of insanity evaluations if some adaptations are made. If we were to do so, the result would be an insanity standard that adds two components to the standards we discussed above: first, *reasoning* about the options and, second, *appreciation* of the situation (rather than mere knowledge of the act in *M'Naghten*). I am not entirely convinced that the reasoning component should be added: the crucial issue for criminal law appears to be that the defendant understood the *nature or wrongfulness* of the act—the extent to which he or she was able to reason about other options is less important.

Furthermore, transferring the four capacities of patient competency to the forensic setting showed the relevance of the notion of "appreciation," which is more demanding than mere knowledge. A patient should not merely have "knowledge" about his situation in order to make the right decision about medical treatment; he or she should *appreciate* that situation in an adequate manner. In my view, appreciation is also the right term in a legal insanity standard, even though the intricate question of whether psychopaths should be considered insane may surface.

5.1.5 Transcending the Boundaries of Legal Systems

As mentioned above, research on patient competency has been able to transcend the boundaries of individual legal systems. It is an international endeavor, which makes it possible to have an open exchange of ideas and findings across countries and jurisdictions (Meynen and Oei 2011). As a consequence, researchers in, for instance, Amsterdam may benefit from findings in New York and vice versa. Researchers in Amsterdam may also be criticized, hailed, or helped by researchers in New York. Such criticism and assistance are crucial to science.[33] Research on competency has been able to benefit from such an international scientific debate, which may add significantly to its quality. Yet, to a considerable extent, forensic psychiatry is bound by the specific characteristics of criminal law in a jurisdiction. And there may be enormous differences between legal systems, and in particular between the legal standards for insanity that are used. This means that research on insanity is, at least in part, deprived of the blessings of international research. Nevertheless, it would be well for research on legal insanity standards to be as much an international effort as possible. Perhaps even a tool like the MacCAT

[33]See, on the value of universalism and criticism in science, "The normative structure of science" in Merton (1973, pp. 267–277).

could be developed for structuring psychiatric and psychological assessments concerning insanity across jurisdictions.[34]

5.1.6 Inauthenticity

Some have challenged the approach to competence proposed by Appelbaum and Grisso. Tan, et al. (2006) studied competency in anorexia patients. Although considered competent when evaluated using the four-capacities criteria, these anorexia patients turned out to be incompetent when their *values* were taken into account.[35] In some anorexia patients, the value of "being thin" was their most important value, even more important than "being healthy."[36] Tan et al. consider such "being thin" values to be pathological:

> Unlike psychotic disorders which tend to be associated with apparently bizarre, meaningless or disconnected beliefs, there can be consistency, coherence and organisation within the value and belief systems which underpin the behaviour of patients who suffer from anorexia nervosa. The patient who has anorexia nervosa therefore may be able to give a coherent, consistent answer to the "Why?" question, but still be making decisions based on "pathological values" that arise from the disorder.

[34]See Meynen (2011a) and Hondius (2009). A structured tool for assessments of insanity has been developed: the Rogers Criminal Responsibility Assessment Scales (R-CRAS). As Rogers (2008, p. 703) writes, it "is a structured decision model for quantifying relevant psychological variables that are salient for the retrospective evaluation of insanity." It was developed to be used in the context of the Model Penal Code (ALI). Interestingly, Rogers writes: "The reliability of the R-CRAS is challenging to establish, given the retrospective nature of insanity evaluations. As a rigorous test of its reliability, the R-CRAS was administered by independent evaluators on separate occasions with an average interval of 2.7 weeks. For individual variables, the mean reliability coefficient was 0.58, which is very acceptable given the rigorousness of the retrospective test-retest design." Packer (2009, p. 75, reference omitted) concludes regarding the R-CRAS that it "does not achieve its desired aim of serving as a quantitative measure to assist decisions about criminal responsibility. However, it can be used as 'an organizing model or template.' Utilizing this approach, the R-CRAS would be an aid to guide an evaluator regarding which issues to address and a framework for integrating the data into an analysis relevant to the legal criteria."

[35]Still, Turrell et al. (2011) reported that anorexia patients had cognitive characteristics/problems relevant to the "four abilities" criteria formulated by Appelbaum and Grisso; see Turrell et al. (2011). In addition, there has been some criticism regarding the retrospective method used by Tan et al.; see (Grisso and Appelbaum 2007).

[36]Quotes are taken from NIH-PA Author Manuscript. See also Meynen and Widdershoven (2012).

Is there more that can be said about such "pathological values?" According to Tan et al. (2006), "one implication of their being pathological is that these values do not represent the true or authentic views of the person." What is interesting about this interpretation of "pathological" within the context of this section is that the concept of "inauthenticity" actually adds something to the four capacities required for competency (Meynen 2012b). To illustrate, two people may both have the capacity to communicate a choice, to understand the options, to reason about them, and to appreciate the situation, but they may nevertheless reach very different decisions, because they are different *people*. In other words, the difference between the outcomes of their decision-making processes must be explained in terms of *who* they are rather than in terms of the four capacities.[37] From this perspective, if a mental disorder affects a patient's authenticity, this could lead to an incompetent decision, even if the four capacities were intact. Now, if incompetence is similar to insanity in a relevant way, the notion of inauthenticity may also be relevant to legal insanity.[38]

The study performed by Tan et al., is not the only source that may provide reasons for considering inauthenticity relevant to legal insanity. According to the moral philosopher Haji (2010b, p. 265), authenticity is one of the requirements for moral responsibility:

> The account of moral responsibility that I favour has at its core the analysis that one is morally responsible for performing an action if and only if one performs it in the (non-culpable) belief that one is doing something morally obligatory, right, or wrong, one has appropriate responsibility-grounding control in performing it, and it causally issues from authentic actional springs. So, responsibility has at least a control component, an epistemic component, and an authenticity component.

Again, the epistemic and control requirements feature in this account of responsibility, but Haji adds authenticity.[39] Let us now return to our analysis in Chap. 4,

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[37]See also Adshead (2010, p. 298): "First, mental disorders impair an individual's autonomy to make good-quality decisions in many situations, including treatment. Most mental health legislation assumes that mental disorders make people likely to refuse treatment that may actually help them because their disorder impairs their capacity to make a good-quality decision. Compulsory treatment is justified on the basis that the treatment refusal does not represent the 'real' choice of the patient; that he or she is not 'himself or herself.' Just as unconscious patients in intensive care may later say 'thank you' to their doctors for making it possible for them to recover, so when the mentally ill patient is his or her 'real self' again, he or she will be grateful for the treatment that has helped him or her to recover."

[38]In this section, I focus on the relevance of the concept of authenticity to responsibility. On authenticity and autonomy, see, e.g., Dworkin (1976).

[39]*Cf.* Perring (2004, p. 496) in a paper entitled "Conceptual issues in assessing responsibility for actions symptomatic of mental illness": "To summarize, I have found three ways in which we can count a form of behavior as involuntary: (a) It is the result of an irresistible craving or overpowering fear. (b) It is the result of an aberrant and temporary desire external to a person's true personality. (c) It is the result of a delusion. I am proposing involuntariness of all symptoms as a necessary condition of mental disorder, not a sufficient one." "External to a person's true personality" appears to refer to inauthenticity.

where we examined the concept of free will. I concluded that one of its meanings or aspects is sourcehood: the agent being the genuine source of the action. Such sourcehood can be understood as authenticity. We also noted that, roughly, free will covers the control element of responsibility. On this account, authenticity (i.e., sourcehood) would already be included in the notion of control. It may be considered a deeper layer of being in control.

There is further support for this viewpoint on control and authenticity in moral philosophy. Wolf (1987) argues that ethical theories as developed by Watson, Frankfurt, and Taylor give a "deep self view" (DSV) of moral responsibility.[40] The "deep self view" recognizes two requirements for responsibility. First, we are responsible if "our actions are within the control of our wills" (Wolf 1987, p. 49). So, if we perform an action that was not within the control of our will, we should not be held responsible for that action. But there is more to being responsible than the actions being within the control of our wills. A second requirement must be added; namely, that our wills must be "expressions of characters that come *from* us, or that at any rate are acknowledged and affirmed *by* us." This second requirement is what gives the DSV its name, because it requires that our wills be within the control our "*selve*s in some deeper sense" (Wolf 1987, p. 50). Therefore, to be responsible for an action, that action has to be controlled by our wills, and our wills have to originate in our deeper selves.[41]

Philosophers have articulated such origination in a *deeper self* in different ways, Wolf explains. According to Watson, "our wills must be governable by our system of values," and according to Taylor our wills "must issue from selves that are subject to self-assessment and redefinition in terms of a vocabulary of worth" (Wolf 1987, p. 49). It is important to recognize this "deeper self" criterion, since, according to Wolf, it enables us to explain why, for example, victims of brainwashing and people acting under post-hypnotic suggestion may lack responsibility for their actions. In these exceptional cases "the connection between the agents' deep selves and their wills is dramatically severed—their wills are governed not by their deep selves, but by forces external to and independent from them."[42]

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[40]Note that, in this section, I focus on Wolf's rendition of the "deep self view," not on one of her own original contributions to the requirements of responsibility: the sanity requirement. In fact, Wolf not only endorses, but also problematizes the traditional "deep self" views by posing further questions about the *sanity* of the deep self. She then supplements the deep self view with a sanity requirement. There are, however, some problems from the perspective of psychiatry regarding her elaboration on this notion, see Meynen (2012a). Nevertheless, I agree with Wolf that the "deep self" may be affected by disorders in a way that undermines responsibility. I interpret both the "deep self" view and the "sane deep self" view as theories that recognize authenticity as a requirement for responsibility.

[41]See also Wallace (1994) on mental disorders, insanity, and "general powers of reflective self-control."

[42]Wolf (1987, p. 50) goes on, stating that the deep self view also makes clear why "dumb animals, infants, and machines" are not responsible agents: "these beings *lack* deep selves altogether."

Actions flowing from a deep self can, in general, be considered to be authentic actions.[43]

Wolf thus distinguishes between two types of control: one type that we may consider "control of our muscles" and another, deeper type that may be considered control by our deeper self, or authentic action. In my view, this distinction within the concept of control is helpful. It makes clear that there is more to control than just actions in accordance with a will: further questions can be asked about the origins of that will. In other words, there are two layers of control:

1. the action is within the control of the person's will.
2. the will flows from the person's deep self (i.e., it is authentic).

Both components can be affected by psychopathology. Let us consider some examples. Clearly, there will be some overlap with the examples we used when explaining how free will may be affected by mental disorder, because free will can, loosely, be understood in terms of control.

Re 1: In general, mental disorders do not hinder actions from being in accordance with a person's will; control of bodily movements usually remains intact in mental illness. Still, in Tourette's syndrome, actions may not be in accordance with one's will. A Tourette's patient may hit another person without any intention or will to do so: it is merely a *tic*.[44] The patient's will is *bypassed*, it does not play a role in the coming about of the action (Meynen 2015b). Another example may be parasomnias (sleeping disorders): people may act while sleeping—allegedly even commit crimes—without their actions being under the control of their conscious will. Cases in which the behavior is not under the control of the person's will are usually more neurological—and less "psychiatric"—in nature. For instance, Gideon Yaffe (2013, p. 345) states with respect to epileptic seizures: "The epileptic's bodily movements are not a product of his will; they are little different in origin from heart palpitations, or cold-induced shivers. We might even feel that to describe such bodily motions as 'behaviors' is misleading." In any case, most mental disorders do not result in actions that are not under the control of people's wills in this sense.

Re 2: Under certain psychopathological conditions, actions may flow from wills that are not affirmed by the patients themselves. Perhaps the most powerful example is a commanding voice that cannot be disobeyed (a phenomenon we discussed above). The patient acts, but his will to act does not flow from his deeper self; it is merely the result of an auditory hallucination that commands the patient to act in a certain way. Suppose, for instance, that a voice orders a patient to attack his neighbor, of whom he is actually quite fond. The patient would never harm his neighbor if his "deep self" were in control of his actions. But his deeper self is not pulling the strings at this moment: a will is formed to attack the neighbor just

[43]On the element of authenticity, see also Law (2003).

[44]Some of the tics in Tourette's can, at least to some extent, be controlled by the patient (Verdellen et al. 2008).

because the person cannot but obey the commanding voice. His will is *hijacked* by the voice, not formed based on the patient's own values and desires (Meynen 2015b). Another relevant condition may be severe incoherence: if a person is incoherent, a will may be formed and actions may flow from that will, but they may not be stemming from a deeper self and they may not be acknowledged and affirmed by the patient.

The two-layer structure of control implies that, where legal insanity standards refer to "control," at least two issues may be relevant: whether the act was willed and whether the will was authentic.[45] Yet, it may be difficult to actually use the notion of authenticity in a court of law. What is someone's real self? How should we establish whether it was affected by psychopathology? Authenticity may be too subtle and vague a term for use in a court of law. Nevertheless, in a case of commanding voices leading to crimes, it might be helpful to explain to a judge or jury that, although the actions flew from the defendant's will, the will formation did not stem from the person's deeper self. The defendant's will was "hijacked" by the psychopathological phenomenon (i.e., the commanding voice).[46] Other cases in which the notion of authenticity may be helpful are short and reversible changes of one's character because of, e.g., a drug ingested against one's will or without one's knowledge, or certain side effects of deep brain stimulation.

Notably, the first layer of the notion of control may, depending on the legal system, also be covered by other legal concepts, such as lack of intent, or insane automatism.[47] Still, the automatism defense is not available in all jurisdictions and what counts as an insane automatism and what falls outside this category may be subject to debate.[48] Considerations like these make clear that the components of a legal insanity standard also depend on other elements of a legal system, such as the availability of the insane automatism defense. This underscores the fact that an insanity defense is never an isolated object, but always part of a complex legal structure. Since legal systems vary considerably, it is hard to make general statements about the exact shape the defense should take.

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[45]Bublitz and Merkel (2013, p. 357) doubt the relevance of authenticity to legal responsibility, "we might cherish ideas such as authenticity in our personal self-conceptions, but they should not be taken too seriously in determining the adequate legal assessment of persons and their actions."

[46]For some, the notion of will, which is central in Wolf's framework, may need some clarification as well. Meanwhile, Felthous (2008, p. 23) has argued in favor of using the concept of "will" rather than that of "free will" in the context of forensic assessments of criminal responsibility: "To the law, the will, a relatively, naturally functional will, not a metaphysically free will, could regain significance in validating (and invalidating), in principle, individual responsibility." Thus, in his view, "will" could be a helpful concept in this context.

[47]A distinction has been made between sane and insane automatisms (Fenwick 1990; Rumbold 2013). An insane automatism would be the result of an internal factor (e.g., brain disease), while a sane automatism would be the result of an external factor (e.g., being hit on the head), but this distinction has been criticized (Fenwick 1990).

[48]See Rumbold (2013). On epilepsy with regard to insanity and automatism in English criminal law, see Mackay and Reuber (2007).

In sum, mental disorder may not just result in a lack of one of the four capacities, but it may also lead to inauthentic decisions or actions. Authenticity is relevant to patient competency, but also to responsibility and, therefore, in principle, to legal insanity. Does this mean that we need to add another criterion to insanity on top of the epistemic factor and the control factor? Not necessarily. Control can be understood to consist of two layers. One layer concerns the control of one's limbs, so to speak, while the other, deeper layer means that one's will is under the control of one's authentic self. From this perspective, the notion of control already covers authenticity. At least in some cases it may be helpful to distinguish between the two types of control, for instance regarding commanding voices.

5.2 Stages of Decision-Making

Another theoretical angle on legal insanity is provided by psychological and philosophical work on the phases of decision-making.[49] This approach to insanity concerns the influence of a mental disorder on different stages of a defendant's decision-making. It is clear that this perspective is not unrelated to competent decision-making, which we discussed in Sect. 5.1. In contrast, however, the present approach will look at what actually happens during the *process* of decision-making in more detail.

Buchanan (2000, p. 80) writes: "If psychiatric conditions are to be grounds for exculpation, they must impair the sufferer's ability to choose. There are many ways in which they may do this." This view of the legally relevant impact of mental disorder may seem self-evident or intuitive, perhaps even trivial. However, the legal standards for insanity discussed in Chap. 2 did not mention the influence of psychopathology on *decision-making*, or at least not explicitly.[50] Clearly, however, the fact that they do not explicitly mention decision-making does not necessarily mean that decision-making is not implicitly relevant, or even crucial, to insanity.[51]

[49]Kalis et al. (2008). This section is partially based on Meynen (2013a); see also Kalis and Meynen (2014).

[50]Although Buchanan uses the term "choose," I use the term "decision-making" or "decision-making process," because these terms make it clear that choosing is a *process*. In addition, the term "decision-making" is the one often used in neuroscientific literature on how mental disorders may influence the choices patients make; see also Chap. 6.

[51]In his book, Buchanan (2000, p. 134) emphasizes that several tests for legal insanity do not explicitly refer to the defendant's ability to choose, and he considers his own view "an alternative approach." Still, I argue that the relevance of decision-making can be considered to be at least *compatible* with such tests. In fact, the standards' components seem to presuppose a defendant whose *choices* are compromised in certain ways by deficits induced by mental disorders (Meynen 2013a).

For instance, *M'Naghten* mentions knowledge—not decision-making. But why would knowledge be relevant to excusing criminal actions? This may be explained as follows: actions are, in principle, the result of decision-making processes, and knowledge about the nature or wrongfulness of an act may be a reason to refrain from choosing a particular course of action. The very fact that knowledge is relevant to *decision-making*, we may say, makes knowledge relevant to excusing criminal acts.

In this section, I analyze the process of decision-making, and answer the following question: how could this process be influenced by a mental disorder?

5.2.1 Three Stages of Decision-Making and Mental Disorders

There are several models of decision-making. An interesting proposal, which I will use in this section, has been developed by Kalis et al. (2008).[52] This view distinguishes between three stages of decision-making.[53] In the first stage, behavioral options are *generated*. In the second stage, an option is *selected*, and in the third stage, the action is *initiated*. These stages posit that decision-making extends from option generation to action initiation. Let us consider the stages and how they relate to one another in more detail by looking at how each of them may be affected by mental disorders.[54]

The first stage is option generation. A strong point of the model of decision-making developed by Kalis et al., is that it emphasizes that deciding is not merely picking one of the already available options. The first step is that options must be *generated.* This step may be considered creative or spontaneous mental activity. Psychopathological phenomena can profoundly influence this first stage of choosing. Option generation may, for instance, be affected by intellectual disability: some people may just not generate good options for action because of low IQ. Particularly in psychotic disorders, option generation may be distorted. If a person suffers from visual hallucinations or paranoid delusions, options may be generated based on these psychotic phenomena. For example, a psychotic patient who is sitting on a chair in his apartment may perceive a staircase (which is not actually there, he is hallucinating). Based on this perception the option to walk downstairs may be generated. Suppose that this patient is also delusionally convinced that he is about to be attacked by his persecutors. He may contemplate whether the

[52]Recently, the value of this stage-model of decision-making for insanity evaluations was explored in some detail (Kalis and Meynen 2014); see below in this section.

[53]I discuss decision-making concerning motor action (as opposed to thinking), see also Kalis and Meynen (2014). In this account, options consist of these two elements: (1) being a possible action and (2) having an affective value for the decision-maker (Kalis et al. 2008).

[54]See on this topic Kalis and Meynen (2014), Meynen (2013a).

staircase provides a possible escape route—an alternative for climbing out of the window. In addition, he may consider options for defending himself using kitchenware. So, even before a patient starts selecting an option, psychopathological phenomena may provide options for courses of action. Without the psychotic phenomena, this man would probably just sit quietly in a room, not generating any of the options he is considering right now. Because of a delusion, however, options to defend himself as well as escape routes (i.e., options) are being generated at this moment, and one of the options for escape (using a staircase that is not actually there) is hallucination-based. In fact, this person is generating a *range* of behavioral options—all having to do with defense and escape—that are all psychotically based (Kalis and Meynen 2014). If the person were not suffering from a paranoid delusion, he would not be considering how to defend himself and how to escape, and if he were not hallucinating at that moment, he would not be considering using the stairs. While considering these options, new options may be generated, such as escaping over the balcony. Some of these options may immediately strike a person as very promising, valuable, or risky, etcetera. This aspect of an option is considered to be part of option generation, even though it comes close to option selection (Kalis and Meynen 2014).

In the second stage, options are selected, usually after critical evaluation. Mental illness may influence this stage as well. For instance, in the case of the psychotic patient just described, the option of fleeing over the balcony may be selected. Note that although this particular patient really tries to analyze the options (stairs, window, balcony) critically, he cannot step back from the experience that he is being persecuted. The delusional nature of this idea makes it impossible for the patient to scrutinize it critically. In fact, in this type of disorder, psychosis, there are practically no ways for the patient to correct what goes wrong in the first stage (Kalis and Meynen 2014). In the selection stage, as stated, even though the patient may try to be critical, the options will be evaluated from a background that is seriously distorted by delusions and hallucinations. This inability to reflect *genuinely* critically on the options and the selection process may be a reason why psychosis is the classic case for a successful insanity defense (Kalis and Meynen 2014).

Let us consider another type of mental disorder, pyromania. Suppose a person is receiving therapy for this disorder. He drives through the country and suddenly the option emerges (first stage) to set fire to a haystack. This generated option is clearly pyromania-based, and it presents itself immediately as an attractive option. Still, in stage two, the patient may consider that although setting fire to this haystack is clearly a strongly appealing option, he is committed to the therapy he is currently receiving. Eventually, he does not select the option to set the fire, but he chooses another option, to visit his brother. This patient, who is not suffering from a psychotic disorder and currently following cognitive behavioral therapy for pyromania, can really take a step back and critically deliberate the option. He can do this because his knowledge about reality is not distorted as that of the psychotic patient we considered above. As the decision-making process moved to the second stage, critical assessment was possible because of, in Wallace's terms, sufficient *reflective* self-control (Wallace 1994).

Other psychopathological phenomena that may profoundly influence the second stage of critical contemplation and selection include attention deficits (for example in mood disorders and ADHD), incoherence (for example in schizophrenia), and memory problems (for example in dementia and delirium).

The third stage concerns action initiation. This stage may be affected by, e.g., depression. During a depressive episode, good options may still be generated and selected, but the patient may lack the energy or motivation to initiate the action. This motivational problem may also lead to excuse, at least in everyday contexts: we tend not to blame a person who, due to a depression, cannot muster the energy to go to his niece's birthday party. Notably, in this stage, options may also be translated into action too easily, e.g., in impulse-control disorders such as intermittent explosive disorder or in a manic episode in bipolar disorder.

Sometimes, a disorder profoundly affects all stages. Consider a person suffering from a depression who believes that his life has no longer value. Various suicidal options are generated, and in the second stage he chooses one of them. However, in the third stage, he does not translate this selected option into action due to lack of initiative and energy. The problem in the third stage thus prevents the occurrence of a dramatic action.

Some disorders may "bypass" the first and second stages and immediately result in action initiation (Meynen 2015b). We have already discussed one such a disorder, Tourette's syndrome—at least some tics appear to bypass decision-making (Verdellen et al. 2008). Conscious control of such actions is impossible. Another type of influence is hijacking the decision-making process, for example, a commanding voice that cannot be disobeyed (see above). If the voice says, "Attack your friend!" the command is never an "option," because it is not "optional." The person *must* do it. This command, therefore, immediately translates into action even though the patient is intentionally aware of what he is about to do, which is different from the situation in Tourette's.

Going through the three stages of decision-making may take any amount of time, from a little to a lot or somewhere in between. A prolonged decision-making process may also have to do with psychopathology. An example is indecisiveness in depression. It may be very difficult for a depressed person to select an option. It may also be that a decision-making process is never completed, for instance because the person forgets what he was thinking about. Such forgetting may also be the result of a mental illness, like in ADHD, or—in a more severe form—in Alzheimer's dementia (Kalis and Meynen 2014).

Finally, the three-stage model provides ample room for feedback loops (Kalis and Meynen 2014). During the selection stage, a new option may present itself (stage one) and even during the initiation (stage three), a new option may be generated (stage one) or another option selected (stage two), and the action that was initiated may be aborted. Option generation, selection, and action initiation constitute a continuous process during our lives: a never-ending stream of options being generated, a small number of options being selected, and an even smaller number of these selected options being translated into the actions that shape our world.

5.2.2 Insanity and the Three-Stage Model

The three-stage model is not meant to be a normative standard for legal insanity. It is a way to get a clearer view of how mental disorders impact decision-making. In my view, any standard for legal insanity should be informed by how mental disorders actually influence people's choices. The same is true for psychiatric evaluations of defendants. The three-stage model is a helpful framework for these purposes.

If we accept this model, *M'Naghten* probably strikes us as too narrow a standard for insanity. Knowledge, as we have seen, is clearly relevant in the three-stage model. It determines, at least in part, which options are generated, and it provides the epistemic background against which options are selected in the second stage. But the reflective *self-control* that is so important in the second stage, when the option is selected, is lacking in *M'Naghten*, as is the fact that action initiation may be seriously affected by mental illness. In particular, phenomena such as the "bypassing" or "hijacking" of the decision-making process—profound ways in which mental disorders may interfere with decision-making processes—are not reflected in *M'Naghten*. In fact, contrary to *M'Naghten*, the three-stage model highlights the relevance of *both* epistemic and control elements to decision-making. Therefore, the Model Penal Code standard for insanity better covers what can go wrong in the three stages as a result of psychopathology.

The model shows the variety of ways in which mental disorders may affect decision-making; yet, the mere presence of a disorder does not mean that the decision-making process is actually influenced. For instance, there may still be sufficient room for correction. We should also realize that a mental disorder may affect all three stages, particularly in severe conditions such as dementia and schizophrenia. Suppose that each of the stages is somewhat affected, for instance in a psychotic person whose option generation is partially affected by hallucinations, whose selection stage is partially affected by incoherence, and whose action initiation phase is partially affected by severe anxiety and agitation. Together, in principle, this could amount to a *substantial* lack of capacity on the part of the patient to conform his conduct to the requirements of the law, as it is phrased in the Model Penal Code standard. By distinguishing between the three stages, the model may help to do justice to the serious challenges some patients face in making decisions about their actions.

Kalis and Meynen (2014) suggest that the model may be applied as a heuristic tool in actual forensic evaluations. Psychiatrists and psychologists can, depending on the legal standard, also use the model's stages to clarify the actual impairments regarding decision-making that existed at the time of the crime. In jurisdictions where no formal insanity standard is available, such as the Netherlands, the three-stage model may even play a more prominent role, enabling a psychiatrist to shape his or her argument regarding the defendant's legal insanity.

An important possibility opened up by this framework is that it can be directly linked to a considerable body of neuroscientific research on decision-making in

psychopathological conditions (Meynen 2013a). Therefore, mental health experts using this approach when evaluating defendants may benefit from research findings in this field in the future. Examples are neuropsychological data on impaired decision-making in addiction and psychosis. This possibility will be considered in Chap. 6, which discusses the relevance of neuroscience to legal insanity.

5.3 Conclusion

Aiming to further explore and clarify the conceptual underpinnings of legal insanity, this chapter considers two new approaches to insanity. Decision-making is central to both of them.

We started out by comparing two related concepts: patient incompetency and legal insanity. There proved to be a profound parallel between them. Based on the analogy, we explored the extent to which a standard for insanity could be based on current approaches to patient incompetence. First, because the most influential framework for competency assessments does not refer to mental illness, we examined whether mental disorder is actually a necessary criterion for insanity. There are good reasons for omitting it: in the end, the incapacities—not the presence of a mental disorder—are decisive. Yet, although there is a parallel between competency and insanity evaluations, there are relevant differences as well. The context of criminal law may, more than the health care context, require that a mental disorder be included as a criterion because it adds some objectivity. However, some sobering remarks were made regarding the "objectivity" of psychiatric diagnoses.

The analogy with patient competency also showed the possible relevance of the notion of *appreciation* to legal insanity. In addition, the analysis revealed that *authenticity* may be a necessary insanity criterion. Although, generally, the concept of authenticity may be a bit vague, it can be clear in cases in which profound, short-lived, and reversible changes of one's character occur, e.g., because of a drug ingested against one's will or without one's knowledge, or because of side-effects of DBS. Interestingly, Wolf's account showed that the notion of control is broad enough to encompass authenticity, in the sense of our actions flowing from our deeper selves. This should not come as a complete surprise: the notion of control is closely related to free will, and one of the senses of free will is being the source of the action (see Chap. 4). The fact that the notion of authenticity—sourcehood—resurfaced in this chapter is an important reason to take it into account in the context of insanity. In fact, legal standards that include a control prong can, at least in some sense, already be considered to encompass inauthenticity as a ground for insanity.

In the second part of the chapter, we used a three-stage model of decision-making to examine the possible impact of mental illness on a person's behavioral choices. Our analysis of the three stages of decision-making, emphasizing the *phased structure* of choosing, made one thing very clear: mental disorders

can influence people's choices—and therefore their actions—in many ways. Each of the three stages may be compromised in more than one way by mental illness, and some illnesses affect all three stages. It also became clear that both pathologically distorted beliefs *and* control problems may profoundly compromise decision-making.

Taken together, this chapter's analysis suggests, in line with the preceding chapter, that the basic Aristotelian scheme of responsibility—including both epistemic and control factors—is a fitting theoretical framework for insanity. Not just knowledge, but also control and authenticity (which may be considered part of control), are theoretically relevant to legal insanity. Thus, the picture that emerges is that the most influential insanity standard in the Western world—*M'Naghten*—is too narrow. In addition, the comparison with criteria for competency suggests that the epistemic factor should be understood not just as knowledge of the act (or its wrongfulness), but as appreciation, referring to a deeper form of understanding. Consequently, including appreciation as criterion in a standard sets a higher threshold for sanity than mere knowledge.

Should these considerations convince us that *M'Naghten* is to be abandoned as insanity standard? Not necessarily. The insanity standard serves a practical purpose. It is part of a legal process, to which conceptual issues are definitely relevant, but they need not be decisive. Practical considerations are important as well. These concern, for example, the reliability of the assessment as well as the clarity of the criteria. Considerations about vagueness may make us hesitate to include inauthenticity as a criterion for insanity, even if there are good theoretical grounds for its inclusion. In my view, a legal standard for insanity should reflect what is theoretically relevant to excuse due to mental disorder *unless* there are grave practical qualms. Such qualms should then lead to adaptations. And if the theoretical relevance increases, the practical worries must be weightier to justify such adaptations.

Chapter 6
Neurolaw: Challenges and Opportunities

Neuroscience produces an inconceivable amount of data on brain correlates of mental functioning. Mental functioning is a concern of many different disciplines, including criminal law. Therefore, it is perhaps not surprising that, as Pardo and Patterson put it, "interest in law and neuroscience has exploded and, with it, the attention of scholars from a variety of disciplines."[1] The new research domain studying the possible and actual impact of neuroscience on the law and legal practices is called "neurolaw" (Meynen 2014b). Neurolaw researchers do not necessarily favor the use of neuroscience in the courtroom. In fact, many are critical or skeptical of the value neuroscience currently has for the law.[2] Still, they take the developments and debates regarding law and neuroscience very seriously. Part of the research concerns criminal responsibility and mental disorder.

Presently, there is a lack of empirical data that can support or supplement psychiatric evaluations of a defendant's insanity. As Ira Packer, professor of psychiatry, writes: "The problem is not that research challenges the value of criminal responsibility evaluations, but that too little research has been done.… forensic clinicians do not have the empirical guidance that would be most desirable for conducting criminal responsibility evaluations."[3] It is often expected and hoped that, in the near future, neuroscience will provide more empirical support and guidance for these evaluations. In addition, neuroscience could help answer questions regarding the criteria for an insanity standard, as discussed in previous chapters, especially those pertaining to the control prong. This chapter considers the possible contribution of neuroscience to defining and evaluating insanity.

[1]Pardo and Patterson (2013, p. ix).

[2]See, e.g., Pardo and Patterson (2013), Vincent (2013c).

[3]Packer (2009, pp. 76–77, Packer abbreviates criminal responsibility as CR). The situation is, in fact, a bit more problematic than Packer suggests, because some believe that neuroscience has shown the futility of responsibility evaluations, since no one is, allegedly, responsible; see the earlier chapter on free will.

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6.1 Neurolaw: Three Domains of Research

Neurolaw covers a diversity of topics and approaches, some mainly philosophical, some largely legal, and others predominantly neurobiological in nature.[4] The field of research can be divided into three general domains: revision, assessment, and intervention (see Table 6.1).[5] I discuss these domains below. As will become clear, the first and second domains are directly relevant to insanity.[6]

6.1.1 Revision

The *revision* domain concerns research on the need to revise the law or legal practice because of neuroscientific findings. Such a revision may be subtle, moderate, or drastic.

The legal view of human functioning is often considered to be folk psychological in nature. As Morse (2008, pp. 2–3) puts it, "Roughly speaking, the law implicitly adopts the folk psychological model of the person, which explains behavior in terms of desires, beliefs and intentions." Some believe that brain research results erode the folk psychological basis of criminal law, or at least some of its central elements, in particular those related to free will and free choice—and thus that criminal law should be revised.

Perhaps, *the* neuroscience experiment giving rise to such ideas is Libet's famous electrophysiological study on the so-called readiness potential (RP) (Libet 1999), as discussed in Chap. 4. Interestingly, Libet's basic research paradigm has been applied using other neuroscientific techniques, such as fMRI (Soon et al. 2008a) and single-neuron measurements (Fried et al. 2011). The findings were in line with Libet's observations, at least according to these researchers. Many other neuroscientific findings allegedly also indicate that free will is an illusion. For example, Michael Gazzaniga's famous findings in "split brain" patients. Because of severe epilepsy that could not be otherwise controlled, the *corpus callosum* in each of these patient's brains had been severed. Because the *corpus callosum* is the structure that connects the two hemispheres of the brain, the brains of these patients were "split." In Gazzaniga's ingenious study design, these patients, at least during the experiment, appeared to confabulate the reasons for their actions—which the patients themselves believed to be true. The fact that these patients made up the reasons for their behavior was considered evidence that, as humans, we continuously invent the reasons for our actions, and that it is the brain,

[4]This section is in part based on Meynen (2014b), see also Meynen (2016) and Meynen (in press).

[5]See Meynen (2014b, 2016). For various ways in which neuroscience may support the law, see Jones (2013).

[6]Since insanity concerns an *assessment* of the defendant, intervention is not immediately relevant. However, it is possible that, in the future, a neuroscientific intervention will be performed to *enable* a better assessment to be made.

Table 6.1 The three domains of neurolaw research[a]

Neurolaw domain	Examples of topics and publications in these domains
Revision	
• Free will	• Neuroscience allegedly shows that free will is an illusion, therefore nobody is truly responsible for his actions; consequently criminal law must be revised (Greene and Cohen 2004)
• Development	• Neuroscience allegedly shows that adolescents' brains are not fully mature, which should be taken into account regarding culpability and sentencing (Feld et al. 2013)
Assessment	
• Risk	• Risk assessment for future violence (Nadelhoffer et al. 2012)
• Insanity	• Assessment of criminal responsibility or legal insanity (Aharoni et al. 2008)
• Lying	• Regulation of brain-based lie detection (Greely and Illes 2007)
• Bias	• Evaluating biases in prospective jurors (Greely 2013)
Intervention	
• Treatment	• Legally coerced addiction treatment (Hall and Carter 2013)
• Enhancement	• Enhancement of moral responsibility (Vincent 2013)
• Manipulation	• Manipulating people to commit crimes (Bublitz and Merkel 2013)

In the three domains, subtopics are highlighted
[a]Table taken from (Meynen 2014b) with some adaptations

rather than our conscious reasoning, that determines our behavior.[7] According to this theory, therefore, the reasons we provide for our actions are merely post hoc rationalizations or, indeed, confabulations; they do not guide our actions. Gazzaniga hypothesized that a part in the left brain—the "interpreter"—interpreted our actions, continuously making up reasons.[8]

Some argue that although experiments like those performed by Libet and Gazzaniga clearly have limitations, there is *converging* evidence from neuroscience and psychology that conscious reasoning does not guide action (Davies 2013, Chap. 4). Therefore, it has been argued that holding defendants to be basically responsible for their actions is no longer justified, and the law should be revised accordingly (Greene and Cohen 2004). This would imply a drastic revision: a fundamental component—a person's responsibility—would have to be eliminated from all areas of the law in which it plays a role. More precisely, retributivist elements would have to be deleted from criminal law. Perhaps surprisingly, it may well be that much of criminal law could remain in place because of utilitarian or consequentialist arguments (Greene and Cohen 2004). One need not be too surprised, though, considering the fact that utilitarian elements are already incorporated into current criminal law. For instance, as Dubber and Hörnle (2014, p. 441)

[7]If the two can be separated.

[8]Gazzaniga (1998, 2005). Note that this would undermine "acting for reasons," which is one of the senses of free will discussed in Chap. 4. We would then no longer act *for* reasons, but would instead confabulate reasons afterwards.

write, "The Model Penal Code is resolutely utilitarian, and more specifically treatmentist, in outlook." In fact, as Greene and Cohen write, "as consequentialists, we can hold people responsible for crimes simply because doing so has, on balance, beneficial effects through deterrence, containment, etc."[9] Note that deterrence and containment are already elements of our criminal justice systems.

In the same vein as Greene and Cohen, the philosopher Derk Pereboom has argued in *Living without free will* that even without free will, far-reaching legal measures can be justified. In analogy with quarantine, detaining dangerous criminals in order to reduce the risk of future harm may be justified (Pereboom 2001). Pereboom (2001, p. 177) adds that

> if we have the right to "quarantine" criminals, we have the right to tell people in advance that they will be isolated from society if they commit crimes. Publicizing the detention policy is justified and in fact required by the standards of an open society. This publicity itself has a powerful general deterrent effect.

Although far-reaching measures such as detention may still be possible, it is clear that revisions such as those proposed by Greene and Cohen as well as Pereboom are drastic.

According to many other scholars, there is no reason for such a substantial revision (Mackor 2013; Morse 2011a; Pardo and Patterson 2013). Their arguments often rely on a different view of (1) the requirements for responsibility, (2) the relationship between neuroscience and the realm of law, and/or (3) the clarity and validity of neuroscientific results.

More subtle legal revisions based on neuroscientific developments are also possible. For example, changing specific legal regulations in order to make the use of certain neuroscientific techniques possible for a particular purpose or to answer a particular legal question.

6.1.2 Assessment

The second neurolaw domain concerns *assessment*. This includes all types of legally relevant evaluations of the state of mind/brain of individuals. Most likely, such individuals will be defendants and prisoners, but they may also be, e.g., prospective jurors or witnesses.[10] The evaluations may take place, for instance, because we want to know whether a person is *lying*, whether he is *insane*, whether he might *reoffend*, or perhaps even whether he is *biased* (if he is a prospective juror). Like others, I use the term "mind reading" for such techniques, even though not all may rely on reading the *mind* in a strict sense: for instance, the risk of recidivism may be assessed based on neuroparameters of which the subject himself is unaware. Neuroscience-based assessments may regard past, present, and

[9]Greene and Cohen (2004, p. 1783).

[10]See on such applications, e.g., Buckholtz and Faigman (2014), Greely (2013).

future mental states. Assessments about the past and the future will be the most challenging. In this section, we look at "mind reading" and lie detection in general; in Sect. 6.6, we focus on insanity evaluations. There are two major types of issues with respect to mind reading; the first type concerns technical or methodological aspects, while the second regards normative issues.

Technical issues are the reliability and validity of neuroscientific mind-reading methods. A distinction must be made between reliability/validity in *research settings* and reliability/validity in the *courtroom*. Note that even if a technique is reliable in research settings, it may still be unreliable in a court of law. Concerning the research setting, Pardo and Patterson have formulated thoughtful qualms about lie detection research. They doubt, to say the least, that the participants in fMRI experiments are actually lying. In their view, whether or not a statement is a lie is context-dependent (2013, p. 109): "As Don Fallis notes in an insightful article, the difference that makes 'I am the Prince of Denmark' a lie when told at a dinner party but not a lie when told on stage at a play are the norms of conversation in effect." Building on Fallis' viewpoint, Pardo and Patterson make clear that lies are made "in a context where the following norm of conversation is in effect: *Do not make statements that you believe to be false*." This simple observation constitutes a serious problem for fMRI lie detection research, because participants in such studies are *instructed to make false statements*. Subjects in lie detection experiments *have to* make statements they believe to be false. Therefore, the norm is *not* "Do not make statements that you believe to be false." Given this, it is practically impossible to lie genuinely in such a research setting. This elegant analysis by Pardo and Patterson shows a serious methodological difficulty faced by research on fMRI lie detection in the research setting. Clearly, this also raises doubts about the applicability of lie detection research findings and techniques in Court, where the *Do not make statements that you believe to be false* conversational norm is in effect, especially when oaths are taken.

Such a courtroom situation may generate additional complications. Unlike helpful participants in a psychological experiment, in the courtroom, defendants may be tempted to cheat or to disturb and manipulate the assessment. For instance, defendants may take "countermeasures" that distort or manipulate the fMRI lie detection measurements. Traditional polygraph lie detection is definitely prone to such countermeasures. According to Leo Kittay, "It is common lore that polygraphs can be beat. Subjects have used counter-measures, such as sedatives, to dampen their autonomic responses and stressors, such as flexing muscles or placing tacks in a shoe, to artificially inflate or create stress reactions."[11] It is assumed that there is less risk of such distortive countermeasures in fMRI measurements. However, as Kittay (2006, p. 1365) notes, in a study "healthy subjects could be taught relatively quickly to self-regulate their responsive brain oxygen level changes in certain areas of the brain." In the future, such counter measures may

[11] Kittay (2006, p. 1364).

also distort or manipulate fMRI-based lie detection in defendants. Therefore, in principle, a certain fMRI lie detection technique may be helpful in research settings, where participants are willing to collaborate, but may still be unhelpful in actual criminal cases, because defendants cannot be expected to be willing to collaborate. This illustrates that two separate questions must indeed be answered: does a technique work in the research setting, and does it work reliably in the courtroom? Both questions are generally relevant to all neuroscientific techniques whose use in a court of law is being considered.

The second major issue is a normative one. To what extent can mind reading techniques (broadly conceived) be used against an individual's will? (See e.g., Pardo and Patterson 2013). It is clear that this second question is much more legal—and moral—in nature than the first, because it requires considering the relevant elements of the law in a specific jurisdiction. For example, in the U.S. context, the Fifth Amendment, including the right against self-incrimination, is clearly relevant. Meanwhile, the significance of an analysis of the Fifth Amendment for other legal systems, e.g., those of Germany or France, is limited. Yet, it may still be valuable for other jurisdictions, because other legal systems are likely to have similar provisions and may therefore benefit from the type of analysis, lines of argument, etcetera, that have been used in the U.S. context.

It is worth noting that the technical and normative issues are not completely separate. For instance, there will always be technical shortcomings in neuroimaging techniques, and the question of how many shortcomings the justice system is willing to accept is a normative one. In contrast, the use of neurotechniques against a defendant's will is a normative issue, but technical issues may still be relevant: to what extent does a certain technique rely on the cooperation of the person being assessed? In other words, technical and normative issues are interrelated.

6.1.3 Intervention

The third domain covers brain- and law-related *interventions*. Three basic types of intervention can be distinguished: treatment, enhancement, and manipulation.[12] Treatment may primarily concern those defendants who are considered insane and admitted to mental hospitals, but other types of intervention may become available in the future. Interventions could be considered treatment only as long as they aim to end a pathological condition by restoring a normal situation. As soon as they aim higher and try to establish a better-than-normal situation, we may consider them to be enhancement. Of course, the boundaries between treatment and enhancement are vague (see, e.g., Schermer 2013).

[12]See also Vincent (2013a, p. 326). She distinguishes between denying, assessing, restoring, and enhancing responsibility.

When it comes to enhancement, a variety of interesting questions may be posed. For example, would it be reasonable to require surgeons or pilots to enhance themselves to be more focused and alert (Santoni de Sio et al. 2014)? Or, we may ask ourselves: should a mentally enhanced person perhaps be held to a higher standard of responsibility for his actions (Vincent 2013a)? In addition, we may wonder whether it would be wise to enhance the memory of eyewitnesses, as discussed by Vedder and Klaming (2011). Clearly, enhancing the memory of eyewitnesses could have a major impact on the outcome of criminal cases. In the future, it may even be possible to enhance a defendant's memory, which could be valuable in insanity evaluations, especially in combination with mind-reading techniques. More generally, in the future, some types of insanity assessments may be facilitated by a neuroscientific intervention. This means that the intervention domain may also be relevant to legal insanity, albeit that the intervention will be done to support assessment.

The third type of intervention, manipulation, is the most morally problematic. There may be beneficial ways to manipulate people, but this type of intervention generally has negative connotations. Criminals who want to keep their own hands clean might find hacking a patient's DBS device—if that were possible—and making the patient commit the crime to be a very appealing prospect.[13] One of the questions that comes up when considering such a scenario is whether such a manipulated patient could be held criminally responsible for his actions (Bublitz and Merkel 2013). Or should we instead prosecute the doctor who implanted the DBS device? Or the company that made a device that could be hacked?

Although the division into three domains—revision, assessment, and intervention—may be helpful in discussions on the rapidly expanding field of neurolaw, the three domains cannot be completely separated. For instance, as mentioned previously, the availability of fMRI mind reading (an *assessment* technique) may result in *revisions* to the law.

Many people probably accept the possibility that the law may need to be revised in the future, and that legally relevant assessment and intervention techniques will become available. But the crucial question is: What has neuroscience to offer at present? There is a widely shared feeling that neuroscience currently has very little to offer to the assessment and intervention domains (see, e.g., Morse and Roskies 2013; Pardo and Patterson 2013; Vincent 2013c). Views on neuroscientific contributions to the revision field strongly diverge. As discussed, some authors conclude that rigorous revisions are already called for based on what we know now. In particular, these authors argue that, based on neuroscientific findings, retribution should no longer have a place in our legal system. Other authors emphatically disagree.

In the next sections, we consider the possible impact of neuroscience on psychiatric assessments of defendants.

[13]See Bublitz and Merkel (2013), Gasson and Koops (2013).

6.2 Neuroscience and Psychiatry

When exploring the possible impact of neuroscience on insanity evaluations, it is good to know where we stand as far as the contribution of neuroscience to psychiatry is concerned.[14]

For more than three decades, psychiatric journals have been publishing an enormous number of neuroscientific studies on mental disorders. Neuropsychiatry has been defined as conceiving of and studying mental disorders, primarily as *brain* disorders.[15] Still, the contribution of neuroscience to psychiatric clinical practice has been very modest. This state of affairs stands in contrast to the considerable optimism that prevailed in the past. I will illustrate that optimism and the contrasting current reality by briefly looking at the DSM-5 project.

The DSM-IV was published in 1994. By no later than 1999, an initiative had been formed to start working on a new edition, which would eventually become the DSM-5, which was published in 2013.[16] One of the priorities for the DSM-5 task force was "to evaluate the readiness of neuroscientific advances in pathophysiology, genetics, pharmacogenomics, structural and functional imaging, and neuropsychology" (Regier et al. 2009). The DSM-5, however, does not include any neurobiological criteria for mental disorders such as psychosis, bipolar disorder, ADHD, schizophrenia, antisocial personality disorder, autism, anxiety disorders, and obsessive-compulsive disorder (neurocognitive disorders are an exception). As Urbaniok et al. put it: "Although with the help of functional imaging techniques much progress has been made over the past 10 years in uncovering the causes of psychiatric diseases, conclusive explanatory models, even for disorders like schizophrenia, are still far off."[17]

Still, in the nineties, expectations were high. In his paper entitled "The third wave of biological psychiatry," Henrik Walter (2013) points to the neuro-overoptimism in the past: "researchers as well as media have been overenthusiastic with regard to the power of the new methods. In particular neuroimaging results, probably due to their seemingly simple and straightforward presentation, have ignited the imagination of researchers, lay people and the media."[18]

People now realize that neuroscience has not delivered what many claimed it would, and this has evoked a critical, if not skeptical, response. As Walter (2013) writes, "the field of 'critical neuroscience' has flourished in the last 5 years immensely with an increasing number of books, papers and blogs…." This critical

[14]This section is based on Meynen (2014a, 2015a).

[15]See Berrios and Marková (2002) on the definition(s) of the term neuropsychiatry.

[16]Originally, five was written in Latin, later in Arabic.

[17]Urbaniok et al. (2012, p. 179, reference omitted). Kupfer and Regier (2011, p. 672) state: "… we anticipated that these emerging diagnostic and treatment advances would impact the diagnosis and classification of mental disorders faster than what has actually occurred."

[18]References omitted.

attitude is reflected in neurolaw research as well: many caveats can be found in neurolaw publications against overrating neuroscience's value to the law.

But even if we are aware of the limited neuroscientific contributions to psychiatry, and the challenges that lie ahead, we would not be getting ahead of ourselves to think about the possible implications of neuroscience for criminal law, in particular for legal insanity. Pardo and Patterson (2013, p. 140), who are often critical towards neuroscientific contributions to the law, even consider legal insanity as "one of the more plausible avenues by which neuroscience may contribute to the law." And, of course, we are not just obliged to expose the unhelpfulness of neuroscience, but also to recognize the helpfulness of particular neuroscientific data and tools. In other words, we should refrain from being overly critical or overly skeptical.

6.3 Insanity and the Neuroscience of a Person's Decision-Making

Why does the discipline of forensic psychiatry exist when there is no such thing as forensic cardiology, pulmonology, or dermatology? The extraordinary thing about *mental* illnesses is their impact on behavior via their impact on decision-making (see previous chapter). Elucidating the impact of mental disorders on decision-making, therefore, means elucidating part of why these disorders may have such a profound impact on people's choices and, therefore, on their lives.

In Chap. 5 we discussed a three-stage model of decision-making as a way to look at the influence of mental disorders on a person's criminal actions.[19] Interestingly, for more than a decade, research in cognitive neuroscience has been targeting the impact of mental disorders on patients' decision-making. In fact, a wealth of neuroscientific data on impaired decision-making in various types of mental disorders has been produced (Howlett and Paulus 2013; Lee 2013). Let us briefly consider two examples of neuroscientific findings in different mental disorders.

In patients with intermittent explosive disorder (IE disorder), which implies impulsive aggression, Best et al. (2002) observed that, on a gambling task, the patients "continued to make disadvantageous decisions throughout the 100 trials, whereas controls learned to avoid disadvantageous decisions."[20] What makes these findings interesting from a neuroscientific point of view is that, among others, IE disorder patients "performed similarly to patients with orbital frontal and amygdala lesions in previous studies" (Best et al. 2002). These data are thus suggestive of neurobiological impairments occurring in IE disorder patients that are similar to those in patients with such brain lesions, although "the extent and nature of the

[19]This section is partially based on Meynen (2013a).

[20]Best et al. (2002, p. 8448; quote from abstract of the article).

pathology is probably quite different." The decisional impairments that were found may play a role in how aggressive outbursts—which may be highly relevant from a criminal law perspective—arise. Best et al. (2002, p. 8448) are aware of the potential societal relevance of their study, as they start their paper as follows: "A major concern in our society is the prevalence of violence, which stems from various forms of human aggression." In other words, if there is one type of impulse that must be controlled, it is the aggressive one. Note that research on impulse-control in mental disorders may also prove helpful in clarifying the control prong in the insanity defense.

In their paper "Decision making deficits in patients with first-episode and chronic schizophrenia" Hutton et al. (2002) report the results of a study on orbitofrontal cortex dysfunction. They observed significant impairments in decision-making performance in schizophrenia. Patients "were slower to make decisions and made suboptimal choices when provided with information to guide their decisions. Chronic patients were more impaired than first episode patients on these measures and additionally demonstrated impulsive responding" (2002, p. 255). The decisional problems observed in studies like these may be more "subtle" than the presence of a paranoid delusion in schizophrenia. Still, it is essential to know that schizophrenia patients may have such decisional impairments as well. They may also be *part* of the explanation why a schizophrenia patient who suffers from a delusion commits a crime.[21]

Other mental disorders in which decision-making has been studied include ADHD, depression, autism (Lee 2013), and OCD (Dittrich and Johansen 2013). Eventually, results from neurobiological research on decision-making in mental disorder are bound to be valuable to patients, their relatives, and society.

The neuroscience of decision-making may also be able to predict future violence as a result of mental illness. This is especially relevant given the fact that, in general, the presence of mental disorder *as such* does not lead to crimes. For instance, as Elbogen and Johnson (2009) write, "severe mental illness alone is not an independent contributor to explaining variance in multivariate analyses of different types of violence." They conclude, "it is simplistic as well as inaccurate to say the cause of violence among mentally ill individuals is the mental illness itself."[22] The neuroscience of decision-making in mental disorder may help to

[21]See also Lee (2013, references omitted) who writes that studies "…consistently showed that patients with schizophrenia might be impaired in flexibly switching their choices based on negative feedback and incrementally adjusting their choices according to positive feedback across multiple trials. Consistent with these behavioral results, activity related to reward prediction error in the frontal cortex and striatum is attenuated."

[22]See Szmukler and Rose (2013, p. 135), "people with a psychosis, in the absence of substance abuse or antisocial personality, are not much more likely to be violent than the general population." On risk factors for violence in psychosis, see also (Witt et al. 2013). Increased risk of violence has been reported in cases of severe mental illness by, e.g., Van Dorn et al. (2012).

clarify why mental disorder in a particular case led to a crime. Such a clarification is likely to include characteristics of the disorder, the environment, and their interaction. At present, however, neuroscientific data on decision-making that could be useful for evaluating insanity are scarce.

Because psychiatric illnesses may impact on decision-making in many ways, an enormous variety of disorders and psychopathological phenomena will have to be studied. To be applicable to evaluations of insanity, ideally, research designs will have to specifically target those aspects of decision-making that are directly relevant to criminal behavior. Up to now, this has hardly been the case, Yaffe (2013, p. 350): "Studies aimed at mapping neurologic and psychologic differences between sufferers from various disorders and controls, have not been designed to study precisely the psychologic states that matter for criminal responsibility, but adjacent and related psychologic states instead." So, the challenge is to design studies that are specifically tailored to answering forensic psychiatric and psychological questions. This is likely to be a demanding task for at least three reasons. First, committing crimes is prohibited in experimental situations, just as anywhere else. Second, crimes tend to cause harm, which should be avoided in research. Third, crimes are likely to occur in situations of increased arousal, stress, danger, threat, etcetera, which may be hard to simulate in laboratory conditions.

Still, the neuroscience of decision-making in mental illness is a promising area of investigation that may shed light on the impact of mental disorder on criminal behavior. Basically, the benefits of this type of research for forensic psychiatric evaluations may be twofold.[23] First, neuroscience may generate *knowledge* about the relationship between specific mental disorders or psychopathological phenomena and decision-making that can be used in assessing defendants. Second, neuroscience may generate *tools, methods, and techniques* that can be used in psychiatric assessments of defendants.[24] These two aspects of scientific contribution—knowledge and techniques—are relevant not only to the neuroscience of decision-making, but to all areas of neuroscience that may be applied in psychiatric evaluations of defendants.

For example, in the future, we may know that 40 % of the patients suffering from a certain type of substance dependence have a specific decisional impairment. Although such knowledge may be helpful when evaluating a defendant with alcohol dependence, the knowledge as such will not enable us to determine whether *a particular* defendant has the decision-making deficit. A neuroscience-based assessment technique may be used to determine whether this is so. With the help of such a technique, it may be possible to say with 80 % accuracy that *this particular* defendant has the relevant decision-making impairment. Additional neuroscientific techniques may further increase this likelihood to 95 %. In this way, neuroscientific knowledge and techniques may be combined in future insanity evaluations.

[23]This section is partially based on Meynen (2013a).

[24]Clearly, these techniques may also lead to new, general knowledge about the relationship between psychopathology and decision-making, which can be used in the assessments.

Another example concerns command hallucinations that cannot be disobeyed (see also earlier on this phenomenon). What is so significant about this type of hallucination from a decision-making perspective is its immediate impact on behaviour, actually "hijacking" the decisional process (Meynen 2015b). Such hijacking is highly relevant when it comes to insanity, at least if a control prong is included in the legal standard. In the literature, several factors have been associated with obeying commanding voices, such as "severity of command, malevolence/benevolence," "power of voice," or "voice familiarity and supportive delusion" (Braham et al. 2004). Yet, Braham et al. (2004, p. 517) emphasize how little is known about these voices, and that "the relationship between voice hearer and voice is likely to be more complex than first assumed." In a more recent study, Bucci et al. (2013) found overall levels of anger, anger regulation, impulsiveness, and voice power to be "significantly associated with compliance with harmful command hallucinations." Still, the literature does not clarify why a voice must be obeyed in a particular case. Therefore, the pressing question is: how does the forensic psychiatrist *know* that the defendant heard such a commanding voice ordering him to commit the crime? In the future, neuroscientific findings may increase our understanding of the nature of this intriguing phenomenon and assessment techniques could become available to detect the presence of command hallucinations in a particular patient. Both may well improve the quality of psychiatric evaluations.

Yet, even if neuroimaging were to enable us to determine decisional deficits in an individual defendant, it might still be hard to tell whether the deficits were present at the time of the crime based on an assessment being conducted *now*. In other words, showing that a defendant currently suffers from a decisional impairment is not the same as showing that this impairment was decisive in the commission of the crime. As Morse (2011c, p. 611) writes, "No criminal wears a portable scanner or other neurodetection device that provides a measurement at the time of the crime, at least not yet." Still, brain assessment may well enable us to make more reliable assessments about past mental states as well. For instance, we cannot exclude the possibility that traces of earlier brain states will still be detectable.[25]

Conceiving of insanity in terms of the impact of a mental disorder on decision-making, as we did in Chap. 5, provides the opportunity to benefit from a promising field in neurobiological research. The findings may eventually lead to revisions of insanity standards as well, as we discuss in the next section.

[25]The outcome of neuro-assessments could also support making *predictions* about decisional deficits influencing future behavior, which may be valuable for risk assessment. There are qualms regarding neuroscience-based risk prediction, particularly with respect to reliability, defendants' privacy, and the possibility of forcing a defendant "to be a witness against himself" (Nadelhoffer et al. 2012). However, Nadelhoffer et al. (2012, p. 95) "found no novel legal or moral issues that were raised by neuroprediction that were either not already raised by other forms of violence prediction or that would not be easily remedied."

6.4 Neuroscience and the Legal Norm

Legal insanity concerns a normative judgment. It is not like a judgment about a person's weight or height. These phenomena can just be measured using the appropriate technical instruments. Legal insanity is more analogous to determining whether someone's body mass is too high or too low, which is a *normative* judgment. In fact, regarding insanity, the norm is legal in nature—not neuroscientific. As Redding (2006, p. 110) writes: "To be sure, neuropsychological or neuroimaging evidence cannot establish a defendant's lack of criminal responsibility, which is a legal determination, not a medical one." In this section, we explore the relationship between neuroscience and the legal norm regarding insanity.

Pardo and Patterson (2013, pp. 45–46) emphasize that we should recognize "important limitations on how neuroscience can contribute to law.… For example, neuroscience cannot tell us where the brain thinks, believes, knows, intends, or makes decisions." Central to these restrictions is that "People (not brains) think, believe, know, intend, and make decisions." Conceptually, these points are valuable, and in line with Bennett and Hacker's *Philosophical Foundations of Neuroscience* (2003). In this book, Bennett and Hacker identify numerous instances of the, as they call it, mereological fallacy, entailing that properties of humans as such are attributed to the brain (Meynen 2014b). Pardo and Patterson are perfectly right that any use of neuroscientific data for purposes that ultimately have to do with human mental capacities/activities must be based on the basic distinction between people and brains. In contrast, I would like to add that while the distinction is important conceptually, it may be less important in legal practice. Criminal law is used to dealing with phenomena that are themselves not identical to the concepts of legal interest. A person's fingerprints at a crime scene are not considered as identical to a person having been there at the time of the crime, let alone to his having committed crime. Lawyers tend to consider certain findings as possible *evidence* for a particular element of a crime. I expect lawyers to treat neuroscientific findings, e.g., MRI images or EEG recordings, in a similar way: not as identical to mental states, but as evidence for the presence or absence of certain mental states. For example, suppose a 35-year-old civil-law notary suddenly attacks his friend who pays him a visit, apparently without any reason at all. An MRI shows a brain tumor, and an EEG shows epileptic activity. Now, it may be inferred that the defendant actually suffered from an epileptic seizure at the time of the crime due to a brain tumor. The defense argues that it is very likely that the defendant did not form the intention to attack or harm the victim. Note that the neurological findings are not considered to be identical to "the absence of intent to kill," but they do provide evidence for the absence of intent. Together with other evidence, they may lead to the conclusion that there was no such intent.

From a slightly different angle than Pardo and Patterson, but generally in line with their argument, Morse (2006, p. 405) emphasizes that the legal "criteria for responsibility are behavioral," not neuroscientific. This is true: current legal approaches to responsibility are behavioral, which means that if neuroscientific

data are used, they will first have to be interpreted in order to be helpful regarding questions of legal responsibility. The neuroscientific findings themselves will not immediately answer the normative legal question at hand.[26] But does it always have to be this way? Perhaps behavioral criteria are used because, at present, nothing better is available—not because they are ideal criteria. According Craigie and Coram (2013, p. 99), "a dependence on behavioral level explanations is often considered a weakness in assessments of culpability, and neuroscience has been proposed as a means to address such concerns."[27]

There is no rule prescribing that criteria for responsibility must be behavioral for all eternity. This means that the law could, in principle, be revised in this respect, perhaps because people have become dissatisfied with behavioral criteria in view of neuroscientific findings. At some point in time, people may feel that the reliability of neuroscientific assessments is superior compared to behavioral ones, which may be a reason for revision. In fact, neuroscientific findings may be considered as more objective, less dependent on what a defendant says or does, easier to replicate, easier to standardize, etcetera. This means that the neuroscience of decision-making may have potential not just for psychiatric assessment, but also for *revision* of the legal insanity standard, i.e., a revision of the legal norm. In the future, the insanity standard may refer to neural pathways, or brain activation patterns, etcetera, *instead of* to mental illness. The element of mental disorder may thus be replaced by another "objective marker," that is considered to add more objectivity to the evaluation.[28]

Clearly, if brain abnormalities were included in the insanity standard, more direct inferences from neuroscientific findings to insanity would be possible. The reason is that the brain abnormalities are relevant not because they are, e.g., elements of a mental disorder required for insanity, but because the neuroscientific abnormalities are themselves required. Earlier, we discussed many similarities between insanity and incompetence. Interestingly, the Mental Capacity Act (England and Wales) states with respect to patient competency: "For a person to lack capacity, he or she must have an impairment of or disturbance in the functioning of the *brain* or mind, and this defect must result in the inability to understand, retain, use, or weigh information relevant to a decision or to communicate a choice."[29]

So, in the context of the Mental Capacity Act, disturbances in the functioning of the brain are directly relevant to incompetence. Analogously, *M'Naghten* could, in principle, be rephrased as: "at the time of the committing of the act, the party accused was labouring under such a defect of reason, from dysfunctioning of the mind *or brain*, as not to know the nature and quality of the act he was doing;

[26]See also Silva (2007) on this matter.

[27]In part in response to Morse. See also Meynen (2014b).

[28]See Sect. 5.1 on this term "objective marker," cited by Morse as a reason to include mental defect/disorder as a criterion in an insanity standard.

[29]Nicholson et al. (2008). See also Sect. 5.1, emphasis added.

or, if he did know it, that he did not know he was doing what was wrong." Were this to become the standard for insanity, findings of neurological abnormalities—together with lack of knowledge about the nature, quality, or wrongfulness of the act—could be sufficient to constitute insanity. Then, it might be appropriate for defendants to be evaluated not just by psychiatrists and psychologists, but also by neurologists and neuroscientists. This is not yet reality, however, and we do not know whether it ever will be.

Let us now look more closely at the issue of control as an element of the insanity standard. If, based on neuroscience, more can be said about the impact of mental disorders on control, then some of the reservations expressed about the control prong in insanity standards may be overcome.[30] In particular, neuroscience may help to make a clearer distinction between an irresistible impulse and an impulse that was simply not resisted. If neuroscience succeeds in doing that, some people who now oppose the control prong may change their minds and support this element in an insanity defense. The eventual result could be that the insanity standard, the legal norm therefore, will be revised, at least in some jurisdictions.

According to Penney, neuroscience already provides evidence that supports including a control prong in the standard for insanity:

> Contemporary neuroscience has shown that volitional control can be impaired "just as unambiguously as any other aspect of brain function" (Sapolsky 2004, p. 1794). It is true that no single diagnostic or evaluative tool (including brain imaging and neuropsychological testing) can establish whether a defendant was incapable of control at the relevant moment. But used in combination, these techniques (along with all of the other evidence in the case) can provide an adequate basis for the court's decision.[31]

In other words, there are good neuroscientific reasons for revising the legal norm for insanity in those jurisdictions without a control prong.

Yet, clearly, neuroscience may also influence legal insanity decisions without any legal revision. Suppose that neuroscience were used to diagnose a mental disorder, not its impact. Whether or not a mental disorder can be diagnosed or examined using neuroimaging or other neurobiological techniques is basically a medical issue rather than a legal one. Consequently, if neuroscientific techniques are considered helpful by psychiatrists in diagnostic procedures and become part of standard procedures, their use in assessing defendants may not be problematic from a legal point of view. The court cannot reasonably expect mental health experts to do otherwise than make use of state-of-the-art diagnostic methods. Neuroimaging is currently used to diagnose brain trauma and tumors in neurology,

[30] See Sect. 2.3 for concerns about the control prong.

[31] Penney (2012, p. 101), all references but one omitted. Regarding the reference to Sapolsky, it is of interest that Wallace (1994, p. 170) notes: "Much of the controversy about this question turns on the issue of whether irresistible impulses really are among the symptoms of mental illness; whether, that is, people in the grip of insanity or mental illness are plausibly regarded as acting from irresistible impulses." He adds: "Even if we are skeptical about the claim that irresistible impulses are genuine symptoms of insanity or mental illness, however, I think we can agree that susceptibility to such impulses would often be an exempting condition."

and thus it may already be playing a role in criminal cases. There would not seem to be any profound legal problem if the scope of applicability of neuroimaging techniques were extended to other illnesses. Perhaps this is one of the reasons why Pardo and Patterson (Sect. 6.2) consider legal insanity "one of the more plausible avenues by which neuroscience may contribute to the law."

It is worth noting that, although in practice "mental disorders" are assessed by psychiatrists and psychologists (and sometimes a neurologist or other behavioral expert), some emphasize that ultimately the term "disorder" or "defect" in the insanity defense is a *legal* notion. Morse (2011b, p. 894, references omitted) writes the following regarding the United States:

> The criminal law can, but need not, turn to scientific or clinical definitions of mental abnormality as legal criteria when promulgating mental health laws. The Supreme Court has reiterated on numerous occasions that there is substantial dispute within the mental health professions about diagnoses, that psychiatry is not an exact science, and that the law is not bound by extra-legal professional criteria. The law often uses technical terms, such as "mental disorder," or semi-technical qualifiers, such as "severe," but non-technical terms, such as "mental abnormality," have also been approved. Legal criteria are adopted to answer legal questions. As long as they plausibly do so, they will be approved even if they are not psychiatric or psychological criteria.

While it is true, that, ultimately, the judge or jury decides whether a defendant is insane, which includes the presence of a mental defect/disorder, I doubt that it is wise to conceive of "disease of the mind" as referring to a legal instead of a medical phenomenon. In principle, notions like disease and illness refer to entities that fall within the medical realm, even if judges or juries eventually decide about their presence. If the notion of disease in *M'Naghten* was a purely legal notion that did not refer to the medical realm, why would psychiatrists have to give expert testimony on the presence of a disease or disorder? (See also Chap. 7 on this issue.) Still, as stated, it is true that, in a criminal case, it is ultimately up to the judge or jury to determine whether there is sufficient evidence of the presence of a disease. This is especially relevant where experts provide contradicting testimonies. Finally, we should realize that the exact nature of the terms used may differ between jurisdictions.[32]

In sum, it is crucial, first, to recognize that legal insanity is a normative legal concept. Second, neuroscientific data may, nevertheless, be used as a basis for judgments about insanity simply by playing a role in diagnosis, e.g., in dementia. Third, although current standards for insanity are behavioral and refer to illness rather than to brain abnormalities, they might become neuroscientific in the future—at which point neuroscience will become a component of the legal norm. Meanwhile, even if neuroscience is in some way included in the standard for insanity in the future, the notion of insanity will remain a legal concept. Ultimately, whether or not a defendant is insane will still be up to the judge or jury—not to the expert neurologist or neuroscientist.

[32]See, e.g., Norway, where psychosis is used in Section 44 of the General Civil Penal Code, apparently referring to the *psychiatric* notion (Melle 2013).

6.5 Brain-Based Mind Reading and Insanity Evaluations

Lie detection is a central topic in neurolaw, as we discussed earlier in this chapter.[33] It is clear why mind reading may be of importance in criminal cases: given what is at stake, people may lie. And given what is at stake, such lies may have dramatic consequences.[34] The risk of defendants lying is, clearly, also relevant information for the psychiatrists and psychologists evaluating the defendant's sanity (Rogers 2012). Probably more than in any other area of medicine, assessors in psychiatry are dependent on what a patient—or defendant—*says*. The reason is that subjective experiences are central to psychiatric diagnosis.[35] In general, we know about a person's subjective experiences via his or her own verbal expressions. This means that a psychiatrist must, to a considerable extent, rely on the verbal information provided by the patient or defendant, even if other sources of information, such as the police file, are also available.

Suppose that a defendant claims that, at the time of the crime, a voice which he could not but obey commanded him to commit the crime. It is known that command hallucinations are "easy to fabricate" (Resnick and Knoll 2005). Therefore, it may be valuable if the defendant could be neurobiologically tested to find indications that he does indeed suffer from such hallucinations (see earlier in this chapter). But it could also be of value, if it were possible, to perform a neurobiological test to determine whether or not a defendant is lying about such commanding voices. So, lie detection is not a way to directly neurobiologically diagnose a disorder, but it is a way to "verify" the person's account, which may also be valuable for psychiatric diagnosis, and indeed, the insanity evaluation.[36] The topic of lie detection shows that neuroscience may not only help to determine the presence of a disorder or symptom *directly*, but also *indirectly* by helping to evaluate the *reliability* of the defendant's account.

Note that, at present, legal systems treat polygraph lie detection differently. It sometimes has a place in criminal law, but in many systems it does not, and there may be significant differences between jurisdictions in which lie detection is allowed (Rakoff 2008). The technique is, in fact, controversial. We should not

[33]For insightful discussions, see Greely (2013), Greely and Illes (2007), Pardo and Patterson (2013). It is not my intention in this section to advocate for brain-based lie detection in insanity evaluations, but to explore the possibility of using such a technique.

[34]The considerations in this section are partly based on Meynen (2014a). The risk of lying may even be increased because of a defendant's mental condition; one of the DSM-5 criteria for antisocial personality disorder is "deceitfulness, as indicated by repeated lying, use of aliases, or conning others for personal profit or pleasure."

[35]On subjective experiences and mental disorder, see also Sect. 5.1.

[36]For comparison, lie detection would probably be less valuable, e.g., during a cardiological evaluation, even in a setting in which the risk of lying is increased. The reason is that the cardiologist can also use, *inter alia*, the results of an ECG, blood tests, and ultrasound examinations to make the eventual diagnosis. See also Linden (2012) on faking and brain-based lie detection in psychiatry.

exclude the possibility that, in the future, jurisdictions will treat neuroscientific lie detection and other brain techniques differently, since they decide themselves about the admissibility and legal relevance of neuroscientific techniques and/or findings.

6.6 Reliability of Neuroscience

In the previous section we considered lie detection, which may be used because of doubts about a defendant's reliability. But how about the reliability of neuroscientific findings? Neuroscientific data, in general, are never 100 % reliable. How do we deal with that fact?

Some emphasize the lack of certainty and the complexity involved in interpreting neuroscientific data.[37] Haller and Bartsch (2009, p. 2702) discuss potential pitfalls in fMRI interpretation, concluding: "The number of potential confounds, in concert with multiple possibilities in experimental design, data acquisition and data analysis, implies that there is no unequivocal fMRI approach and no 'perfect' fMRI study. Each factor discussed above may systematically confound fMRI results in the sense of potential pitfalls." Attending to the trickiness of fMRI data and other neuroscientific techniques is both justified and necessary.[38] Still, in the context of legal insanity, such emphasis could also obscure the fact that interpreting human behavior in general may be a bit tricky. Moreover, the context of a criminal case may further complicate things, e.g., because people may lie and malinger (see earlier). The reason we are interested in the use of (f)MRI in criminal cases is, in part, precisely because interpretations and inferences about behavior and states of mind in this context may be very challenging. It is not the case that forensic psychiatric evaluations are always straightforward, without complexities and pitfalls.[39] Surely, we have to be cautious regarding the legal application of neuroscientific techniques. But we are not in a position to be *too* picky. This means that neuroimaging-related complexities are highly relevant, but they do not

[37]See, e.g., De Kogel et al. (2013).

[38]See also Poldrack (2006), who analyzes the problems encountered when an inference is made from fMRI data on brain regions to cognitive states ("reverse inference"). He concludes: "There is substantial excitement about the ability of functional neuroimaging to help researchers to discover the organization of cognitive functions. The analysis presented here suggests that caution should be exercised in the use of reverse inference, particularly in cases where the prior belief in the engagement of a cognitive process and selectivity of activation in the region of interest are low."

[39]Finally, scientific tools and techniques currently used in forensic psychiatric evaluations, are not 100 % accurate. Risk of recidivism assessment tools are an example. They have *some* predictive value, but it is definitely limited; Buchanan (2013), Szmukler et al. (2012), Szmukler and Rose (2013). Notably, even as controversial a method as Rorschach tests may sometimes be used in forensic assessments of defendants (Board of Trustees of the Society for Personality Assessment (2005): The Status of the Rorschach in Clinical and Forensic Practice).

as such preclude fMRI—or other neuroimaging techniques—from being potentially helpful.

The crucial issue is whether the neuro-techniques *add* something to criminal law, and in particular to psychiatric evaluations of defendants. In this respect, it is relevant that Haller and Bartsch (2009 p. 2702) not only make their above-mentioned cautionary statement, but also write: "Despite the discussed concerns, fMRI is an extraordinarily powerful and versatile advanced neuroimaging method…" In fact, in the near future, fMRI may have a lot to offer, *as long as* pitfalls are taken into account.[40] In order to do so, Haller and Bartsch (2009, p. 2702) recommend a multidisciplinary approach that "combines the specific expertise of various disciplines, including, for example, MR physicists, neuroscientists, (neuro-)psychologists, (neuro-)linguists and (neuro-)radiologists." For the legal context, obviously, lawyers and neurolegal scholars should be involved as well.

At this point, it may be helpful to remind ourselves that the admissibility of DNA-technology, probably the most powerful forensic tool available, has been a subject of debate as well. As Jasanoff (2006, p. 339) writes: "In little more than twenty-five years, DNA profiling has moved from the status of novel and contested scientific evidence to a taken-for-granted implement in the toolkit of forensic science." So, the value of a new technique may not be immediately clear, and some techniques have considerably improved over time. Besides, even regarding something as taken-for-granted as DNA evidence, a caveat remains necessary: "In practice, the production of DNA evidence is vulnerable to human error and, especially in the context of law enforcement, also to organizational pressures that are likely to enhance the risk of false identifications." Jasanoff (p. 339) concludes: "In a court of law, science cannot hold itself out as simply science, the source of transcendental truths; more modestly, and with appropriate caveats, it can be the source of just evidence." The cautionary statements regarding neuroscience may not only apply to neuroscience as a newcomer in the courtroom, but they are likely to *remain relevant*, even after neuroscientific evidence is more routinely used in the courtroom in the future. Clearly, proper education and training regarding neurolaw issues will help to avoid pitfalls and errors.[41]

In other words, we should never be naïve about using science for legal purposes. Complexities, pitfalls, and human errors are real and present dangers. Still, we should realize that, even without science entering the courtroom, complexities, pitfalls, and human errors can and do occur. For instance, the neurophilosopher Paul Churchland (1996, p. 309) emphasized the challenges courts are *currently* facing with respect to evaluating the mental aspects of criminal acts: "But few will deny that courts are deeply unreliable at determining the many dimensions of cognitive, emotional and social competence in any defendant."[42] Although this is a pretty strong statement, many will probably agree that there is considerable room

[40]See also Silva (2009) on complexities regarding the use of fMRI in forensic psychiatry.

[41]See also Silva (2007, 2009).

[42]Cited also by Claydon (2011).

for improvement, also regarding the evaluation of insanity. In fact, we hope and believe that science, properly used, will help us *avoid* certain pitfalls and human errors in legal practice. Just as we believe that DNA technology—although highly complicated—*reduces* error in criminal cases.

In sum, complexities and potential pitfalls do not arise only when neuroscience enters the courtroom—they are part of the human enterprise called criminal law. Therefore, the threshold for admissibility of neuroscience in the courtroom cannot be "simplicity," "100 % certainty," or "immediate transparency." The criterion should be more like: *added value*.[43] As such, it may yield evidence that is supportive rather than conclusive.

6.7 Two Neurolaw Cases and the Constellation of Findings

6.7.1 A Schoolteacher's Abnormal Behavior: Correlation and Constellation

In general, cognitive neuroscience provides data at group level, concerning correlation rather than causation.[44] Criminal law, however, is about individuals, not about groups. Therefore the value of cognitive neuroscience in a court of law will often be very limited. But unexpected cases may occur, in which its value appears to be much bigger than it usually is.

Burns and Swerdlow (2003) present the following case about a 40-year-old schoolteacher who…

> developed an increasing interest in pornography, including child pornography. He had a preexisting strong interest in pornography dating back to adolescence, although he denied a previous attraction to children and had never experienced related social or marital problems as a consequence. Throughout the year 2000, he acquired an expanding collection of pornographic magazines and increasingly frequented Internet pornography sites. Much of this prurient material emphasized children and adolescents and was specifically targeted to purveyors of child pornography. He also solicited prostitution at "massage parlors," which he had not previously done. The patient went to great lengths to conceal his activities because he felt that they were unacceptable. However, he continued to act on his sexual impulses, stating that "the pleasure principle overrode" his urge restraint. He began making subtle sexual advances toward his prepubescent stepdaughter, which he was able to conceal from his wife for several weeks.[45]

His stepdaughter informed his wife and she discovered what was going on. The schoolteacher was legally removed from home, pedophilia was diagnosed,

[43]In legal practice, depending on the jurisdiction, the threshold may be defined by the legal test for admissibility of scientific evidence, such as *Daubert* or *Frye*.

[44]See also Meynen (2014a, 2015a).

[45]Burns and Swerdlow (2003, p. 437). See also Claydon (2012), who discusses this case from the perspective of English law.

medication was prescribed, and he was found guilty of child molestation. Next, at a rehabilitation center for sexual addiction, he "could not restrain himself from soliciting sexual favors from staff and other clients… and was expelled." Soon thereafter, the very evening before his prison sentencing, he visits the emergency department of a hospital, because of a headache. "A nonphysiologic cause was suspected, and the psychiatry service admitted him with a diagnosis of pedophilia, not otherwise specified, after he expressed suicidal ideation and a fear that he would rape his landlady."

The next day, he complained about balance problems and was examined neurologically. Several neurological problems were observed, such as abnormal eye movements, abnormal reflexes, and an abnormal walking pattern. During this examination "he solicited female team members for sexual favors. He was unconcerned that he had urinated on himself." On a later neurological examination, he scored 25 points (out of a maximum of 30) on the Mini-Mental State Examination[46] "missing points for delayed recall, impaired copy, and an inability to write a legible sentence." An MRI showed a tumor—which turned out to be a hemangiopericytoma—displacing the right orbitofrontal lobe.

The tumor was resected. The teacher's walking and bladder control improved, his sexually aberrant behavior disappeared, and he was now able to finish a Sexaholics Anonymous program. Eventually, he returned home. After some time, the headache came back, as did his earlier behavior: he started secretly collecting pornography again. An MRI revealed that the tumor had regrown, and, again, it was resected. It stayed away for at least six years, and the legally relevant behavior did not return (Glenn and Raine 2013).

This is no doubt an exceptional case, which is why it has often been cited. What is so interesting about this case from a neurolaw perspective is the remarkable *sequence* of events: behavioral change, the MRI findings, the successful surgical intervention, normalization of behavior, tumor regrowth accompanied by behavioral change, second intervention, normalization of behavior. The sequence of events, which includes repeated medical *interventions*, is suggestive of a *causal* relationship between the tumor (shown on MRI) and the legally relevant behavior.[47] According to Glenn and Raine (2013, p. 57), "The case comes almost as close as one can get to a causal connection between ventral prefrontal brain pathology and deviant behaviour—a pendulum moving from normality to brain dysfunction to paedophilia to neurosurgery to normality, and back again." The specific details of this case provide a constellation in which neuroscientific findings appear to give us more than mere correlations between brain characteristics and behavior. But what exactly do the findings tell us?

Do they mean that the teacher could be considered "legally insane?" Suppose his condition qualified as a disease of the mind, and suppose he were tried under

[46]The Mini-Mental State Examination is a widely used instrument for screening cognitive dysfunction (Tombaugh and McIntyre 1992).

[47]See James Woodward (2003) for an influential interventionist account of causation.

M'Naghten.[48] Did he know what he was doing and that it was wrong? Burns and Swerdlow (2003, p. 440) explicitly state: "Orbitofrontal lesion research suggests that sociopathic behavior results from a loss of impulse control rather than a loss of moral knowledge. (…) Our patient could not refrain from acting on his pedophilia despite the awareness that this behavior was inappropriate." From this, it appears that the patient *knew* what he was doing and that it was inappropriate. This is supported by the initial attempts to *conceal* his activities, which suggest awareness of the inappropriateness of his behavior. Further support is provided by his own words about the pleasure principle overriding his urge restraint. Putting the pieces together, it seems plausible that he did know the nature and quality of his actions, and that they were wrong. Therefore, he would be sane.

Nevertheless, there could be a serious problem with his behavioral *control*, which is supported by the above-mentioned comments by Burns and Swerdlow. So, he could, in principle, be considered insane under the Model Penal Code insanity standard. We may feel that it is reasonable to conclude, also in view of the profound problems revealed upon neurological examination, his apparent loss of bladder control, and the impressive tumor that showed in the MRI, that, at the final stage, he was unable to conform his conduct to the requirements of the law. But how about the earlier stages? For instance, was it possible for him, then, to visit a doctor to discuss his activities rather than concealing them?

Morse (2011a) identifies two relevant issues regarding the topic of control in this case: the *strength* of his pedophilic urges on the one hand, and his *capacities* to restrain them on the other. Since the patient was not evaluated by a psychiatrist or neurologist in the early stages, it is difficult to judge his capacities for control at that time. Given the severity of the pathological brain process, and the possibility that profound mental changes occurred even in what we call "the early stages," we may hesitate to assume that the capacities for behavioral control were still intact. Even his own words about "a pleasure principle overriding the urge restraint," should, in my view, not be taken for granted. The man had a tumor growing in his brain, and although at that moment in time no remarkable neurological symptoms were present, it could be that *relevant* mental capacities were already impaired. The man himself may also have had difficulties understanding and interpreting his own sexual and behavioral changes. Therefore, there may be good reason to be prudent about judging his behavior, even at the time when he did not urinate on himself and did not show severe agraphia (inability to write).

One may argue that when the schoolteacher, apparently unconcerned, lost control of his bladder, he lost substantial capacity to control himself and thus to conform his conduct to the requirements of the law (Model Penal Code). Conversely, people may lose control of their bladder and still be able to control other actions, including their sexual behavior. Whether or not a person loses control of his bladder or has abnormal plantar reflexes should not immediately lead to the conclusion that the person cannot control his legally relevant sexual impulses. Still, in

[48]For the *M'Naghten* standard, see Chap. 2.

my view, the information about the man urinating on himself *is* relevant. In fact, this phenomenon, the MRI, as well as the other findings—e.g., the abnormal reflexes—are relevant, taken *together*. It is the *constellation* of the facts and findings from which the picture emerges that this person, at least at some point, was no longer in control.

Finally, let us reconsider the argument that because the teacher "went to great lengths to conceal his activities" at the outset, he was still in control of his actions. Indeed, such concealment attempts—especially if successful—suggest *some* behavioral control. Nevertheless, eventually, the legally relevant question is whether he could refrain from his unacceptable/criminal sexual activities *as such*. In principle, it may have been the case that, although he was capable of performing his actions in a way that reduced the chance of his being caught, he was incapable of resisting the sexual impulses themselves. For example, suppose that an otherwise law-abiding shop owner is compelled by criminals at gunpoint to commit a certain offense. We can imagine that he will commit the act, being compelled to do so, but that he will still try to do this in such a way that he will not be caught. We do not know the extent to which the teacher's situation in the earlier phases of his disease is similar to the case of such a shop owner. But it illustrates that the legally relevant question is not: is *some* control left? The legally relevant question regarding control is: to what extent was the person able to control his behavior in such a way that he could conform to the requirements of the law?

These considerations merely articulate that loss of control in one area does not necessarily imply loss of control in other areas. And the reverse is true as well: we cannot conclude from the fact that some behavioral control remains intact that the defendant also has sufficient control to refrain from certain criminal behavior (see Sect. 2.3). Therefore, until we know more about the specific impact of such a large orbitofrontal tumor on behavior, we may want to take care when drawing conclusions regarding whether or not the man could control himself.

Greely (2011) mentions that, in the course of the evaluation of this schoolteacher, people suspected that he was *faking* his problems.[49] It is clear that, as soon as an MRI scan showing impressive pathological changes becomes available, such suspicion evaporates. In fact, the MRI provides a certain *context* to the other findings and observations.

It is the whole picture—the constellation of findings—that informs our judgment about the extent to which this schoolteacher should be held responsible at which moment in time. What role the MRI (an image is included in the case report) plays exactly in this evaluative judgment may be difficult to determine. Should we consider the MRI as providing direct, indirect, additive, supporting, or crucial evidence? Is it really possible to sever, as it were, the MRI from the rest of the evidence—does it make sense to omit it from consideration, or is it an inalienable part of the case? And for the sake of the argument: suppose that the MRI scan had not revealed any abnormalities whatsoever? Would this have been possible,

[49]See also an article in *New Scientist*, by Charles Choi (2002), entitled "Brain tumour causes uncontrollable paedophilia," in which Jeffrey Burns is cited as stating: "He wasn't faking."

given the profound neurological changes on physical examination? What, then, is the specific value of the MRI? These questions emphasize how difficult it is to delineate with precision the impact of neuroscientific techniques and findings on legal decisions about a defendant's responsibility. Once neuroscience and neurotechniques enter the legal stage, they may affect a legal decision. Yet, how they affect that decision depends on other factors as well. In some cases, "supporting" evidence may be decisive for the legal outcome, depending on the availability of other evidence. In the absence of other evidence, however, supporting evidence may serve no purpose.

In conclusion, this remarkable case makes two important points regarding neuroscience and decisions about criminal responsibility. The first point concerns the unexpected nature of the case in which a neuroscientific finding (MRI) is, apparently, *more powerful* than it usually is. The neuro-findings—including the responses to neurosurgical interventions—are *suggesting* causation, rather than mere correlation. So, the statement that neuroscientific results only reveal group-level correlations is only generally true. We have to be open to the possibility that, in individual cases, neuroscientific techniques have more to add than they normally do. Second, neuroscience has a place in a certain *constellation* of facts and findings. Apart from the MRI results, there was a unique temporal constellation in which specific interventions were made—with a similar effect on the person's behavior. To this, we may want to add that, apart from an impressive MRI scan, there were serious abnormalities on physical examination, and that the problematic behavior did not happen before the age of 40, etcetera.[50] So, the value of specific neuroscientific findings for actual legal judgments is likely to *depend* on the presence of other information and evidence. Based on such evidence, neuroscience may have impact on a judgment, and it may sometimes provide information that tips the balance in favor of a certain legal outcome. In an individual criminal case, it may even be hard to establish precisely the impact of neuroscientific findings on the final verdict.

6.7.2 Brain Development in Adolescence: Revising a Legal Norm

The case of the schoolteacher and the orbitofrontal tumor discussed in the previous section falls within the assessment domain of neurolaw. The case we consider in this section, *Roper v. Simmons*, falls within the revision domain.

[50]Burns also emphasizes the unique temporal aspects of the case (Choi 2002): "But if someone argues that every paedophile needs a MRI, the difference in this case was that the patient had a normal history before he acquired the problem. Most paedophiles develop problems early on in life."

At the age of 17, Christopher Simmons committed murder, which he planned together with two friends; at the age of 18 he was sentenced to death. In *Roper v. Simmons* (2005) the U.S. Supreme Court eventually held that capital punishment for crimes that were committed while the person was under eighteen is unconstitutional (Glannon 2011; Scott 2005).[51] Several amicus briefs were submitted to the court in this case. In such briefs, people or institutions may offer their view on a legal case to the court. An amicus brief by, among others, the American Medical Association, the American Psychiatric Association, and the American Association of Child and Adolescent Psychiatry, stated the following in its summary of the argument:

> Adolescents as a group, even at the age of 16 or 17, are more impulsive than adults. They underestimate risks and overvalue short-term benefits. They are more susceptible to stress, more emotionally volatile, and less capable of controlling their emotions than adults. In short, the average adolescent cannot be expected to act with the same control or foresight as a mature adult. Behavioral scientists have observed these differences for some time. Only recently, however, have studies yielded evidence of concrete differences that are anatomically based. Cutting-edge brain imaging technology reveals that regions of the adolescent brain do not reach a fully mature state until after the age of 18. These regions are precisely those associated with impulse control, regulation of emotions, risk assessment, and moral reasoning. Critical developmental changes in these regions occur only after late adolescence. Science cannot, of course, gauge moral culpability.[52]

Quite some emphasis is put on "cutting-edge" neuroscientific findings in this short summary of the argument made in the amicus brief. However, according to Morse, the neuroscientific considerations did not have much influence on the U.S. Supreme Court's judgment:

> Now, we already knew from common-sense observation and rigorous behavioral studies that juveniles are on average less rational than adults. What did the neuroscientific evidence about the juvenile brain add? It was consistent with the undeniable behavioural data, and perhaps provided a partial causal explanation of the behavioural differences. The neuroscience data was therefore merely additive and only indirectly relevant.[53]

Walter Glannon (2011, p. 21) provides a similar view: "The imaging studies did not influence so much as confirm the Supreme Court majority opinion by Justice Anthony Kennedy, which was based largely on accepted views of developmental psychology."

Now suppose that, indeed the neuroscientific evidence was "merely additive and only indirectly relevant," and "confirmed" the majority opinion. Interestingly, the U.S. Supreme Court's decision was a *5-4* decision. In such a case, "merely additive and only indirectly relevant" information may be relevant as well. Of course, we do not know for sure the precise extent to which neuro-evidence

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[51] *Roper v. Simmons*, 125 S. Ct. 1183 (2005). This section is partly based on Meynen (2015a).

[52] https://www.aacap.org/App_Themes/AACAP/docs/Advocacy/amicus_curiae/Roper_v_Simmons.pdf.

[53] Morse (2011a, p. 540); see also Introduction to Morse and Roskies (2013).

influenced the justices' decisions in this case.[54] For the sake of argument, let us suppose that the amicus brief had pointed out that cutting-edge brain imaging showed that a seventeen-year-old brain is "mature." Would the U.S. Supreme Court's decision have been different?

What I aim to point out is that neuroscience may be relevant to an outcome as soon as it has a place in arguments. Just as in the schoolteacher's case, its relevance depends on other evidence and considerations. In practice, as said, it may sometimes even be difficult to clearly distinguish between evidence that is "indirect and additive" and evidence that is direct and somehow crucial to a final decision.

Five years after *Roper v. Simmons*, there was another U.S. Supreme Court decision related to juveniles, *Graham*, which reversed the convictions of five minors, holding that juveniles convicted of non-homicide crimes could not be sentenced to life without parole. Neuroscientific findings played a role in this case as well. According to Feld et al. (2013, p. 184) "*Graham* asserted that subsequent research in developmental psychology and neuroscience bolstered *Roper's* conclusion that adolescents' reduced culpability required somewhat mitigated sentences." They emphasize that neuroscience was not, in itself, a decisive factor, but it "provided one more piece of confirmatory data in the Court's holding."[55] In this analysis of the Supreme Court's ruling, neuroscience is, again, presented as just one relevant factor (see also Meynen 2014b); yet there is the suggestion that neuroscience became more important than in *Roper v. Simmons*, because later research "bolstered" the earlier conclusion in *Roper*.

According to Steinberg (2013), neuroscience was not irrelevant to U.S. Supreme Court decisions about adolescents' criminal culpability. He (2013, p. 516) writes about several U.S. Supreme Court cases, including *Roper* and *Graham*:

> Because the Supreme Court justices' deliberations are never made public, it is impossible to know just how much neuroscience findings influenced the Court's decisionmaking above and beyond the impact of the behavioural evidence. Nevertheless, a close reading of the transcripts of the oral arguments and opinions makes it clear that the attorneys and justices involved in these cases certainly paid attention to the neuroscience. At times they even insinuated that it was somehow more compelling than the behavioural evidence (as one attorney stated during oral arguments in *Roper*, "I'm not just talking about social science here, but the important neurobiological science")...

If neuroscience provided a relevant piece of information in these U.S. Supreme Court decisions, they fall within the *revision* domain of neurolaw. By providing piece after piece of relevant data that inform legal decisions the overall revision-impact of neuroscience may eventually become substantial.

Neuroscience is an enormous, multifaceted endeavor, with such a variety of powerful tools that it may, in many and unexpected ways, now or in the near future, somehow influence legal decision-making, including decisions about insanity. The challenge is to make sure that such influence increases rather than

[54] See also Steinberg (2013).

[55] Feld et al. (2013, p. 184) refer to Maroney (2009).

decreases the quality of legal decisions. Although neurolaw researchers are accepting that challenge, they are finding themselves confronted with a complication.

6.8 A Complicating Factor: Differences Between Legal Systems

Neurolaw partially overlaps with neuroethics. For instance, neuroscience-based mind reading is a topic not just in neuroethics, but also in neurolaw (Meynen 2014b). Compared to neuroethics, however, neurolaw research is, in a relevant way, more complicated. While ethics—and therefore neuroethics—transcends the boundaries of legal systems, neurolaw is, to a considerable extent, bound to a particular legal system.[56] And legal systems may differ significantly.

The insanity defense is a good example of this. Standards for insanity vary greatly between jurisdictions; for instance, the notion of control may or may not be a criterion. This means that neuroscientific findings on behavioral control in mental disorder may be relevant to insanity in some jurisdictions, but not in others.

In fact, where insanity is concerned, we can distinguish between medical and legal issues. Since medicine is basically an international endeavor,[57] the way in which a mental disorder is diagnosed generally transcends the boundaries of legal systems. If in the future, state-of-the-art psychiatry requires neuroimaging for diagnosing a particular disorder, this will most likely be accepted in the courtroom as part of a proper evaluation.[58] However, if certain neuro-techniques do not have a place in standard psychiatric evaluations, the situation is different. Then, it is likely to become a legal issue and the court may have to decide about the admissibility of a certain technique regarding the legal question at hand, for instance, concerning behavioral control. In the U.S. legal context, *Daubert* and *Frye*, standards for the admissibility of scientific evidence, are relevant in this respect. But other countries have other laws and rules regarding admissibility of evidence.

Many neurolaw topics can only be fully addressed within the context of a particular legal system, e.g., the right against self-incrimination, while some largely transcend the locality of the law, such as discussions about neuroscience and free will. However, this also depends on the researcher's approach to these issues. For instance, Morse (2007) takes a largely legal approach to the problem of free will, concluding that it is a "non-problem" in forensic psychiatry and psychology because "free will" is not part of any relevant legal doctrine in the *U.S.*[59]

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[56] On the topic of this section, see also Meynen (2014b).

[57] See Sect. 5.1, and Meynen and Oei (2011).

[58] See Sect. 6.4.

[59] Morse supplements this argument, meanwhile, with some more general and philosophical considerations about determinism and responsibility (Morse 2007).

Notably, taking the legal details into account may also lead to further analysis of neuroscientific techniques. Suppose that a certain legal standard is relevant to admissibility of the evidence; it may not be immediately clear whether a particular technique meets that standard. The technique itself must be carefully studied before one can conclude whether or not it meets the standard.

One implication of these considerations is that neurolaw involves much more research than neuroethics, because many neurolaw questions have to be answered for each legal system separately. This is one of the major challenges for neurolaw. On the positive side, legal systems may also learn from one another, because *similar* rules and standards may apply. In this respect, publications like Spranger's (Ed.) *International neurolaw. A comparative analysis* (2012) are very valuable.

6.9 Conclusion

Neurolaw is a rapidly developing area of profoundly interdisciplinary research. Legal insanity is one of the topics studied. Currently, the presence of a mental disorder cannot be neurobiologically assessed. Apart from dementias, brain traumas, and tumors—conditions that may be considered primarily neurological in nature—neuro-techniques are not helpful in diagnosing psychiatric illnesses. But this could change in the near future. Much work is being done in "biological" psychiatry, and these efforts may result in neuro-assessment tools. However, in the past, there has been considerable overoptimism in this respect.

Neuroscience might not only be helpful in diagnosing the presence of a disorder; forensic psychiatry is not just about the presence of a disorder, it also concerns the impact of a disorder on a person's decision-making. A great deal of neurobiological research is being done on how mental disorders may affect decision-making. What is lacking, though, are clear findings to be used in individual cases to evaluate how a defendant's decision-making was affected by mental illness. Still, this type of research could soon yield valuable results for forensic psychiatric evaluations.

The norm for insanity is legal. Even if neuroscience were to contribute to insanity evaluations, and even if, in the future, "brain abnormalities" were to replace or supplement "mental disease" in the insanity standard, the norm will still remain legal, and the final decision about insanity will still be up to the judge or jury. That stated, if neuroscientific terms or criteria were to be incorporated into the insanity standard, the role of neuroscientists in the courtroom would likely become more prominent.

Apart from contributing to forensic psychiatric evaluations of defendants by shedding light on mental disorders and their impact, neuroscience may contribute through brain-based lie detection, or other forms of neuro-mind reading. The development and use of brain based mind reading, even more than other neuro-techniques, should probably be accompanied by thorough neurolegal and neuro-ethical research.

A major issue in neurolaw literature is the validity and reliability of neuroscience, in the laboratory as well as in the courtroom—which may be a very different matter. Its reliability and validity are not perfect, and will not be perfect for some time. In addition, neuroscientific findings may only help to answer a small part of the legal question at hand. But this is not the same as saying that neuroscience is unable to contribute to legal decisions. Such decisions are usually made based on various considerations, and neuroscience may support or provide one of them. This was apparently the case in the two U.S. Supreme Court decisions we briefly discussed. In addition, neuroscience may sometimes be able to deliver more than we expect it to, as appears to be true in the schoolteacher's case. In fact, at this moment, the only general answer we have to the question about what neuroscience can contribute to the legal decisions is: "It depends."

Many neurolaw questions have to be addressed separately for each legal system, which will entail a great deal of work. For instance, German lawyers cannot just refer to U.S. lawyers who answered a similar neurolaw question—even if the U.S. lawyers' answer is highly accurate. German lawyers have to answer the question in a German legal context. Nevertheless, the Germans might still be able to benefit from the Americans' answer. Notably, the specific legal details that have to be addressed in a particular jurisdiction may also require further study of neuroscientific data and techniques.

In sum, neurolaw is intriguing as well as challenging—also where it concerns legal insanity.

Chapter 7
Issues to Consider When Revising Legal Insanity

Legal insanity touches upon many fascinating theoretical issues, such as free will and brain determinism, but it ultimately concerns a practical forensic psychiatric and legal matter. In this chapter, we explore the issues to be considered when evaluating, revising, or introducing insanity to a legal system. The crucial argument in favor of legal insanity is fairness towards those who are suffering from a severe mental disorder that profoundly impacts their behavior. But acknowledging this is just a starting point, because the insanity defense may take many forms. Building on the previous chapters, the aim is to provide arguments that may inform decisions about the actual shape legal insanity should take in a particular jurisdiction. The nature of legal insanity is such, though, that even this practical aim will continue to confront us with theoretical concerns and contemplations.

7.1 Boundaries Between Psychiatry and Law

A basic and guiding principle should be that legal insanity is a legal matter. Insanity is not a medical term.[1] Insanity is not even a medico-legal term (like patient competency). It belongs strictly to the legal domain: it is a legal interest, the norm is legal, and the ultimate decision is, in every case, up to the judge or jury.

[1]See Pardo and Patterson (2013, p. 140): "As a doctrinal matter, 'insanity' is a legal and not a medical or psychological concept, although medical and psychological expertise informs judgements of insanity." See also Sinnott-Armstrong and Levy (2011, p. 300): "It is common to think that insanity is a medical condition. Psychiatrists, however, almost never describe their patients as 'insane' or 'sane.' It would not help them in diagnosis or treatment to employ this dichotomy. Instead, they use such diagnostic categories as schizophrenia, paranoid delusion, kleptomania, and borderline personality disorder to decide what is wrong with their patients and how to treat them. It is the *judges and lawyers* who have to decide who is insane and which mental conditions make someone insane. (…) although psychiatrists are best qualified to determine a person's mental condition, lawmakers still need to decide whether that mental condition removes legal responsibility or some other legal status. Where the law draws the line between sanity and insanity depends on particular contexts and purposes."

G. Meynen, *Legal Insanity: Explorations in Psychiatry, Law, and Ethics*,
International Library of Ethics, Law, and the New Medicine 71,
DOI 10.1007/978-3-319-44721-6_7

Still, decisions about insanity principally rely on expert testimony by psychiatrists, psychologists, and possibly other behavioral experts. The nature and extent of this reliance may, in practice, lead to somewhat blurred boundaries between psychiatric judgments on the one hand and legal judgments on the other. In particular, behavioral experts may enter the legal domain. As Buchanan writes, there is a "longstanding and widespread concern that psychiatric testimony is more likely than other evidence to intrude into the jury's realm."[2] Of course, in a sense, by entering a courtroom, the psychiatrist enters the legal domain. But the crucial issue is the extent to which the experts' testimony remains within the limits of their psychiatric or psychological expertise.

For instance, in the Netherlands, behavioral experts are asked to provide explicit advice regarding the defendant's legal insanity, which is done in the absence of a legal standard specifying the criteria for insanity (see Sect. 2.7). In practice, this means that, in their reports, these experts develop their own arguments regarding a defendant's insanity, thus interpreting the legal notion of insanity. By providing such advice, the experts cross the line between psychiatry and the law. Yet, without a legal standard, it may be very difficult to get from medical findings to a conclusion about the legal norm. In my view, one of the basic merits of a legal insanity standard is that it enables the proper translation of psychiatric and psychological findings into a legal norm in a way that allows psychiatrists and psychologists to stay out of the legal domain. In that sense, it is an intermediary between psychiatry and criminal law.

The standard contains the criteria for insanity defined by the legal domain (either by judges or, perhaps preferably, lawmakers). It is helpful if the terms are chosen in such a way that they are understandable for lawyers, psychiatrists, psychologists, and jurors. From my perspective, it is not a problem if the expert witness uses the standard's terminology, such as "the defendant knew that he was harming his neighbor, but he thought that the neighbor was attacking him" under *M'Naghten* (knowledge is a component of *M'Naghten*). Using the standard's terms facilitates clear communication between the expert and the judge or jury.

Still, as is elegantly explained by Judge Burger in *Blocker*, there is a concern that jurors may be overwhelmed by the expert, and may immediately adopt the expert's interpretation of the terms of the standard as related to the particular case at hand. Judge Burger wrote:

> The hazards in allowing experts to testify in precisely or even substantially the terms of the ultimate issue are apparent. This is a course which, once allowed, risks the danger that lay jurors, baffled by the intricacies of expert discourse and unintelligible technical jargon may be tempted to abdicate independent analysis of the facts on which the opinion rests; this is also likely where the opinion giver is a skilled forensic performer.

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[2]Buchanan (2006, p. 19); see also earlier footnote in Sect. 2.7. Within the U.S. legal system, the following is also relevant: Federal Rule of Evidence 704. "Opinion on an Ultimate Issue

(a) In General—Not Automatically Objectionable. An opinion is not objectionable just because it embraces an ultimate issue.

(b) Exception. In a criminal case, an expert witness must not state an opinion about whether the defendant did or did not have a mental state or condition that constitutes an element of the crime charged or of a defense. Those matters are for the trier of fact alone."

Even though I understand the problem, I do not think that an expert should be forced to actively *avoid* such central terms as control or knowledge—terms that are part of both ordinary language and psychiatry—in his or her testimony simply because they happen to be components of the standard. In fact, the standard's terms are likely to be very relevant terms in the context of mental illness and criminal behavior, and therefore it might be strange to refrain from using them in the report. Meanwhile it should be crystal clear that neither judges nor juries are required to adopt the expert's interpretation and application of these terms in a particular case. Judges and juries have their own responsibilities in this matter.

I concede that not everyone may agree with the division of labor between the behavioral experts on the one hand, and judges and juries on the other. But this is not really the issue here. The point is that those who develop or revise a standard for insanity must consider this general question: how and to what extent should we ensure a clear division of labor between behavioral experts and the judge or jury?

7.2 Consistency with Common Morality and Moral Theory

In principle, an insanity standard should *be consistent with common morality*. Moral considerations are often invoked by advocates of legal insanity. The American Psychiatric Association's Position Statement on the insanity defense provides an example:

> The American Psychiatric Association, speaking as citizens as well as psychiatrists, believes that the insanity defense should be retained in some form. The insanity defense rests upon one of the fundamental premises of the criminal law, that punishment for wrongful deeds should be predicated upon *moral* culpability. (…) Retention of the insanity defense is essential to the *moral* integrity of the criminal law.[3]

Because legal insanity is often justified in moral terms, the defense should, in general, exculpate those defendants who, according to our common morality, ought to be exculpated. Of course, moral intuitions with respect to those defendants' commission of serious crimes may differ considerably between people, but there has to be a general fit. Since legal insanity may apply to the most horrendous of crimes, it would be especially problematic if the verdict were to be at odds with common morality.

Apparently, an illustration of such a mismatch is the *Hinckley* case. John Hinckley, who attempted to assassinate U.S. President Ronald Reagan, was found to be legally insane. According to Hans and Slater (1983, p. 202), "No verdict in recent history has evoked so much public indignation."[4] An article in *Psychiatric News* (Moran 2002), partly based on an interview with American Psychiatric

[3]Insanity Defense Work Group (1983, p. 683, emphasis added).

[4]Hans and Slater (1983, p. 202) add: "An ABC News poll conducted the day following the verdict revealed that three-quarters of the Americans surveyed felt 'justice had not been done' in the Hinckley case (…) The public's negative reaction has stimulated reforms of the insanity defense."

Association President Paul Appelbaum, directly links the public response to shifting *moral* consensus:

> Legal standards reflect a shifting moral consensus among the public. "For many years books have been written and debates held about what is the best standard for an insanity defense," said APA President-elect Paul Appelbaum, M.D. "There was a fairly broad consensus in the middle of the 20th century that the M'Naghten standard was too narrow." It was that consensus that led to the ALI standard, which broadened the definition under which a defendant could be found not guilty. But the consensus shifted again with the case of John Hinckley, who shot former President Ronald Reagan and was found not guilty by reason of insanity. "After the Hinckley verdict, there was a swing back away from a broadened standard to a narrower standard," Appelbaum said.

If many people feel that the insanity standard classifies as insane those who, morally, deserve punishment, the standard will have to be adapted. Alternatively, the insanity defense may be abolished altogether, as happened in some U.S. states after the *Hinckley* verdict.[5]

In fact, the challenge is to find a solution for the *divergence* of moral views and intuitions in society. One way of dealing with this is to use a very strict standard to ensure that defendants are considered insane only in those cases where almost everyone feels that the defendants are not blameworthy. Few would then oppose such an acquittal on moral grounds. Clearly, there is a price to be paid for such a strategy: in a considerable percentage of the cases, defendants are not considered insane, even though many people in society feel that they should not be held responsible. Another way to deal with the divergence of opinions is to aim to strike the Aristotelian golden mean. The standard becomes less strict, and the possibility that the public sometimes feels that a defendant gets away with a serious crime is accepted, because it increases the chance of doing justice to many defendants suffering from a severe mental disorder while committing a crime.

The standard should be consistent not just with common moral sense, but also with moral theory. Because justifications of legal insanity tend to rely, at least partly, on ethical notions and theory, the standard must be plausible and defensible from a philosophical point of view. The previous chapters provide examples of how criteria for legal standards can be related to, derived from, and founded in moral theory. Of course, there are a variety of moral theories that have been used to explain positions on insanity. In my view, what is required for a standard is solid support from at least one common theoretical view.

7.3 Clarity in Practice

The requirement of the standard's clarity in legal practice is self-evident. Still, it may be helpful to emphasize this point, particularly in view of some of the insanity standards we considered in earlier chapters.

[5]Clearly, such changes basically depend on the public's *perception* of the case and the standard.

The product test may be a good example of a standard lacking such practical clarity: under what conditions, exactly, can a crime be considered to be the *product* of a mental illness? Conceptually, the product standard may not be a bad one, because, we may feel that if a crime is the product of a mental disorder—and the defendant was not responsible for suffering from that disorder in the first place—the defendant should not be considered responsible for the product of that disorder, whatever that product may be. Still, interpreting the notion of "product" in actual criminal cases has proven to be difficult (Sect. 2.5).

The purpose of a legal standard is not conceptually to answer the question of when and why a mental disorder exculpates a defendant—that is a question that falls within the realms of moral philosophy, philosophy of psychiatry, and legal theory. The standard serves a practical cause, while doing as much justice as possible to theoretical considerations. The standard should therefore facilitate clear, straightforward legal decision-making in high-stakes criminal cases. For instance, if the idea behind the product test were theoretically valuable, the task would be to define, as simply as possible and as elaborately as required, the cases in which a crime should be considered the "product" of a mental illness.

Such a clarification would help in at least three ways. First, it would guarantee that the idea behind the defense would work out in practice as intended. It would limit the range of possible interpretations, and thus decrease the probability of unintended outcomes. Second, it would promote equality before the law. If the range of interpretations were restricted, the likelihood that similar cases would be treated similarly would also increase. Third, it would increase the transparency of legal decisions. People—e.g., defendants, victims, and the public—might be better able to understand why certain legal decisions are made, because the criteria used would be clear to them. In sum, the standard's criteria should not only have solid theoretical support, they should be clear in legal practice as well. In that sense, they would be inhabitants of two worlds: a theoretical one and a practical one.

Let us consider another example that could generate a lack of clarity in legal practice: the term "substantial." According to *M'Naghten*, the defendant should "not know the nature or quality of the act." So, there is *no* knowledge. An alternative phrasing could be: The knowledge should be *substantially* affected. This would parallel the Modal Penal Code's phrasing, according to which the defendant should lack *substantial* capacity either to appreciate the criminality of his conduct or to conform his conduct to the requirements of the law. Such an alternative phrasing using the word "substantial" may be morally defensible, but it may make the standard more vague as well: what type of impact should count as "substantial" in legal practice? According to Yaffe (2013, p. 353), the Model Penal Code standard excuses defendants "whose disorders make it very difficult for them to do what the law requires, even if they are fully aware of salient information about their conduct and its wrongfulness." He adds:

> Potentially, although virtually never in practice, a defendant suffering from obsessive-compulsive disorder could be excused from criminal liability under this approach. After all, those who are driven to act find it much harder to refrain than the rest of us. When what they are driven to do is illegal, they arguably "lack substantial capacity to conform their conduct to the requirements of law."

So, even though a term like "substantial" may not be problematic from a theoretical perspective, in legal practice, it may "substantially" broaden the range of possible interpretations, conceivably beyond what appears to be justified.

In contrast to the Model Penal Code's formulation of the control prong, Penney proposes that "the legal standard for volitional control should be defined as a *total* inability to exert control in the circumstances."[6] This narrow variant of the control prong is similar to *M'Naghten*'s *no* knowledge. This is also in line with the Rome Statute of the International Criminal Court, which uses the term "destroys," implying a total rather than a substantial lack of capacity. Article 31, *Grounds for excluding criminal responsibility*, reads:

> 1. In addition to other grounds for excluding criminal responsibility provided for in this Statute, a person shall not be criminally responsible if, at the time of that person's conduct:
>
> (a) The person suffers from a mental disease or defect that *destroys* that person's capacity to appreciate the unlawfulness or nature of his or her conduct, or capacity to control his or her conduct to conform to the requirements of law.[7]

Still, we may ask ourselves: when should we consider a capacity to be "destroyed?" Or, regarding *M'Naghten*, we may ask: in what circumstances can we justly conclude that defendant "did not know?" More precisely, what is required for "knowledge?" This has been a topic of debate for centuries among epistemologists (Steup 2005). People differ with respect to their knowledge of their actions and their knowledge of the law. When is it sufficient for sanity? As we have seen, Appelbaum does not define a specific threshold for patient competency (see Chap. 5). Appelbaum's abilities approach defines what has to be taken into account when a judgment about competency is made, but it does not provide a cut-off point. The decision is up to the healthcare professional—a decision that should be based, at least in part, on "the performance curve" in society. Analogously, at some point, the court will have to decide whether the defendant meets the criterion for not knowing the nature, quality, or wrongfulness of the act (under *M'Naghten*). It may take into account the "performance curve" regarding such knowledge as well.

How about not having a standard for legal insanity? As discussed, the Netherlands has no standard defining the criteria for insanity. Therefore, it is unclear what type of influence of a mental disorder should result in exculpation. It may be that the psychiatrist will argue in his or her report that the defendant did not have "free will," or did not have "alternative possibilities," or "insight," or

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[6]Penney (2012, p. 101, emphasis added, see also Sect. 2.4).

[7]The Rome Statute of the International Criminal Court, emphasis added. Krug (2000, p. 321) mentions that, while Article 31 reads "destroys … capacity", the *draft* International Criminal Code read "lacking substantial capacity". Krug adds: "thereby perhaps narrowing the availability of the defense."

"control," and that he is therefore insane. The Dutch courts usually accept the psychiatrist's advice regarding insanity, "and in their sentences they frequently use the exact phrasing of the report."[8] Although such an approach to insanity may be hailed because of its flexibility,[9] it entails a serious lack of clarity as well. In fact, it is unclear to the defendant, the judge, the prosecution, the victim, the public, and the expert beforehand what the exact criterion for insanity will be.

Still, this lack of clarity and transparency might be considered an advantage, not just because of its flexibility. Resnick and Noffsinger (2004, p. 341) write:

> The defendant should be interviewed [by the clinician] as close to the time of the offence as possible. Early evaluation reduces the likelihood that the defendant will have been coached about the legal criteria for insanity. As time passes, defendants may change their account of the offence because of unconscious distortion or conscious attempts to malinger insanity.

If the exact legal criteria for insanity are unclear, it is harder to coach a defendant about them. In that sense, the psychiatric evaluation could be more valuable, because "faking insanity" may be more difficult. This could be considered an advantage of not specifying the criteria. In my view, however, clarity is clearly preferable.

7.4 The Burden of Proof

The burden of proof is a crucial issue regarding legal insanity. As Simon and Ahn-Redding (2006, p. 233) note in their overview of insanity in twenty-two countries:

> The burden of proof varies considerably. In four countries, the burden is on the prosecutor to prove sanity or responsibility beyond a reasonable doubt or on the balance of probabilities. In the remaining countries, the burden is on the defense to prove insanity, mostly by a preponderance of the evidence or on the balance of probability.[10]

This shows that there is significant variation between legal systems. Regarding the burden of proof, at least three questions are relevant: What must be proven: insanity or sanity? Who bears the burden of proof? What is the standard of proof?

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[8] Van der Leij et al. (2001, p. 700).

[9] Sinnott-Armstrong and Levy (2011, p. 311) write on the Model Penal Code rule: "The popularity of the MPC rule at that time might have been due in part to its flexibility. States could interpret this rule in various ways to fit their preferences." So, flexibility may be considered an asset, but not having a standard is, in my view, overly flexible.

[10] Which is not entirely correct. In the Netherlands, the burden of proof for insanity is usually *not on the defense*.

7.4.1 What Must Be Proven?

The usual context of an insanity defense is that a defendant is considered sane *unless* there is sufficient proof of insanity. However, one might argue that, in a criminal case, the entire burden of proof should be on the prosecution. As Sinnott-Armstrong and Levy (2011, p. 324) write:

> Since *Hinckley*, most states and the federal system have required the defense to prove that the defendant is insane, usually either by a preponderance of evidence or by clear and convincing evidence... To critics, such shifts seem to conflict with the traditional view that every element necessary for someone to be guilty must be proven by the prosecution beyond a reasonable doubt.

Of course, these critics make an interesting point, legally. But if this position were adopted, then a defendant would appear before the court not only presumed innocent, but, basically, also presumed insane. This may not seem realistic. Furthermore, couldn't this imply that every defendant would have to be evaluated by a psychiatrist before one could decide that the defendant is sane? This would be very burdensome (e.g., financially) for a legal system.

At this point, we may also draw an analogy between insanity and incompetence (see Chap. 4). People are presumed competent to make decisions about all the aspects of their life, including about their medical treatment and the disposition of their estate, and they are held responsible for the consequences of these decisions *unless* their incompetence has been clearly and carefully demonstrated. So, if citizens are generally considered autonomous, competent, and responsible decision-makers in all areas of life—why should this suddenly change completely as soon as they become defendants in a court of law? Would we really be able to take such an "insanity presumption" seriously? Of course, more could be said about this issue, but in my view it is reasonable to presume sanity.[11] This implies that insanity must be proven.

7.4.2 Who Bears the Burden of Proof?

Who must prove whatever has to be proven? Simon and Ahn-Redding (2006, p. 37) write that, in the United States:

> The Insanity Reform Act (1984) shifts the burden of proof from the prosecution to the defendant, who must prove insanity by a standard of clear and convincing evidence.

[11]See also Sinnott-Armstrong and Levy (2011, p. 324, emphasis added): "Before Hinckley, most state and federal courts required the prosecutor to prove the defendant's sanity beyond a reasonable doubt. This burden was often hard to carry because insanity is obscure and experts conflict. *It also seems natural to presume that people are sane in the absence of any evidence to the contrary*. For these reasons, revisionists proposed either to lighten the burden of proof on the prosecution or to shift the burden to defendants to prove their insanity, as in the original M'Naghten rule."

> Following the passage of the 1984 act, two-thirds of the states have placed the burden of proof on the defendant, most by the standard of by a preponderance of the evidence.

So, the burden of proof may *shift* in a legal system. In fact, according to Sinnott-Armstrong and Levy (2011, p. 324): "Possibly the most popular [insanity] reform is to shift the burden of proof."

Whose responsibility is it to ensure that people who are insane are not punished? Is it the defendant's responsibility or society's? If it is society's, is it enough that the insanity defense is *available* to the defendant, or does society have a further obligation to pursue legal insanity actively if a particular defendant is probably insane? A basic question is whether it is realistic to suppose that the mere availability of the defense is sufficient to prevent those who are actually insane from being considered guilty. It is conceivable that the disorder (e.g., psychosis) that decisively influenced the crime may also make the defendant decide not to raise the insanity defense. In fact, the defendant may lack *insight* into his own condition and behavior at the time of the crime.[12] Suppose that a defendant is still suffering from a paranoid delusion; is that defendant likely to seek exculpation due to insanity? Of course this is a problem for legal systems in which the insanity defense is available and which place the burden of proof on the defendant.

According to Cohn (1988, p. 307), the mere availability of the defense provides sufficient protection, because "a finding that the defendant is 'competent' to stand trial assures he is sufficiently cognizant of the proceedings to invoke the defense if he wishes." In other words, the assessment of competency to stand trial is crucial here: it ensures that the available defense is used properly.[13] Consequently, the burden of proof can be on the defendant, as long as it is combined with an assessment of competency to stand trail. This does not seem to be unreasonable. But it invokes another problem: what happens to those who are not competent to stand trial? Should the insanity defense be imposed on them, or should they be treated as long as necessary to make them competent again? Given the potentially profound and prolonged impact of a mental disorder on a defendant's decision-making, this may be a very long period of time.[14]

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[12]On poor insight and patient competency in various disorders, see Ruissen et al. (2012).

[13]In the Netherlands, a country with a moderately inquisitorial system, competency to stand trial is less an issue than in the U.S.; very few defendants are considered incompetent to stand trial (Dutch Code of Criminal Procedure, Section 16).

[14]In the U.S., *Frendak* deals with the conditions under which an insanity defense may be *imposed* on a defendant who does not raise the defense herself. See, on *Frendak*, Reisner et al. (2013, p. 87, references omitted): "In *Frendak v. United States*, the trial court imposed the insanity defense on Ms. Frendak over her objection. She appealed the court's ruling …. On appeal, the D. C. Court of Appeals emphasized the significance of the defendant's autonomy in making trial decisions. The court held that 'the trial judge may not force an insanity defense on a defendant found competent to stand trial *if* the individual intelligently and voluntarily decides to forego the defense.' The *Frendak* standard, then, requires a two-part inquiry: competency to proceed and competency to waive a plea. This approach has been adopted in many federal jurisdictions. Under the standard, a court may impose the insanity defense on a defendant only when the defendant cannot waive his insanity defense intelligently and knowingly." See Richie et al. (2014) for comments on *Frendak* and forensic psychiatric evaluations.

It is interesting to look at Penney's argument in favor of a control prong (see Sect. 2.3 and 6.4). Penney (2012, p. 101–102) proposes adding such a prong to the cognitive test, but *only if* two conditions are met. First, there must be "a total inability to exert control in the circumstances," and second "defendants should bear the burden of proving the defense with reference to expert testimony and other evidence." Although Penney does not precisely explain the necessity of this second requirement, it appears to be included in order to avoid abuse of the defense.[15] Penney's proposal makes it clear that the burden of proof may even determine whether or not a certain element (in this case, the control prong) can be added to the standard. This underscores the relevance of the burden of proof.

Could there also be complications if legal insanity were not a defense which the defendant bears the burden of proving but which is instead court-ordered? In the Netherlands, a country with a moderately inquisitorial legal system, insanity evaluations are ordered by the court or prosecution and performed by independent psychiatrists and psychologists. A consequence of partial insanity may be that the court will order TBS.[16] TBS is a court-ordered involuntary admission to a forensic psychiatric hospital, which may, in certain cases, be extended every one or two years. TBS continues until the risk of recidivism is considered sufficiently low. Depending on the methods of measurement, the average duration of TBS is nine years, which is considered a very long time, especially taking into account that TBS is often combined with a prison sentence. In recent years, an increasing number of defendants have refused to cooperate with psychiatric evaluations, in part, it is assumed, because they fear the TBS order.[17] Such a refusal creates a serious problem for the system. These problems are unlikely to occur, however, if insanity is a defense which places the burden of proof on the defendant: the defendant who raises it is very likely to be cooperative regarding his own defense strategy. Notably, cooperation in this sense is no guarantee that the defendant will not deceive or malinger.

[15]Penney also writes: "Given such a high threshold, and given the claimant's onus of proof, the available scientific and other information should be sufficient to allow decision makers to distinguish between deserving and undeserving claims [referring to Redding 2006]."

[16]Van Marle (2002, p. 83) explains the TBS measure as follows: "*Terbeschikkingstelling* (TBS)—translated literally, 'at the discretion of the state'—is a judicial instrument embedded in the Criminal Code that [often] works in combination with a prison sentence. The prison sentence is enforced first and then followed by TBS. TBS is not a punishment, it is an entrustment act for mentally disordered offenders. Its primary aim is not to seek retribution by depriving an individual of his or her freedom, but to protect society in the short term by detention, and in the long term, by treatment that reduces risk. TBS means that society can be shielded from a dangerous, mentally disordered individual for as long as is necessary. The TBS order remains in force as long as the person is considered dangerous."

[17]Van Dijk and Brouwers, *Daling opleggingen tbs met dwangverpleging. Ontwikkelingen en achtergronden*. Memorandum-1 (The Hague, WODC 2011).

7.4.3 The Standard of Proof

Finally, let us consider the third question: What should be the standard of proof for insanity? Should insanity be proven "beyond a reasonable doubt," "by a preponderance of the evidence," "by clear and convincing evidence," or "by balance of probabilities"—just to mention a few legal standards of proof? The "beyond a reasonable doubt" standard sets a high threshold; it is used in criminal cases for proving that the defendant has committed a crime. Society will not take a person's liberty—or otherwise punish him—unless it has been proven beyond a reasonable doubt that he committed a crime. Is the same standard of proof required and reasonable for insanity, or should it be lower, more like preponderance of the evidence? Clearly, the standard of proof is far from trivial. Consider an insanity standard such as *M'Naghten*, which places the burden of proof firmly on the defendant, who must prove insanity beyond a reasonable doubt. In this case, perhaps, you might just as well abolish the defense, because it is virtually never successful in practice. Legal insanity becomes not much more than a theoretical possibility.

In sum, the burden of proof is highly relevant to legal insanity. Each of these three issues needs to be considered: What must be proven: sanity or insanity? Who bears the burden of proof? What is the standard of proof? A helpful question to ask oneself before answering these questions may be: What is worse, wrongfully considering a defendant insane or wrongfully considering a defendant sane? My tentative reply to the three questions would be: the burden should not be on the defendant (but this also depends on the legal system), insanity should be proven, and it should be proven by a preponderance of the evidence.

Together with the components of the standard, the burden of proof will be directly relevant to the success rate of the insanity defense. A successful insanity defense is a relatively rare occurrence. But *should* it be rare? Clearly, we can respond in different ways and from different perspectives. I would offer, paraphrasing Paul Appelbaum, that only defendants with impairment that places them at the very bottom of the performance curve should be considered to be insane.[18] Yet, even if one accepts this general idea, exactly how rare the defense should be remains an open question.

7.5 The Element of Mental Disorder

7.5.1 Mental Disorder as an Explicit Requirement for Insanity

Should a mental defect or disorder be one of the criteria for legal insanity? As discussed in Sect. 5.1, it has been argued that the criterion of a mental disorder should be omitted from the legal standard. There are good reasons for this.

[18] See Sects. 5.1 and 7.3.

According to Vincent and Matthews, a mental disorder in itself does not excuse a person, and the presence of a mental disorder is not required for excuse (in children, for instance). So, why not omit the criterion, and focus exclusively on incapacities? The situation would then very much resemble that involving a patient's decision-making competence. Although some form of mental disorder will almost always be present in cases of established incompetence, the criteria that are often used do not refer to a mental disorder.

Note that even if mental disorder were no longer a formal criterion for insanity, the expert's *explanation* of why a defendant meets the requirements of the insanity standard could still refer to some form of mental disorder or defect. It might also be that, in legal practice, the judge or jury will only accept that the defendant meets the criteria of the "incapacity" standard if the behavioral expert has diagnosed a severe mental disorder and has clarified how the disorder affected the criteria of the incapacity standard.

Adding mental disorder as a criterion may also add an "objective marker" to a standard (see earlier). Perhaps such objectivity is more important in a criminal law setting than it is in a health care setting where patient competency is assessed. However, we concluded that the marker may not be as objective as one would wish.

Still, there is one reason to replace the insanity defense with an incapacity defense. The term insanity defense may suggest that mental disorder is *exclusively* relevant to the issues included in the insanity standard, but, depending on the jurisdiction, mental disorder may also negate *mens rea*. In fact, evidence of a mental illness may be used to negate *mens rea* in some U.S. states where no insanity defense is available.[19]

One could also consider the Norwegian standard for insanity, which *merely* requires the presence of psychotic illness at the time of the crime. This is the opposite of a capacity approach that deletes the disorder and merely defines incapacities. One problem regarding the Norwegian approach is that it at least suggests that people who are psychotic are generally not responsible for their actions, criminal or otherwise. Such a view is not only implausible, it may also contribute to stigma of those who suffer from psychosis. Furthermore, it may send a strange signal to sufferers of chronic psychosis: whatever crimes you commit, you won't be held accountable in a court of law.

A related issue concerns *restricting* the range of mental disorders that may lead to insanity. In an interesting paper, Bonnie (2010) discusses whether personality disorders qualify as legally acceptable disorders for an insanity defense. He writes: "In a few jurisdictions (California and Oregon, for example), the insanity statutes specifically exclude all personality disorders from the definition of mental disease."[20] According to Bonnie,

[19]See Packer (2009, Appendix A) and, on insanity and *mens rea*, see Morse and Hoffman (2007).

[20]On legal insanity in Oregon, see Lockey and Bloom (2007).

> categorical exclusion of personality disorders from the definition of mental disease is clinically and morally arbitrary. Nor is there any need to consider such an approach if the sole test of insanity is whether the defendant was "unable to appreciate the wrongfulness of his conduct at the time of the offense." However, if the test of insanity includes a volitional prong, some way must be found to limit the scope of the defense to the core cases to which it has traditionally been applied (cases involving psychotic conditions), and to prevent a shift toward a deterministic account of criminal conduct—i.e., "people can't help being who they are and doing what they do." The best way of accomplishing this is to limit the definition of mental disease to those severe disorders that are characterized by gross disturbances of a person's capacity to understand reality.[21]

Bonnie argues that if the standard only includes appreciation of wrongfulness (the first component of the Model Penal Code), there is *no need* to limit the disorders acceptable for an insanity defense. The opposite is true, however if a control prong is used (the second element of the Model Penal Code). So, *depending on* the criteria formulated in the insanity standard, restricting the range of disorders acceptable for an insanity defense is wise, according to Bonnie. In fact, he (2010, p. 762) points to "the underlying conceptual problem with the volitional prong of the insanity defense, especially if it is coupled with a broad definition of mental disease." This shows an interrelatedness between two issues: the elements of the standard, in particular the control prong, and the perceived need for restrictions regarding mental illnesses.

Note that also the Model Penal Code formulates a restriction regarding the mental disorder: "the terms mental disease or defect do not include an abnormality manifested only by repeated criminal or otherwise antisocial conduct." This is usually considered to mean that antisocial personality disorder—a mental disorder according to DSM—is excluded. For instance, Lockey and Bloom (2007) write, "This paragraph means that individuals with what is tantamount to an antisocial personality disorder cannot assert an insanity defense based on that particular condition."[22]

In legal practice, the range of mental disorders that may lead to legal insanity is often restricted. All U.S. jurisdictions, as Packer (2009, p. 30) writes, "require that a defendant asserting an insanity defense must show that he suffered from

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[21]Bonnie (2010, p. 762–763). This passage is introduced as follows: "I agree with Dr. Kinscherff's view that…".

[22]In my view, however, if we look at the criteria for antisocial personality disorder, this paragraph does not necessarily exclude this disorder in all cases. While it is true that most criteria for antisocial personality disorder refer to *conduct*, one of the criteria a defendant may fulfill to be diagnosed as having antisocial personality disorder is lack of remorse. The DSM-5 reads: "Lack of remorse, as indicated by being indifferent to or rationalizing having hurt, mistreated, or stolen from another." Now "*being* indifferent" is not necessarily a behavioral issue. This could mean that if a defendant with an antisocial personality disorder indeed fulfills this criterion, the mental disorder is not an abnormality manifested *only* by antisocial conduct—at least not in the strict sense of *conduct*. In such a case, and based on such an interpretation, antisocial personality disorder may still constitute grounds for legal insanity.

a 'severe' disorder at the time of the alleged offence. Psychotic disorders (e.g., schizophrenia) and major affective disorders (e.g., major depression, bipolar disorder) are typically considered to meet this requirement of level of severity." So, in practice, it is not just a disorder that is required, but a severe disorder. Is this a wise restriction? In my view, it should be the impact on the relevant mental capacities/phenomena that is decisive, not the overall severity of the disorder. Ideally, one should define the criteria for an insanity standard in such a way that no further restrictions on the type or severity of the disorder need be imposed. This would mean that *if*, due to a mental disorder, the defendant did not know the nature, quality, or wrongfulness of an act, he would meet the criterion for insanity, irrespective of the disorder's overall severity (under *M'Naghten*). But because defining such criteria, apparently, may be challenging, putting restrictions on the type of mental disorder may be seen as a necessary additional filter to prevent "abuse" of the defense.

Finally we may ask, why not include the brain in the standard for insanity? As discussed, according to the Mental Capacity Act (U.K.), in order to be considered incompetent as a patient to make a decision about treatment, the patient "must have an impairment of or disturbance in the functioning of the *brain or mind*, and this defect must result in the inability to understand, retain, use, or weigh information relevant to a decision or to communicate a choice."[23] In principle, adding such a brain criterion could also be a possibility for the insanity defense, if the analogy between patient competency and legal insanity were taken seriously.[24] The presence of a brain tumor could than serve as an "objective marker" (see earlier). For instance, the brain abnormality could be included in *M'Naghten.* Then, if a person did not know what he was doing, and if an MRI revealed a large brain tumor, the standard's criterion for insanity could be met. Clearly, the nature of a brain tumor and the nature of a mental disorder are different, but in some respects the objectivity of a brain tumor may even be more convincing than the objectivity provided by a psychiatric diagnosis. Of course, we have to ask ourselves whether this type of objectivity (e.g., MRI images and brain biopsies) is also *legally relevant*. I am not arguing in favor of including the brain as a criterion, merely pointing out the possibility.

In sum, even though it seems self-evident to include mental disorder and defect as a criterion for insanity, these reflections on the element of mental disorder suggest that when developing or revising a standard for insanity, one may consider deleting the reference to a mental disorder from the standard, or adding a reference to the brain. In addition, the range of mental illnesses may be limited.

[23]Nicholson et al. (2008, emphasis added).

[24]See Chap. 5 on relevant similarities (and differences) between patient competency and a defendant's insanity.

7.5.2 Mental Disorder: Medical or Legal?

Even if the requirement of a mental disorder is included in the insanity standard, there is a further issue: should it be considered a psychiatric matter, or a legal matter? Earlier, we quoted Morse, stating: "The criminal law can, but need not, turn to scientific or clinical definitions of mental abnormality as legal criteria when promulgating mental health laws."[25] This suggests that mental disorder would refer to something "legal."

Let me suggest a perspective on this issue. Mental disorders fall within the realm of medicine; they are something medical, not legal. Surely, in the end, everything in our society becomes legal as soon as someone takes a certain matter to a court. The court may then define the legal boundaries of certain concepts, such as computers and inventions—but computers and inventions themselves are not legal matters. The same is true for medical illness. In a criminal case, in which a defendant raises the insanity defense, the *ultimate decision* about whether the defendant meets the criteria for legal insanity is up to the judge or jury, and this includes a judgment about the presence of a mental disorder, at least as long as the disorder is a criterion in the insanity standard. Such a final legal judgment is particularly important in cases in which behavioral experts disagree. There should not be an endless discussion between experts, but a legal verdict within a reasonable timeframe. In order to reach such a verdict within a reasonable timeframe, judges will render *their* final judgment *based on expert testimony*.

Consider the question about a victim's death in a criminal case. Ultimately, the judge will have to assess whether a defendant actually caused the death of another human being. However, whether the victim has died must be evaluated by a medical examiner (*not a lawyer*), and, in that sense, the assessment of a person's death is a profoundly medical matter. It takes a doctor's expertise to establish whether a human being has died. There may be cases in which a judge has to decide whether or not a person is dead without a medical examiner's report, e.g., in the absence of a body. But still it would be very strange if, e.g., the only two medical examiners who give testimony testify that the victim is dead, while the judge decides that the victim is alive, and vice versa. In our society, establishing whether a person has died is, in principle, a doctor's task, as establishing the presence of a mental disease is a psychiatrist's and/or psychologist's task.[26]

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[25]Morse (2011b, p. 894); see Sect. 6.5 for the complete quote.

[26]Note that the exact term used for mental illness in the legal test may differ. For instance, *M'Naghten* uses "disease of the mind," the Model Penal Code standard, as well as Rome Statute Article 31, read "mental disease or defect," the State of Delaware (U.S.) uses "mental illness or mental defect," the State of Georgia uses "mental disease, injury, or congenital deficiency," the State of Hawaii uses "mental disease or disorder" the State of Kentucky uses "mental illness or retardation," and the State of Florida uses "mental infirmity or disease" (Janofski et al. 2014). Other standards in other jurisdictions may yet use alternative (languages and) terms. Such variations can also be found in psychiatry. For example, the DSM-5 uses the term "mental disorder" while the ICD-10 uses "mental and behavioural disorders." More terms can be added, such as "psychiatric disorder," "psychiatric illness," or "psychopathological condition"—terms like these

What does this mean in practice? If one expert says: the defendant suffers from a mental disorder, and the other expert comes to the opposite conclusion, the legal judgment may go either way. But if there is no expert testifying that there is a mental disorder, there can be no ground for considering a defendant legally insane (assuming that mental disorder is a criterion).[27] So, the legal conclusion has to be *based on* expert testimony. As always in criminal law, there may be extraordinary cases in which this does not apply, but these should really be extraordinary.

7.6 Can the Criteria Be Reliably Tested?

Although a certain factor may be relevant for exculpation based on moral intuitions and moral philosophy, it may still not be included in an insanity standard because people feel it cannot be reliably tested. The best example is the element of control. Although, theoretically, the relevance of a lack of control for exculpation is widely recognized, some argue that it may just not work in a court of law, because it cannot be reliably established (see Table 7.1). Penney (2012), as we discussed, is among those who disagree with this view. Based on various types of evidence, he concludes that a lack of control can be reliably determined—and that assessing a defendant's control is not much different from evaluating his knowledge. From a moral perspective, the absence of a control prong in an insanity standard is clearly problematic. Therefore, the decision to exclude the control is a difficult one to make.

Since reliability is an issue where insanity evaluations are concerned, developments that could increase their accuracy should always be taken into account. These may have to do with the ethical training of the experts or the way in which the experts are appointed, but neuroscientific progress may also be relevant in this respect. For instance, in the future, neuroscience may provide us with a better picture of how mental disorders affect behavioral control. In addition, neuroscientific

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Footnote26 (continued)

are used in the literature (and in this book) to refer to the same phenomenon. Clearly, the variations in terminology that can be found in legal standards, as well as in psychiatric and psychological literature, do not undermine the central point I intend to make in this section regarding the insanity defense and the role of behavioral expert testimony. (I consider psychiatrists and psychologists to be such behavioral experts, but I do not mean to exclude other relevant disciplines, such as behavioral neurology.).

[27]One may even consider the following, somewhat exaggerated, argument: If mental disorder were legal in nature, then there would be no need for standard psychiatric/psychological evaluation and those considered legally insane would be sent to *legal* facilities instead of *medical* facilities (hospitals) and would be treated by lawyers, not by physicians because, following this line of reasoning, lawyers—rather than physicians—would be the experts on the person's condition. This argument shows that mental disorders and defects fall within the realms of medicine and psychology. This is fully compatible, however, with the view that, in a criminal case, *judges* and *juries* should be charged with making the final decision—based on expert opinion—on whether or not the defendant has a mental disorder.

Table 7.1 The cognitive prong versus the control prong in the scholarly debate

Issue	Cognitive prong	Control prong
1. Moral theory	Theoretically, lack of relevant knowledge leads to excuse. It concerns the epistemic component of moral responsibility	Theoretically, lack of control leads to excuse. It concerns the volitional component of moral responsibility
2. Psychopathology	There appears to be consensus about at least some legally relevant disorders, in particular delusions, that may affect the cognitive prong	Even though control problems are present in some psychiatric disorders, their nature and extent in different mental disorders is a matter of debate, e.g., regarding addiction and impulse control disorders
3. Reliable testing	Many feel that, e.g., a delusion affecting a defendant's knowledge about the wrongfulness of an action can be sufficiently reliably assessed, at least in some cases. This may have to do with the fact that delusions tend to be present and stable over a longer period of time	Some authors argue that this is problematic. This may have to do with the fact that impulse-control problems suddenly arise and then disappear. For example, some commanding voices undermine control, but it may be hard to reliably establish whether a particular defendant actually heard such a voice at the time of the crime

techniques that help assess the presence of control problems in individual defendants may become available. Furthermore, mind-reading techniques may help increase the reliability of psychiatric evaluations. The risk of malingering and deception—a widely recognized problem associated with psychiatric evaluations of insanity—may be reduced. But it is clear that such developments will take time and a great deal of research and debate.

7.7 Degrees of Responsibility

In many jurisdictions, insanity is a dichotomous issue. A defendant is either sane or insane, there is nothing between these extremes.[28] Morally, however, people may be considered *more or less* responsible for certain actions. If we agree that responsibility is a continuum concept,[29] doesn't this imply that legal insanity should be measured in degrees as well? In addition, the fact that the boundaries

[28]If diminished responsibility is available in a legal system, it may not be available for all crimes. For instance, in the U.S., as Packer (2009, p. 16) writes, "a diminished capacity defense relates only to crimes requiring a specific intent." Packer (2009, p. 17) explains: "For example, first-degree murder, which requires deliberation, is considered a specific-intent crime, but the lesser included offences of second-degree murder and manslaughter require only general intent (some states have limited the use of diminished capacity defences to homicide cases)."

[29]See Morse (2000, p. 266).

between mental disorder and normality are often characterized by shades of grey can also make us feel that decreased responsibility due to mental disorder should be measured in degrees.

In the Netherlands, there are five degrees of criminal responsibility or legal insanity. The degrees are: responsibility, somewhat diminished responsibility, diminished responsibility, severely diminished responsibility, and insanity (Van Marle 2000). Meanwhile, the degrees are not to be found in Dutch statutory law, which merely mentions that a defendant who is not responsible as a result of a mental disorder or defect is not punishable (Van der Leij et al. 2001). The degrees were established by case law. Some endorse this differentiated Dutch approach to criminal responsibility (Mooij 2012), for instance, because reduced responsibility may lead to reduced punishment.[30] Others point to the fact that it may be hard to distinguish between the three degrees in the middle: somewhat diminished, diminished, and strongly diminished responsibility.[31] Clearly, it may also be difficult to distinguish between severely diminished responsibility and insanity.[32]

Recently, there has been a change in the Netherlands regarding the degrees of responsibility, at least for psychiatrists. The 2012 Guideline for forensic psychiatric evaluations in criminal cases abandons the five degrees, replacing it with three degrees. The Guideline reads: "Possibilities for an objectifying classification within the area of diminished impact on the crime are… impossible. This implies that the five degrees, as they evolved in the Dutch criminal law practice… cannot be substantiated based on the current state of science."[33] Moreover, the guideline states that "there is no evidence for any scale whatsoever, either for a five-point scale or for a three-point scale." Nevertheless, according to the guideline (p. 65), the extremes can be clearly established: absence of psychopathology ("there is no mental disorder that has influenced the criminal act") on the one hand, and a situation in which the defendant "was, as a result of mental disorder, not able to act differently and was absolutely dysfunctional due to the disorder" on the other. Between these extremes, an area in the middle exists: diminished responsibility, or partial responsibility. So, psychiatrists have now adopted a three-point scale instead. For them, five was too many.

This can be considered in line with Morse (2000, p. 266), who states: "Although responsibility is a continuum concept and an agent's level of responsibility depends on facts about the agent's capacity for rationality, we have only limited epistemic ability to make the fine-grained responsibility judgments that are

[30]For an analysis, see Kooijmans (2002).

[31]Van Marle (2012, p. 127). See also Van Marle (2012, p. 127): "It is hard to distinguish between the three degrees in the middle…".

[32]See, e.g., the case of a mother who killed her own child, while suffering from the delusion that both she and her child were being persecuted by Satanists (LJN BH8888), discussed in Chap. 2.

[33]Nederlandse Vereniging voor Psychiatrie (2012, p. 64). The Dutch texts have been translated. Recently, the Netherlands Institute of Forensic Psychiatry and Psychology (NIFP) has adjusted its format of questions to three degrees of criminal responsibility.

theoretically possible." So, epistemic constraints restrict the number of degrees. Note that even if the insanity defense is considered an on/off phenomenon, the judge may still have the option of considering a mental disorder that does not result in legal insanity as a *mitigating* factor in sentencing.

However, Morse argues within the U.S. legal context that mitigation does not sufficiently ensure that the profound influence mental disorders may have is taken into account by the court:

> I now believe that the law should adopt a generic partial excusing condition, "Guilty But Partially Responsible," based on diminished rationality. Mitigating doctrines in the law of homicide, such as provocation and passion, or extreme mental or emotional disturbance, reflect the recognition that many defendants suffer from substantially impaired rationality that is nonetheless insufficient to support an insanity claim. There is no reason whatsoever that such impaired rationality is true only of homicide defendants. Indeed, the criteria of such doctrines are potentially fully applicable to the mental states of defendants accused of any crime. Because rationality is the touchstone of responsibility and culpability, the law should offer a formal, doctrinal partial excuse rather than leave mitigation primarily to the discretion of sentencing judges.[34]

In my view, the basic approach to insanity should be the dichotomy of defendants being either sane or insane. The aforementioned epistemic issue is relevant here: it is hard to reliably make fine-grained distinctions between degrees of insanity. In fact, even if one recognizes that responsibility is a continuum concept, and even if one feels that criminal law should recognize and reflect that responsibility may be partially lacking due to mental disorder, it is not clear that the insanity defense itself should have degrees of diminished responsibility—mitigation may be a more appropriate means of taking a defendant's mental condition into account. However, if good arguments for "diminished responsibility" can be presented in a particular legal system, it may be wise to introduce such a degree in the middle.[35]

Finally, since insanity is a legal matter, it should not be psychiatrists or psychologists who determine the number of degrees, but lawyers and, perhaps preferably, lawmakers.

7.8 Insanity Does not Imply Dangerousness

It may be good to remind ourselves from time to time that insanity does not imply dangerousness in the future. Serious mental illness in general has been found to be related to an increased risk of violence (Friedman 2006). Still, those who are

[34]Morse (2000, pp. 265–266, footnotes omitted). See also on this topic Morse (2003).

[35]Another way, albeit less explicitly, to take diminished responsibility due to mental disorder (addiction in this case) into account is through the drug courts (Hall and Carter 2013). These courts may give an addicted defendant who committed a crime the choice of treatment *instead of* prison time.

considered insane may or may not be at increased risk of future violence compared to others who have committed a crime. Defendants who are not considered insane may have a much higher risk of recidivism, at least in some cases. If we look at risk assessment tools for recidivism, we see that many factors other than having a severe mental disorder are risk factors for future violence. So, mental illness is just one risk factor *among many* (Kooijmans and Meynen 2012). Remarkably, in the *Violence Risk Appraisal Guide*, the presence of schizophrenia even leads to a *reduced* risk of recidivism.[36] Note that some defendants who are considered insane no longer suffer from a mental disorder by the time of the trial, and they may no longer be dangerous. Responsibility and insanity are retrospective, while the risk of recidivism is prospective.

Insanity should be clearly distinguished from the risk of recidivism. The motivation for having the defense, therefore, should have to do with morality, fairness, and justice, rather than with dangerousness and risk reduction.

7.9 Similarities and Differences with Respect to Other Legal Systems

Abdominal surgery in Berlin is similar to abdominal surgery in London, Paris, Tokyo, and New York. Therefore, research findings on abdominal surgery obtained in Berlin are likely to be very relevant in London, Paris, Tokyo, and New York as well. In addition, researchers in London, Paris, Tokyo, and New York may criticize or comment on the papers published by the German researchers, and use the same research design to perform further studies. The results of these studies can, again, be shared with many researchers around the globe. In fact, there are profound similarities in medical practice and research between countries, which makes it possible for doctors and patients to benefit from research that has been done in other parts of the world.

In contrast, there are impressive differences between legal systems, for instance regarding evaluations of legal insanity. The differences between jurisdictions may hinder the use of research data that have been obtained in other jurisdictions.[37] This complicates the distribution and interpretation of scientific findings and reduces the relevance of the data. For instance, findings obtained in a system where the mere presence of psychosis unconditionally exempts a person from punishment (as in Norway) or in a system where *M'Naghten* is used (as in many states

[36]VRAG, see Rossegger et al. (2014). However, risk assessment tools for recidivism are far from flawless.

[37]See also Sect. 5.1, Meynen (2014b), Meynen and Oei (2011), and see the above discussion of neurolaw research and legal boundaries in Chap. 6.

in the U.S.), could present problems when used in legal systems based on other standards. Profound legal differences hamper a fruitful exchange of ideas across jurisdictions and countries.[38]

More homogeneity among legal systems would create more opportunities to benefit from one another. Exchanging research data, experiences, and ideas would help to enhance the quality of forensic psychiatric evaluations and legal decisions about insanity. In my view, this leads to the following rule of thumb: when confronted with two equally good options for shaping legal insanity in a particular jurisdiction, the option that is used in most other jurisdictions should be chosen. Adherence to this principle would create a situation in which the prospects for exchange between legal systems would be enhanced. Obviously, there need not be strict uniformity regarding legal insanity in all jurisdictions. Currently, though, there is so much heterogeneity across systems when it comes to insanity that, for the time being, it would be helpful if we complied with that rule of thumb.

7.10 Legal Insanity as Part of a System

Insanity is part of a legal *system.* This means that when formulating insanity criteria or related issues, one must take other aspects of the legal system into account as well. One of the reasons for considering such elements of a legal system is that, ideally, insanity should not be defined in a way that overlaps with other legal concepts in that legal system. How insanity is defined, may, for instance, also depend on the availability of "automatism" as a defense, or on issues related to *mens rea* and "voluntary action." In addition, where certain issues are concerned, the inquisitorial or adversarial nature of the system will be relevant, as will whether a jury or a judge decides about a defendant's sanity. Furthermore, the possibilities of mitigation in a jurisdiction may be relevant when considering introducing partial insanity, or degrees of insanity.

These are practical issues having to do with specific characteristics of individual legal systems. Unavoidably, in view of the coherence and consistency of the system, they will have to be taken into account when shaping (or reshaping) legal insanity.

[38]Clearly, disparities between countries and cultures regarding psychopathology exist as well (De Jong 2014). Yet, in Western countries (i.e., jurisdictions), similar classification systems are generally used, more specifically the Diagnostic and Statistical Manual of Mental Disorders (DSM, American Psychiatric Association) and the International Classification of Diseases (ICD, World Health Organization) system, even though the legal rules concerning insanity may be very different. Therefore, although transcultural psychiatry is clearly a very relevant research domain in psychiatry, the legal differences between Western countries regarding insanity tend to be much more profound than those regarding psychiatric diagnosis and classification.

7.11 Conclusion

Legal insanity can take many forms. Consequently, for a legal system, there is not just the question of whether legal insanity is available, but also the additional, non-trivial question of what shape it should take. This chapter considered ten essential issues pertaining to the shape of legal insanity. These were derived from the discussions in the previous chapters (Table 7.2 provides an overview of the topics discussed in this chapter, supplemented with some arguments derived from earlier chapters). Taking them into account is helpful—if not necessary—when making decisions about revising legal insanity in a particular jurisdiction. If anything, the ten topics show the multifaceted nature of legal insanity, connecting ethics,

Table 7.2 Central issues to consider when evaluating or revising legal insanity in a jurisdiction

Topics	Considerations
Legal insanity as part of the legal system	• Fairness to those who are suffering from a severe mental disorder that profoundly impacts their behavior is the crucial argument in favor of legal insanity • In many legal systems, the insanity defense is available in some form or another, which is indicative of some merit at least • Arguments against insanity often concern doubts about the reliability of assessments and defendants getting away with serious crimes • Don't confuse insanity with future dangerousness
Medicine versus law	• Distinguish between medical and legal concepts and expertise • Legal insanity is a legal matter; in principle, the legal decision is based on expert evidence
A standard for insanity or no standard	• A standard provides transparency and clarity to all parties concerned and increases equality before the law. It is an intermediary between psychiatric findings and the legal judgment • Not having a standard may be considered more flexible, and it makes it harder to coach defendants before they are evaluated
Consistency with moral intuitions and theory	• Consistency is required for justification of the criteria, guidance, and for legal judgments that can be accepted by the general public
Clarity of criteria for insanity	• Theoretical/ethical notions may not be sufficiently clear in legal and forensic psychiatric practice where they have to be used. They may need to be operationalized
Reliability of tests	• Reliability is an important issue regarding forensic psychiatric evaluations, particularly given the possibility of malingering • Some feel that the defendant's knowledge and appreciation can better be tested than his behavioral control
Components of the standard	• Two elements often included are: – lack of *knowledge/appreciation* of the nature and/or wrongfulness of the criminal act – lack of behavioral *control* regarding the criminal act • Lack of knowledge and/or control should be the result of mental disorder or defect • Overlap with other parts of the legal system should be avoided

(continued)

Table 7.2 (continued)

Topics	Considerations
Mental disorder as a criterion for insanity	• The disorder is mentioned in all standards discussed as a required factor (that brings about the lack of knowledge/appreciation and/or control, depending on the specific criteria) • However, theoretically, one might consider omitting the criterion of mental disorder/defect, and restrict the criteria to relevant inabilities (this would be an incapacity standard instead of an insanity standard) • One might also consider adding brain defect/dysfunction to mental defect/dysfunction • The types of mental disorder can also be restricted (e.g., excluding personality disorders) • Alternatively, one could define one type of disorder as the single criterion for insanity without further criteria (e.g., psychosis)
Degrees of responsibility	• Two degrees may be considered the "basic" approach: the dichotomy of sanity and insanity • Three degrees may be both morally justified and feasible, five may be too much refinement in legal/forensic practice • Additional question: should the degree of "diminished" responsibility be available for all crimes? • Note that mental disorder may also be taken into account in the mitigation phase
Burden of proof	• Determine what must be proven (sanity or insanity) • Determine who bears the burden of proving it (defendant, prosecution, court-ordered) • Determine the standard of proof (e.g., preponderance of the evidence) • A helpful question may be: What is worse, wrongfully considering a defendant insane or wrongfully considering a defendant sane?
Similarities with other legal systems	• Similarities across legal systems may facilitate a fruitful exchange of research data, experiences, and ideas

psychiatry, and law. In addition, and once again, they confront us with the complicated nature of legal insanity. When introducing or revising legal insanity in a legal system, one must be aware of each of the issues mentioned, knowing that decisions about them are often bound to remain contestable. Nevertheless, such awareness increases the chance that prudent decisions will be made. This chance is further increased when representatives of the relevant disciplines are involved, even though lawyers or lawmakers are the ultimate decision-makers.

Chapter 8
Concluding Observations on the Present and Future of Insanity

8.1 The Present

Legal insanity is an intensely debated element of criminal law. Not just the insanity defense as such has been challenged, but also its components and related issues have given rise to numerous controversies and arguments. Lawyers, psychologists, psychiatrists, ethicists, and, increasingly, neuroscientists are participating in these debates. The multidisciplinary nature of the discussion is unsurprising because insanity lies at the intersection of psychiatry, law, neurolaw, and ethics. In the first part of this chapter, I review various multidisciplinary perspectives on current practices and debates regarding insanity, as discussed in the previous chapters.

The moral notion that mental disorders may excuse people for their harmful actions is reflected in different ways in legal systems (Chap. 2). For instance, insanity may be an affirmative defense that must be raised by the defendant, the burden of proof may be on the defendant, there may be a standard that defines the criteria for insanity, and there may be degrees of criminal responsibility—but none of these need be the case in a particular jurisdiction. Furthermore, legal systems use different formal criteria for insanity, if that defense is available. Nevertheless, there are three widely used components of an insanity standard. The first is the presence of a mental disorder or defect (which is an element of all standards we considered). The second concerns the defendant's knowledge or appreciation of the wrongfulness of the criminal act. The third regards his capacity for behavioral control. So, in general, insanity is not just about the presence of a mental disorder at the time of the crime, but also about the specific influence of the disorder as defined by the standard's criteria. Still, Norway is an exception: the mere presence of psychotic illness will unconditionally exempt one from punishment.

The insanity defense is not available in some legal systems. Four U.S. states (Idaho, Kansas, Montana, and Utah) have abolished the defense. Many arguments can be used to justify the absence of legal insanity in a jurisdiction. We discussed such arguments in Chap. 3. Some doubt the possibility of reliably determining a past mental state, others point to the problems related to conflicting expert testimony, particularly in an adversarial legal system. Still others fear that the insanity

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defense undermines deterrence, or results in criminals escaping punishment by faking. Furthermore, it has been argued that, in practice, the success of the defense depends on the defendant's financial resources. In addition, no consensus exists about the criteria for insanity, and the defense may lead to stigma. In my view, each of these critical points has some merit, but none constitutes a knock-out argument against legal insanity.

Obviously, there are valid arguments against legal insanity. Still, morality and legal fairness demand that, in some cases, the profound impact of a mental disorder lead to exculpation in a court of law. "Legal insanity" is the term for such exculpation. In response to arguments against legal insanity, I find it helpful to refer to cases of severe dementia or to cases in which a parent tragically kills her own child, delusionally believing that she is protecting or saving it. Many will agree that, in such conditions, defendants ought to be exculpated, at least in some cases, and that some form of insanity defense is therefore required. The challenge, then, is to incorporate insanity into a legal system in a sensible manner.

Given the controversial nature of legal insanity and the impressive variety of ways in which legal systems deal with it, it might be wise to take a step back and ask ourselves: What is insanity actually about? As soon as this question is addressed, the debate tends to become more theoretical and less legal or psychiatric in nature. In Chaps. 4 and 5, we considered four conceptual perspectives on legal insanity that have been used to justify or clarify the defense.

The first perspective is that of free will. This intriguing concept is often considered closely related to criminal responsibility and it has been used to explain and defend legal insanity as well. More precisely, it has been argued that mental disorders may undermine a defendant's free will, and that free will is required for criminal responsibility. Consequently, some defendants suffering from mental disorder may be exculpated because their disorder compromised their free will. There are at least two problems with this rather common view. First, there are enormous philosophical controversies regarding the very existence of free will, especially in view of findings in physics, psychology, and neuroscience. Often these discussions concern the compatibility of free will with the alleged determinism of the sciences. In recent years, this has even become a topic of public debate. Second, the lack of clarity of the concept of free will is an issue: What does it mean that a person has or lacks "free will?" I tried to deal with this by distinguishing between three senses of free will: acting for reasons, having alternatives, and being the genuine source. Each of these senses, I concluded, can be helpful in explaining why in some cases a mental disorder's influence leads to excuse. However, the three senses do not cover *all* instances in which mental disorders may excuse a person for an action. For instance, a lack of knowledge—central to exculpation under *M'Naghten*—does not match any of the three senses of free will. So, even if we accept free will as a justification of legal insanity, it would only provide an incomplete justification. My conclusion is that since free will is contested, conceptually unclear, and offers a partial justification at best, it is problematic as a clarification of legal insanity and as the guiding concept for integrating insanity into a legal system.

Second, we considered the concept of rationality, or the capacity for rationality, as a theoretical justification for legal insanity. Prominent scholars have proposed rationality as theoretical ground for the defense. The basic problem with this concept, however, is its profound ambiguity: what does "rationality" mean and, in particular, what could it mean in a court of law? The vagueness and ambiguities of the concept make it troublesome to clarify what legal insanity is about, and even more problematic as a criterion for insanity in a court of law. In my view, it can still be used as a starting point for elucidating what insanity is about, as a heuristic tool—but not as an endpoint.

Third, we examined conceptual and practical similarities between patient decision-making competency on the one hand and legal insanity on the other (Chap. 5). Because of the profound similarities, criteria for patient competency could perhaps be used as a basis for clarifying and operationalizing legal insanity. If we do so, the following criteria for insanity can be formulated: a defendant is legally insane if he lacked one or more of the following abilities: (1) to control his actions by his decisions; (2) to understand the legally/morally relevant information; (3) to appreciate the situation and its consequences; (4) to reason about the behavioral options available. On further consideration, it became apparent that inauthenticity might be a relevant, additional component of an insanity standard. This does not necessarily mean, however, that inauthenticity must be an explicit element of the standard, at least as long as a control prong is included. The reason is that two types of control can be distinguished: an action being under the control of the will, and the will being under the control of a deeper self. The latter can also be conceived of as authentic action: behavior in accordance with who one "really" is. In this way, a control prong—included in many legal insanity standards—could already imply authenticity (or sourcehood, in free will terminology).

Finally, we looked at "the stages of decision-making" as a fourth conceptual perspective on legal insanity. This model is derived in part from psychology and has already been used to understand the impact of mental disorders on people's choices. It distinguishes between option generation, option selection, and action initiation. Our discussion of these three stages as related to psychopathology clearly shows that the ways in which mental disorders may influence a person's behavior are manifold. I argued that the model could be used to further study the impact of mental illness on decision-making in, for instance, neuroscience research. Furthermore, in forensic psychiatric and psychological practice, the model may be used as a framework to evaluate a defendant's decision-making regarding a criminal act. Finally, it can be used by those who develop or revise a legal standard for insanity. It may help to keep track of the variety of ways in which psychopathological phenomena may influence people's choices and, therefore, their behavior.

One of the most fascinating developments concerning legal insanity is neurolaw (Chap. 6). This is a rapidly expanding field of interdisciplinary research devoted to the study of the implications of neuroscience for the law, often focusing on criminal law. The possible impact of neuroscience on criminal responsibility, in particular insanity, is one of its central topics. Neuroscience could impact legal insanity

in at least two ways. First, it could deepen our knowledge of mental disorders and, in particular, their role in the coming about of crimes. This may provide a basis for evaluating defendants and for developing or revising insanity standards. Second, neuroscience may produce assessment techniques that could be used to evaluate defendants. In the future, some neuro-tests could help directly diagnose mental illness, other techniques may "read a defendant's mind," thus increasing the reliability of insanity evaluations. Currently, however, neuroscience can provide little information that is relevant in a court of law. But we should be open-minded: being overly critical is no less problematic than being overly optimistic. Moreover, neuroscience has already proven its relevance in some criminal cases, such as that of the forty-year-old schoolteacher with altered sexual behavior. Yet, even in this often-cited case, it is hard to establish the exact legal implications of the neuroscientific findings. I argued that, in general, their relevance is likely to depend on what I called the constellation of findings. This means that neuroscience observations may be relevant not on their own but considered in tandem with other evidence and information. Legal decisions are often based on more than one finding or piece of evidence. If neuroscience provides one such piece, it may be valuable for the legal judgment. Still, we should keep in mind that insanity is a legal notion, and that while neuroscience may provide a basis for legal decisions, it cannot replace them.

In the end, legal insanity is a practical matter. It is about doing justice. The discussions in Chaps. 1 to 6 touched upon many issues. What could they mean for those who are introducing or revising legal insanity in a particular jurisdiction? In my view, several topics must be considered. In Chap. 7, I identified ten such topics. Below, I review the four which I consider most important, also adding some concluding reflections.

First, it is essential to distinguish between legal and medical issues and to respect the differences between the legal and medical realms. Which decisions should be made by behavioral experts and which should be made by judges and juries? Legal insanity is a legal issue, diagnosing a mental disorder is a medical and psychological one. Consequently, in principle, judges and juries should not diagnose mental disorders, just as doctors and psychologists should not determine the criteria for sanity and insanity.

Second, the criteria for legal insanity must be consistent with both common morality and moral theory. The mere presence of a mental disorder should not be sufficient for legal exculpation. It would make psychiatric patients categorically "not responsible," which is morally unjustified, stigmatizing and, most probably, obstructive to valuable efforts towards the social inclusion of those with severe mental illness. Which should be the additional criteria for insanity? Since Aristotle, moral theory has demonstrated the relevance of both an epistemic (cognitive) and a control (volitional) element of responsibility. Both should therefore be reflected in the legal standard. Consistency with common morality also requires dealing with the qualms regarding the over-inclusiveness of the control prong. This could be done, for instance, by using strict phrasing such as requiring a "complete lack of control" regarding the legally relevant behavior.

Third, the burden of proof must be considered. Three issues must be decided: *What* must be proven (sanity or insanity)? *Who* bears the burden of proving it (defendant, prosecution, or court-ordered evaluation)? *What standard* of proof should be used (e.g., preponderance of the evidence)? When defining the burden of proof, it may be helpful to ask ourselves: What would be worse, to consider a defendant wrongfully sane, or to consider a defendant wrongfully insane? In addition, we may ask: Whose responsibility is it to ensure that people who are insane are not punished? Is it the responsibility of the defendant or of our society? In my view, insanity rather than sanity should be proven, and the standard of proof for insanity should be no higher than "clear and convincing evidence"; "preponderance of the evidence" would probably be even more appropriate.

Fourth, should the element of mental disorder or defect—or perhaps brain defect—be included in the legal standard? Although it may seem self-evident to incorporate "mental disorder" into a legal standard for insanity, our analysis gave rise to the question: Why do we need it as a formal criterion? Even though I endorse keeping mental disorder as an element of the standard, I feel that the strength of the arguments against it is such that including mental disorder should not be considered "self-evident." Those revising legal insanity in a jurisdiction, therefore, should consider whether a reference to a mental disorder ought to be made, and if so, in what form. In addition, it should be clear whether the notion "mental disorder" must be understood as referring to a medical or a legal matter. In my view, the concept of insanity is legal, but, in principle, the decision requires a psychiatric or psychological evaluation and report about the mental state in terms of the presence of psychopathology and its relevant influence. In principle, without a medically or psychologically established psychopathological condition, there can be no legal insanity. Where should the court get its criterion for mental disorder if not from those disciplines in our society that deal with mental illnesses and defect: psychology and psychiatry? Meanwhile, not all forms of psychopathology may count as a "disorder or defect" in the legal sense. The legal concept of "disorder or defect" in a particular jurisdiction can be defined more narrowly—e.g., excluding personality disorders—than medical classification.

8.2 The Future

What might future developments regarding legal insanity be? The future may be determined by all kinds of factors about which we know nothing. Despite this, I briefly consider some possibilities below.

One possibility is that the impact of neuroscience and neuropsychology will increase. Chapter 6 on neurolaw derives its relevance basically from neuroscience's anticipated future contribution to legal insanity evaluations; it does not have much to offer at present. Suppose, however, that more people become convinced by the arguments offered by Greene and Cohen, that "hard" science shows that free will is illusory and that retribution is not justified. This could mean that

criminal law will be revised accordingly, making legal insanity less relevant because *all* defendants would be considered not—or less—criminally responsible. The insanity defense is a consequence of the retributivist aspects of criminal law. Generally, criminals are considered to "deserve" punishment. Those who are insane constitute the *exception to this rule.* In the future, the insanity defense could, for instance, be replaced with a universal recognition of human dependency on biological factors. However, I doubt that neuroscience will have such profound revisionary impact, at least in the foreseeable future. Neuroscience is perhaps more likely to lead to more subtle revisions regarding insanity by increasing our understanding of mental disorder and its influence on decisions and behavior. This could lead to revisions of elements of the insanity defense, for example the control prong: more jurisdictions may be willing to include the element of control in their insanity standards if neuroscience enables behavioral experts to better establish a lack of control.

The future almost certainly will bring many debates about neuroscientific findings, claims, and exaggerated claims that will be met with attitudes that range from optimistic to overly optimistic, and from critical to overly critical. As the field of neurolaw expands, the discussions are likely to become more technical and detailed, requiring specific expertise. In one or more decades, one or more neurotests are bound to have become as normal in criminal law as DNA technology is today. Still, as has been the case with DNA technology, these tests will neither set the legal norm nor replace the judge's decision. They may, however, provide valuable information that eventually improves the quality of legal judgments, just like DNA fingerprinting. Clearly, if the role of neuroscience increases, the need for education and training regarding neurolaw issues will also increase. This will concern psychiatrists and psychologists, as well as lawyers.

Another factor that might influence the future of legal insanity is the "risk to society." Our society is becoming more and more interested in prevention and risk reduction (Adam et al. 2000). This is probably true for all parts of our society, but certainly also for criminal law and forensic psychiatry. Risk assessment tools to predict recidivism have been booming. It may be that the question of retribution is less important in a society that is becoming more and more focused on the reduction of future risk. We can even imagine that the *combination* of this focus on risk and neuroscientists claiming that retribution is unjustified will result in a decreased interest in blame and punishment—and defenses against them.

But there is another development that may impact assessments of insanity as well. It is "personalized medicine." There is an increasing awareness of differences between people, and modern genetic technology is making it possible to tailor medicine to a person's individual needs. This may also become an option, in the future, for those suffering from psychiatric illness (Arns and Olbrich 2014; Ozomaro et al. 2013). It may be that we feel that neuroscience and brain techniques help us get a clearer picture of the impact of a mental disorder on a particular patient and defendant. Such intense focus on the individual, together with technological and scientific progress, could just as well lead to personalized fine-tuning of exculpation due to the impact of mental disorder. Perhaps such

technology-based personalized refinement will even lead to the introduction of more than three degrees of criminal responsibility (see Sect. 7.7) in order to better reflect responsibility as a continuum concept in a personalized way.

Furthermore, globalization is likely to increase the exchange of ideas across jurisdictions. This could prove to be as valuable for legal insanity as it is for many other aspects of our society. The exchange may enhance the quality of psychiatric assessments, as well as legal judgments. In order to create the prerequisites for a fruitful exchange, rules and practices regarding legal insanity must be sufficiently similar. Clearly, there may be cultural differences which should be reflected in the insanity defense, but generally, given the many and profound dissimilarities that exist between jurisdictions regarding legal insanity today, we could strive for more uniformity, not so much as an end in itself, but rather as a means for sharing ideas, experiences, dilemmas, and data. This will be no easy task, because there is no one-size-fits-all solution to problems regarding insanity. Insanity is part of a legal system, and the goal should be to achieve the right fit between the rules of insanity and the system. In order to achieve such a fit, the issues we discussed in Chap. 7 should be taken into account. If this is done, insanity is likely to be a valuable component of a fair legal system.

Amidst all the uncertainty that accompanies predictions about the future, there appears to be one thing we can be sure about. Legal insanity will continue to generate debates and controversies and it will continue to be of great importance for a subgroup of defendants, for the fairness of our criminal law system, and for the image of psychiatry, as well as for those suffering from severe mental disorder.

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