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Personality Change, Criminal Responsibility and Diminished Capacity

Free Will and Responsibility

Clearly free will is a prerequisite for moral agency, and for society to run smoothly, we all need to believe that we are in full control of our actions. [...] Is it reasonable, however, to posit that some people are more free than others?¹

The neuroscientifically plausible view that free will is an illusion² runs contrary to the law's assumption that it is, at least normally, appropriate to hold individuals responsible for their actions. Just as Mobbs *et al* argue that "for society to run smoothly, we all need to believe that we are in full control of our actions", so for the law. The law presumes that individuals have free will, that they could choose to act otherwise and hence that it is right to hold them responsible for their actions. The courts operate under the assumption that normally people are in control of their actions. English law³ does acknowledge certain exceptions including insanity, duress, diminished responsibility and loss of self-control.⁴ It also sets an age requirement before attributing criminal responsibility. However, in general the assumption of the law is that people are responsible for and can/should be held to account for their actions.

One need not challenge society's and the law's fundamental belief in free will to question whether there are circumstances where an individual may be more or less free. However, English law operates on a binary divide: individuals are either responsible or they are not. There is generally no gradation. This contrasts, for example, to the approach to criminal offences in the Netherlands where a five-point scale operates in assessing criminal responsibility.⁵ In England gradations of responsibility may be relevant for sentencing following conviction in a criminal trial, but they are generally not relevant to determinations of guilt or innocence.

As science gains a greater understanding of the working of the human brain, society is gaining new and clearer insights into why we behave as we do. It is important that the law keeps abreast of these changes. In England, and much of the common law world, the legal definition of insanity is based on the medico-scientific knowledge of 1843⁶ and the test of unfitness to plead is based on the state of

¹ D. Mobbs *et al* 'Law, Responsibility, and the Brain', *PLoS Biol*, 5(4): e103, 2007
<https://doi.org/10.1371/journal.pbio.0050103>

² For the implications of this for the law see: J. Greene & J. Cohen, 'For the law, neuroscience changes nothing and everything', *Philos Trans R Soc*, Vol. 359, 1451, 2004 pp. 1775-1785. I explore this more fully in P. Catley, 'The Future of Neurolaw', *European Journal of Current Legal Issues*, Vol. 22, No. 2, 2016
<http://webjcli.org/article/view/487/651>

³ Throughout for convenience the term English law will be used to cover the law of England and Wales.

⁴ Insanity and diminished responsibility are discussed later in this chapter. The defence of duress normally applies where a person feels compelled to act through fear of death or personal injury. The loss of control defence was introduced by s54 of the Coroners and Justice Act 2009. It is a partial defence reducing a conviction for murder to one for manslaughter. It replaced the provocation defence.

⁵ In the Netherlands five degrees of responsibility are recognised: complete responsibility, slightly diminished, diminished, severely diminished and total absence of responsibility. See D. Vinkers *et al*, 'The relationship between mental disorders and different types of crime', *Criminal Behaviour and Mental Health*, Vol. 21, No. 5, 2011, pp. 307-320 and L. Claydon, 'Are there lessons to be learned from a more scientific approach to mental condition defences', *International Journal of Law and Psychiatry*, Vol. 35, No. 2, 2012, pp. 88-98

⁶ *Daniel M'Naghten's Case* (1843) 10 Cl & Fin 200

scientific understanding in 1836.⁷ When expert witnesses are called to give evidence on such important issues, the courts should not be asking them to apply tests based on outdated science.

This chapter will explore situations where changes in the brain are associated with changes in personality that are manifested in changes in behaviour. It will focus primarily on situations where that changed behaviour is criminal, but will also touch on other behaviour that has unfortunate implications for the individuals concerned and their friends and families. Before looking at how the criminal law responds and how it should respond to changed personality claimed to arise from changes in the brain, three famous cases of personality change will be examined. These will illustrate some of the possible causes of major personality changes, the issues that may arise and how behaviour may change over time. These lead into an examination of five cases where English courts and tribunals have faced defendants whose behaviour has been significantly altered by brain injury/disease. The limitations of the English criminal law defences of insanity, automatism and diminished responsibility will be explored, as will the Law Commission's proposal for a new defence of not criminally responsible by reason of a recognised medical condition. The chapter will conclude with a plea for a new partial defence based on diminished capacity.

Personality Change: the classic case

Phineas Gage is probably the most famous example of a person's personality being changed by a traumatic head injury. Indeed, he has been described as "neuroscience's most famous patient"⁸ and it has been estimated that his case appears in 60% of introductory psychology textbooks.⁹ Gage was working on the American railroad in 1848 when he suffered his injury. The exact facts of his accident are unclear, but what is well established is that an explosion drove a 3 feet 7 inch, 13¼ pound tamping iron that he was using through his skull and brain. The tamping iron landed many yards away. Gage amazingly survived.

The classic versions of his case emphasise the changes to Gage's character. Kean summarises these accounts neatly: "Gage's frontal lobes got pulped, he transformed from a clean-cut, virtuous foreman into a dirty, scary, sociopathic drifter."¹⁰ Damasio *et al.* write about how Gage:

remained as able-bodied and appeared to be as intelligent as before the accident; he had no impairment of movement or speech; new learning was intact, and neither memory nor intelligence in the conventional sense had been affected. On the other hand, he had become irreverent and capricious. His respect for the social conventions by which he once abided had vanished. His abundant profanity offended those around him. Perhaps most troubling, he had taken leave of his sense of responsibility. He could not be trusted to honor his commitments. His employers had deemed him "the most efficient and capable" man in their "employ" but now had to dismiss him. In the words of his physician, "the equilibrium or balance, so to speak, between his intellectual faculty and animal propensities" had been destroyed.¹¹

These accounts of personality change stem largely from the account of the second doctor to see Gage on the day of his fateful accident. Dr John Harlow wrote about his patient both shortly after

⁷ *R v. Pritchard* (1836) 7 C & P 303

⁸ S. Kean, 'Phineas Gage, Neuroscience's Most Famous Patient', *Slate*, May 6, 2014

⁹ M. Macmillan, 'Restoring Phineas Gage: a 150th retrospective' *J Hist Neuro*, (2000), *Neuro* Apr 9(1) pp. 46-66

¹⁰ Kean *supra* note 8

¹¹ H. Damasio *et al.*, 'The Return of Phineas Gage: Clues About the Brain from The Skull of a Famous Patient.' *Science*, Vol. 264, No. 5162, 1994, pp. 1102-1105, 1102

the accident¹² and twenty years later.¹³ It was Harlow who referred to Gage's friends and acquaintances viewing him as being "no longer Gage."¹⁴

Harlow's later account, informed by examining Gage's skull after death,¹⁵ was that the damage to the frontal parts of the brain caused the changed behaviour.¹⁶ This view was supported by the physiologist David Ferrier ten years later.¹⁷ More than a century later examination of Gage's skull were conducted using modern neuroscientific techniques. It was concluded that the areas of the brain likely to have been affected were "the ventromedial region of both frontal lobes": areas responsible for "rational decision making and the processing of emotion."¹⁸ A later study¹⁹ identified the damage as being focussed on the left frontal cortex. Importantly, this study also looked at the fibre pathways between areas of the brain, concluding that

the impact on measures of network connectedness between directly affected and other brain areas was profound, widespread, and a probable contributor to both the reported acute as well as long-term behavioral changes.²⁰

Personality Change: a modern classic

The short account²¹ by Burns and Swerdlow of a forty-year old American teacher whose behaviour changed markedly has attracted extensive interest from lawyers, ethicists, psychiatrists and psychologists.²² In this case the man started to develop an interest in child pornography, started visiting prostitutes and then began to make sexual advances towards his pre-pubescent step daughter. The step daughter told her mother, the mother reported the matter to the police and the man was convicted of child molestation. He was sentenced to attend a rehabilitation clinic for sex addiction with the threat of jail if he refused or failed to complete the programme successfully. Although he wanted to avoid jail, he could not resist the urge to solicit sexual favours from the staff

¹² J.M. Harlow, 'Passage of an iron rod through the head', *Boston Med Surg J*, Vol. 39, 1848, pp. 389–393.

¹³ J.M. Harlow, 'Recovery from the passage of an iron bar through the head', *Publ Mass Med Soc*, Vol. 2, 1868, 327–347. A copy of this 1868 presentation published in Boston in 1869 is available at:

<https://archive.org/details/66210360R.nlm.nih.gov/page/n3>

¹⁴ *Ibid.* p. 14 of the 1869 publication *supra* n13. For the passage from which Damasio *et al's* quote is largely drawn see pp 13-14 of the 1869 publication. See also K. O'Driscoll & J. P. Leach. "'No longer Gage": an iron bar through the head. Early observations of personality change after injury to the prefrontal cortex' *BMJ (Clinical research ed.)* Vol. 317, 7174, 1998, pp. 1673-1674.

¹⁵ Phineas Gage died in 1860. At Dr Harlow's suggestion, his family disinterred Gage's body and recovered his skull.

¹⁶ Harlow, *supra* note 13, p. 19 of the 1869 publication.

¹⁷ D. Ferrier, 'The Goulstonian Lectures on the localisation of cerebral diseases', *BMJ*. Vol. 1, 1878, pp. 443–447.

¹⁸ Damasio *et al*, p. 1102, *supra* note 11.

¹⁹ J.D. Van Horn *et al* 'Mapping Connectivity Damage in the Case of Phineas Gage', *PLoS ONE*, Vol. 7, No. 5, 2012.

²⁰ *Id.* p.1

²¹ J.M. Burns & R.H. Swerdlow, 'Right Orbitofrontal Tumor with Pedophilia Symptom and Constructional Apraxia Sign', *Arch Neurol*, Vol. 60, 2003, pp. 437-440

²² See for example: N. Farahany 'Law and Behavioural Morality', *Nomos*, Vol. 52, 2012, pp. 115-165; W. Glannon, 'The Limitations and Potential of Neuroimaging in the Criminal Law', *J Ethics*, Vol. 18, Issue 2, 2014, pp. 153–170; O. Goodenough & M. Tucker, 'Law and Cognitive Neuroscience', *Annu. Rev. Law. Soc. Sci.*, 2010, Vol. 6, pp. 61-92; G. Meynen, *Legal Insanity: explorations in Psychiatry, Law and Ethics*, Springer, 2016; and S.J. Morse 'Neuroimaging Evidence in Law: A Plea for Modesty and Relevance' in J. R. Simpson (Ed.) *Neuroimaging in Forensic Psychiatry: From the Clinic to the Courtroom*, Wiley-Blackwell 2012.

and from fellow patients. The evening before he was due to be sentenced to prison, he was taken to hospital complaining of a headache. By this stage he was also walking with a wide gait and appeared unconcerned when he urinated on himself. When tested he was unable to write a legible sentence or draw a clock face, but his verbal and memory skills seemed unaffected. He was found to have a large brain tumour; when this was resected, he was able to walk normally and recovered control of his bladder. He was sent back and completed the treatment course. Seven months later he returned to live with his wife and step daughter. About three months after returning home he started secretly collecting pornography once more, three months later he complained of severe headaches and was readmitted to hospital where it was found that the tumour had regrown. The tumour was removed and his behaviour reverted to what it had been originally. It is very hard to argue that there was no correlation between the tumour and his behaviour. Burns and Swerdlow comment that:

The orbitofrontal cortex is involved in the regulation of social behavior. Lesions acquired very early in life impede social- and moral-knowledge acquisition, which may result in poor judgment, reduced impulse control and sociopathy. A similar acquired sociopathy occurs with adult-onset damage, but previously established moral development is preserved. Nevertheless, poor impulse regulation leads to bad judgment and sociopathic behaviour.²³

They conclude that “Our patient could not refrain from acting on his pedophilia despite the awareness that this behaviour was inappropriate.”²⁴

Looking back to the initial quote from Mobbs *et al*, the tumour patient we have just been considering would certainly seem to fall within the class of people who, in terms of controlling their behaviour, are less free than others.

Linking brain injuries with criminality

Charles Whitman was another individual with a brain tumour. Whitman’s tumour was found to be in the region of the amygdala – an area of the brain involved *inter alia* with emotion regulation, damage to the area potentially leading the person to act without worrying about the consequences.²⁵ Whitman first killed his wife and his mother then went to the University of Texas in Austin and from the university tower shot 16 people dead and wounded a further 32.²⁶ The Travis County Grand Jury concluded that the tumour “undoubtedly caused him much pain and possibly contributed to his insane actions.”²⁷

A subsequent investigation into the killings noted that ‘abnormal aggressive behavior may be a manifestation of organic brain disease.’²⁸ However, the investigation concluded that “the application of existing knowledge of organic brain function does not enable us to explain the actions of

²³ Burns & Swerdlow, *supra* note 21, pp. 438-439.

²⁴ *Id.*, p. 440.

²⁵ K.J. Reddy, K.R. Menon & U.G. Hunjan, ‘Neurobiological Aspects of Violent and Criminal Behaviour: Deficits in Frontal Lobe Function and Neurotransmitter’, *International Journal of Criminal Justice Sciences*, Vol. 13, No.1, pp. 44-54.

²⁶ J.M. Blomberg *et al*, ‘Report to the Governor, Medical Aspects, Charles J Whitman Catastrophe’, September 8, 1966. p. 5 of the Findings and Recommendations available at: <http://alt.cimedia.com/statesman/specialreports/whitman/findings.pdf>

²⁷ The News and Courier, ‘Jury Blames Tumor For Killings’. August 5, 1966. p. 9 available at: [https://archive.is/20130124173937/http://news.google.com/newspapers?id=6FIJAAAAI BAJ&pg=804,861969&dq/](https://archive.is/20130124173937/http://news.google.com/newspapers?id=6FIJAAAAIBAJ&sjid=KQoNAAAAI BAJ&pg=804,861969&dq/)

²⁸ Blomberg *et al*, *supra* note 26, p. 8

Whitman".²⁹ That was 1966. Whitman never stood trial, so the courts never had to determine the cause(s) of his actions. He had been shot dead in the Texas University Tower by a police marksman. In a note left after he killed his mother, Whitman had written:

I do not really understand myself these days. I am supposed to be an average reasonable and intelligent young man. However, lately (I cannot recall when it started) I have been a victim of many unusual and irrational thoughts. These thoughts constantly recur, and it requires a tremendous mental effort to concentrate on useful and progressive tasks.

In the note Whitman went on to talk about his 'overwhelming violent impulses' and how he had been 'fighting my mental turmoil alone, and seemingly to no avail.' He mentions 'tremendous headaches' and linked to these headaches made a plea that: 'After my death I wish that an autopsy would be performed on me to see if there is any visible physical disorder.'³⁰ There was an autopsy. It was this autopsy that discovered the tumour. The findings were examined in depth. The initial investigation was conducted by a pathologist.³¹ He dismissed the possibility of a link between the tumour and the killings, but his evidence failed to persuade the Grand Jury. The second investigation involved 32 experts drawn from a wide range of disciplines including neuropathology, mental health, psychiatry, forensic pathology, psychology, functional behavioural problems, psychopathy and at least four tumour specialists.³² This second investigation was the one that concluded that whilst 'abnormal aggressive behavior may be a manifestation of organic brain disease' existing knowledge as to how the brain works was not sufficient to explain whether the tumour caused Whitman to act as he did.

In the three cases just examined the courts did not have to determine responsibility for the behaviour. Whilst Phineas Gage's behaviour was viewed as problematic and led *inter alia* to his employer dispensing with his services, it was not criminal. The 40-year old step father did not argue at trial that the tumour caused his behaviour because at the time of his trial he did not know that he had a brain tumour.³³ Charles Whitman did not stand trial, as he had been shot dead. Although a Grand Jury was called to look into the shootings and a team of experts reported to the Governor on the cause of the shootings, there was no investigation as to Whitman's criminal responsibility for his acts. The next section will examine a couple of English cases where criminal (and civil) responsibility has been an issue following acts which were claimed only to have occurred because of personality changing events.

Personality change and responsibility: two contrasting cases

Christopher Meah suffered severe head injuries when the car in which he was a rear seat passenger hit a tree. His brain injuries were likened 'to the sort of damage which could be caused deliberately in the course of carrying out a leucotomy'.³⁴ Kerrie Gray was a passenger on a small train which collided with a larger high-speed train. In the accident 31 people were killed and over 500 were

²⁹ Id.

³⁰ All quotes from the first page of letter written by Charles Whitman on 31st July 1966, shortly after he had killed his wife and his mother; but before he went to the University of Texas and commenced his shooting spree. The letter is available at <http://alt.cimedia.com/statesman/specialreports/whitman/letter.pdf>

³¹ Dr Colomon de Chenar.

³² The list of experts and their specialisms is on pages 1 – 4 of the report *supra* note 26.

³³ Burns & Swerdlow's account (*supra* note 21) does not include the court's reasons for sending him back to the rehabilitation course. Presumably the court considered the tumour relevant in deciding to send him back to the rehabilitation course, rather than sentencing him to imprisonment.

³⁴ *Meah v. McCreamer* [1985] 1 All ER 367 p. 380

injured.³⁵ Gray suffered only minor physical injuries, but suffered post-traumatic stress disorder (PTSD) and depression as a result of the accident. The personalities of both Meah and Gray changed after their respective accidents. Both Meah and Gray went on to commit criminal offences which expert witnesses said they would not have committed but for their accident. There the similarities end.

Before his accident Christopher Meah had committed a string of criminal offences. However, these were of a different type and seriousness to those he committed later. His early criminal history involved theft, driving offences, house breaking, burglary and one offence of assaulting a police officer. Additionally, his medical record identified a number of fights in which he had been involved and in which he had sustained injuries.³⁶ He also admitted that he had been using drugs for the three years prior to the accident and was typically drinking 15 – 20 pints of beer plus spirits each week. Meah had not done well at school and perhaps given what has just been outlined it was unsurprising that he had not managed to keep any job for long, and had spent significant periods out of work.³⁷

Gray, on the other hand, had pursued a law-abiding life. Prior to the train crash, he was employed by a local authority and he was in a long-term relationship. His life was described by one judge as ‘relatively uneventful’;³⁸ it certainly did not indicate that he was likely to go on to commit a very serious criminal offence. Following the accident, Gray

became withdrawn, was liable to angry outbursts and shunned physical contact – which naturally put a strain on his relationship with his partner. He began drinking heavily. [...] his attendance [at work] became irregular, due to various manifestations of PTSD. He changed jobs. [...] he found coping with work increasingly difficult.³⁹

22 months after the accident Gray was driving when a drunk stumbled into the road causing Gray to brake. The drunk then punched the windows of Gray’s car. Gray got out. He later said that he was reminded of the rail crash.⁴⁰ There was a scuffle between Gray and the drunk which was broken up by passers-by. Gray then drove to the home of his girlfriend’s parents, got a knife and drove back to look for the drunk. He found him and killed him by stabbing him several times.

Gray was charged with murder. Two experts, one for the defence and one for the prosecution, both agreed that at the time of the killing Gray was suffering from PTSD. Gray’s plea of guilty to manslaughter on the grounds of diminished responsibility was accepted by the prosecution. He was sentenced to an indefinite hospital detention order.⁴¹

As Lord Brown said later in the House of Lords:

I have the greatest sympathy for this Respondent. Truly his life has been a tragedy. For forty years a decent and law-abiding citizen, now, consequent on severe psychological trauma sustained in the Ladbroke Grove rail crash, subject to hospital and restraint orders following conviction for

³⁵ *Gray v. Thames Trains and others* [2009] UKHL 33 [20] – [21]

³⁶ In most of these fights Meah appears to have been the victim. However, in at least one he was the aggressor. In this fight he was provoked by someone who was the other side of a plate glass window. He attempted to head butt the person through the window and as a result cut his own head.

³⁷ For fuller details of Meah’s life before the accident see Woolf J’s judgment *supra* note 34 particularly pp. 373-374.

³⁸ *Gray v. Thames Trains and others* *supra* note 35 per Lord Hoffman [21]

³⁹ *Id.* Lord Hoffman [57]

⁴⁰ *Gray v. Thames Trains and another* [2008] EWCA Civ 713 [7]

⁴¹ Pursuant to sections 37 and 41 of the Mental Health Act 1983

manslaughter. But for his injuries it is inconceivable that the Respondent would ever have killed anyone.⁴²

Christopher Meah elicited less sympathy, and was treated more harshly by the criminal law. As noted earlier, Meah had not been a decent, law abiding member of society prior to the car crash in which he sustained severe head injuries. The accident did however change him. His former wife and his subsequent girlfriend, with whom he had a child, both noted a 'very marked change in his behaviour'.⁴³ He became more aggressive, more sexually demanding and more callous.

Three and a half years after the car crash Meah sexually assaulted and maliciously wounded a woman. The same day he sexually assaulted another woman. Seven months later, whilst on bail in respect of the first two offences, Meah raped and maliciously wounded a third woman. For these offences he was sentenced to life imprisonment – the maximum sentence available to the court.

Four expert witnesses called to give evidence at a subsequent civil trial⁴⁴ all agreed that Meah's personality had altered as a result of the head injuries sustained in the car crash. However, they were divided when it came to the question as to whether or not the brain damage could be said to have caused the offending behaviour.

Summarising Dr Roberts' evidence with regard to the injuries suffered by Meah, Woolf J. said that Dr Roberts

had no doubt head injuries of this kind can make persons more aggressive and more psychopathic, and he was not prepared to say that the injury played no part at all. He agreed that the injury could have had a disinhibiting effect and he said he was quite prepared to accept that the behaviour of the plaintiff had changed after the accident. It did, however, remain his view that you could not, on the balance of probabilities, relate the attacks to the injury and say but for the injuries the attacks would not have occurred.⁴⁵

Dr Leigh initially thought the time lapse between the accident and the offences was critical.⁴⁶ However, under cross-examination and in light of the evidence of Meah's former partners he accepted that if their accounts were accurate it was 'more likely that the accident was connected with the attacks.'⁴⁷

The other two experts believed that Meah would not have committed the offences had he not suffered the head injury. Dr Noble stated of Meah that: 'He is just the sort of person who is likely to react very badly to frontal damage and in particular to display abnormal sexual behaviour, aggressiveness or antisocial conduct.'⁴⁸ In Dr Noble's view the injury removed the inhibitions which would otherwise have restrained Meah's conduct. Hence the brain damage could be said to be

⁴² *Gray v. Thames Trains and others* supra note 35 per Lord Brown [89]

⁴³ *Meah v. McCremer*, supra note 34, p. 375

⁴⁴ Meah brought a civil action for damages against the insurers of the car in which he had had been travelling. He sought damages for not just pain and suffering and loss of earnings, but also for being imprisoned for crimes which he would not have committed, but for the accident. Meah was successful in his action. Subsequent caselaw has upheld the principle that a claimant cannot profit from his own wrongdoing - *ex turpi causa non oritur actio* – so future similar civil actions for compensation for committing a crime would be very unlikely to succeed.

⁴⁵ *Meah v. McCremer*, supra note 34, p. 381

⁴⁶ In his report he had stated: 'The fact that 3.5 years had gone by before Mr Meah was involved in this serious anti-social behaviour ... suggests that the frontal lobe damage, itself, was not responsible for this serious anti-social behaviour.' *Meah v. McCremer*, supra note 34, p. 382

⁴⁷ *Id.*

⁴⁸ *Id.* p. 380

responsible for his actions. Dr Gooddy was similarly persuaded that on the balance of probabilities the offence would not have occurred but for the brain damage sustained in the car crash. Dr Gooddy described Meah as a psychopath and in relation to the injury he had suffered he said that he was 'the worst possible person to sustain an injury of this kind' as the lack of inhibition arising from the effects of the injury exaggerated his tendencies and made him more likely to put them into effect.⁴⁹

If we refer back again to the initial quote from Mobbs *et al*, Meah is clearly in less control of his actions following the accident than he was prior to the accident. The same is true of Gray. However, Gray had a partial defence. Following the acceptance of Gray's plea of diminished responsibility, the trial judge chose a sentence which reflected the fact that he might respond better to treatment in hospital rather than detention in prison. Meah was not treated in the same manner. He was sentenced to life imprisonment and detained as a Category A prisoner – a designation reserved for the most dangerous prisoners. Arguably, given the extreme seriousness of his offences and his dangerous disinhibited violent behaviour this was appropriate; yet possibly it did not reflect his blameworthiness. Meah was not able to claim diminished responsibility as the partial defence only applies to a charge of murder. He was not insane, he knew the nature and quality of his acts and he knew that what he did was legally wrong.⁵⁰ He was also probably not treatable; as Dr Gooddy said 'He will never be the same man again'.⁵¹ Meah illustrates a problem for the law: the person who because of a brain injury is less blameworthy, but more dangerous.

Three more English cases

Graham Worrall worked for British Rail as a technician. According to Worrall's account, whilst working for the railway he suffered a severe electric shock which rendered him unconscious for over half an hour, he was then treated in hospital for shock and burns. Worrall claimed that the shock changed his personality. Almost exactly two years after the incident, Worrall committed a serious sexual offence against a prostitute. Nine months later he committed a similar offence against another prostitute. He was convicted and sentenced to six years imprisonment for the two offences. At a subsequent trial⁵² medical evidence was provided; this was summarised in the statement of claim:

As will appear from the medical reports the plaintiff suffered serious psychological effects and/or neurological damage and by reason of the same his personality changed so that he committed criminal offences and was in prison for six years ... for two offences of buggery committed against working prostitutes in 1986. The criminal behaviour was caused by the plaintiff's injuries and their secondary psychological and psychiatric effects.⁵³

At trial Worrall had not argued that his criminal behaviour had been caused by the accident.⁵⁴ However, as with Meah, even if the causal link had been accepted it is hard to see how under the

⁴⁹ Id. p. 381

⁵⁰ Infra note 79 and accompanying text

⁵¹ *Meah v. McCremer*, supra note 34, p. 380

⁵² *Worrall v. British Railways Board* (unreported) All England Official Transcripts (1997-2008) (judgment 29th April 1999). In this case Worrall sued his former employers for loss of earnings and pension rights arising from their negligence. The British Railways Board had dismissed Worrall when he was sentenced to imprisonment. The Board accepted that they had been negligent, but disputed the extent of his injuries and argued (successfully) that for public policy reasons (see supra note 44) that they were not liable to compensate Worrall for losses that had arisen as a result of his criminal acts.

⁵³ Id.

⁵⁴ At trial Worrall had argued that he had not committed the offences and had presented alibi evidence that he was elsewhere. This was not believed by the jury.

current law it would have affected the determination of guilt. As it was not a murder charge the partial defence of diminished responsibility was not available to him. Additionally, there was no suggestion that he was unfit to plead and no suggestion that he was insane. If his argument was accepted then it might possibly have affected sentence, but again as with Meah, the effect might simply have led to him being viewed by the sentencing judge as more dangerous – therefore potentially leading to a longer sentence on the basis that the public needed to be protected from such a dangerous offender.

Derek Chisnall was a successful solicitor until he fell from his horse. It was a serious accident. He stopped breathing and had to be resuscitated. He suffered cerebral damage and his personality changed. Nevertheless, Chisnall continued in practice. However, he found it difficult to manage his large practice. He failed to file accounts, withdrew money from client's accounts and used it for his own purposes. The shortfall in client accounts amounted to at least £697,600. The Solicitors Disciplinary Tribunal referred to a psychiatric report that found:

because of his disturbed emotional state and impaired executive functions (reasoning, judgment, memory and concentration), the respondent had been unable to carry out the tasks entrusted to him by his clients to the best of his ability; such indolent behaviour and lack of concern in an otherwise diligent and reliable person was undoubtedly the consequence of brain damage.⁵⁵

Normally a solicitor who had acted as Derek Chisnall had acted would have been struck off. However, the Tribunal took the view that this was an exceptional case. They accepted that he was liable for what he had done, but emphasised that this was not the same as being culpable. Chisnall's psychiatric report had said that it was difficult to give a prognosis as to recovery. In his particular case they decided to spare him the "ignominy" of being struck off, but in order to protect the public they decided that he should be suspended for life, but with the express provision that the suspension might be brought to an end if he was shown once more to be fit to practice. Whilst not a determination of criminal responsibility, the approach of the Solicitors Disciplinary Tribunal is interesting for the sympathetic manner in which the case was assessed and the way the outcome could be altered if Chisnall recovered.

Trevor Hayes was a criminal with a brain tumour. Prior to October 2010 he had committed a number of relatively minor crimes of dishonesty: theft, fraud, deception as well as a number of motoring offences. He had one conviction for violence, actual bodily harm, for which he had been fined. In October 2010 his style of offending changed. Between October 2010 and January 2011, he committed four firearms offences,⁵⁶ three robberies and one offence of arson. He pleaded guilty and was sentenced to an indeterminate sentence of imprisonment for public protection (IPP)⁵⁷ coupled with a sentence of 15 years imprisonment. IPPs were introduced to protect the public from serious offenders whose crimes did not merit a life sentence. Prisoners subject to IPPs have to first complete their tariff sentence, in Hayes' case 15 years, then become eligible to apply for release. They will only be released if the Parole Board is satisfied that their continued detention is no longer necessary in order to protect the public. If released a former IPP prisoner will be on supervised licence for at least 10 years. IPPs proved very contentious and following a review were abolished in 2012.⁵⁸ However,

⁵⁵ P. Niekerk, 'Solicitors Disciplinary Tribunal – Re Derek John Arthur Chisnall (decision 4525)' 1990 *LS Gaz*, 6 Jun, 87, (48)

⁵⁶ Two offences of possession of a firearm with intent to cause fear of violence and two offences of having a firearm with intent to commit an indictable offence (robbery).

⁵⁷ IPP stands for Imprisonment for Public Protection. IPPs were introduced in 2005 pursuant to the Criminal Justice Act 2003.

⁵⁸ Legal Aid, Sentencing and Punishment of Offenders Act 2012 s.123

abolition was not retrospective, so prisoners already subject to such sentences remained subject to them.

Hayes' tumour was only discovered after he had been convicted and sentenced. His tumour was described as having grown to "enormous size".⁵⁹

The MRI scan prior to operation confirmed the presence of a large tumour compressing the brain and stretching from the middle of the frontal lobe into the parietal lobe. It had eroded the vault of the skull and was seen to be protruding through the skull plate itself.⁶⁰

Hayes appealed against his sentence. There was evidence that his later offending behaviour was out of character; his original pre-sentence report had noted that the escalation in his offending behaviour had been 'wholly unexpected by those who had been supervising him in the community.'⁶¹ There was also evidence that some of Hayes' behaviour whilst preparing for and committing the offences was odd. He wore the same high visibility jacket whilst committing all the serious offences in the three-month period. He had visited the bank where he committed an armed robbery several times in the week preceding the offence. He wore a balaclava when committing all the offences, but, when robbing the bank, he took it off despite the presence of CCTV cameras. He pointed a sawn-off shotgun at a man and demanded the keys to the man's van, but when given the keys he then returned them. His previous lower level offending had not been marked by such eccentric actions.

Dr Fenwick, a consultant neuropsychiatrist, gave evidence at Hayes' appeal that:

There is medical evidence that Mr Hayes has had a meningioma which has been growing for at least the last ten years. This tumour reached an unusually large size and will certainly have compromised his cognitive functioning and his mental states. There is little doubt that he had an abnormality of mind at the time of the offences in 2010 and that this abnormality of mind significantly impaired his judgment, his understanding and his insight into his own behaviour. He had never used a gun before or employed threatening behaviour. These, together with the impulsiveness, the other features of these crimes, discussed above, and the personality changes noticed by those close to him, would suggest that the tumour had a significant effect on his behaviour and mental state ... Although it is never possible to be 100% certain, I do feel that the characteristics of the offences point to the abnormal mental state which had developed due to his tumour, and in consequence, had there been no tumour he would not have behaved in the way that he did. I would have expected him to continue with his previous career of petty thieving ... but not to embark on the use of firearms and direct personal threats of violence."⁶²

The operation to remove the tumour was only partially successful; not all of it was removed and it was considered very likely that it would regrow. However, the evidence from the medical staff and prison officers indicated that he 'showed no evidence of aggressive or impulsive outbursts, and nothing to suggest he would again be a danger to the public.'⁶³ The Court of Appeal was satisfied by Dr. Fenwick's evidence that, following the removal of the tumour, Hayes no longer presented a risk of serious harm to the public and that therefore 'in these highly exceptional circumstances'⁶⁴ the IPP

⁵⁹ *R v. Trevor Raymond Hayes* [2013] EWCA Crim 897 [23]

⁶⁰ *Id.*

⁶¹ *Id.* [15]

⁶² *Id.* [26]

⁶³ *Id.* – quoted from Dr Fenwick's report.

⁶⁴ *Id.* [30]

should be set aside. Additionally, the minimum sentence was reduced from 15 years to 11 years because of the tumour evidence.

Interim conclusions from the English cases

English courts and tribunals have been ready to accept that behaviour may change as a result of brain injury,⁶⁵ brain disease⁶⁶ or even the effect of traumatic events on brain functioning⁶⁷. They have also accepted that brain injury and brain disease can affect responsibility⁶⁸ and future risk.⁶⁹ Expert evidence has been accepted pointing to reduced impulse control,⁷⁰ aggressive behaviour⁷¹ and poor judgment.⁷²

In the cases there has been a need to show changed behaviour. In Meah's case this was not just the offences, but also the evidence of his post-injury callous behaviour towards his sexual partners. In Gray's case there was evidence of his work and relationship problems. Trevor Hayes was able to introduce evidence that not only was his behaviour whilst committing his later offences bizarre, but in addition after most of the tumour was removed his behaviour was not perceived as presenting a danger to the public. In addition to the evidence of behaviour there was expert evidence that injury had been suffered and that the behavioural change could be linked to that injury. The experts were in agreement in Gray's case, but there was some division in the case of Meah.

The ability of English courts and tribunals to handle the evidence of personality change is interesting and shows a variety of approaches. In Gray's case it led to the prosecution accepting a plea of guilty to a lesser charge and the imposition of a sentence aimed more at rehabilitation than punishment, but still with a clear focus on public protection. In Chisnall's case the approach could be seen to be similar. The tribunal protected society by stopping Chisnall from practicing as a solicitor, but held open the possibility that, if he recovered, he could be allowed to return to practice. Evidence of Hayes' tumour and the impact it had on his behaviour led to a reduced sentence. The removal of the indeterminate element of his sentence could be seen as significant, but the reduction of the tariff sentence from 15 years to 11 years could be seen as a relatively marginal reduction. If one sees criminal sentencing as primarily linked to the offence, then this reduction might seem unwarranted. If one sees it as linked to the blameworthiness of the behaviour then the four-year reduction may seem insufficient. The criminal court that sentenced Meah saw a very dangerous violent offender with little in the way of impulse control and sentenced him to the maximum available sentence. In Worrall's case, the defendant did not claim at his criminal trial that his criminal behaviour had been caused by the neurological damage and psychological effects which had changed his personality. He instead claimed not to have carried out the attacks and to have been elsewhere at the time. We can

⁶⁵ E.g. Christopher Meah and Derek Chisnall

⁶⁶ E.g. Trevor Hayes

⁶⁷ E.g. Kerrie Gray

⁶⁸ Kerrie Gray's plea of diminished responsibility was accepted. Derek Chisnall's liability for breaches of the Solicitor's Rules was explicitly differentiated from his culpability for his acts.

⁶⁹ Christopher Meah's brain injury made him more dangerous. Trevor Hayes' brain tumour was linked to his more violent behaviour, but the partially successful treatment of his tumour together with his subsequent behaviour led to him being viewed as less dangerous.

⁷⁰ E.g. Christopher Meah and Kerrie Gray

⁷¹ E.g. Christopher Meah, Kerrie Gray and Trevor Hayes

⁷² E.g. Christopher Meah, Kerrie Gray, Derek Chisnall and Trevor Hayes.

surmise why he did not advance the personality-change-based arguments, but we cannot know the reason.⁷³

Inadequacy of English law

As a result of brain injury, brain disease or psychological changes following traumatic events some people are less able to control their behaviour. This can lead to their coming before the criminal courts. The defence of diminished responsibility could potentially apply to many of the cases we have been considering, except that it is limited to murder.⁷⁴ The lack of a general partial defence akin to the partial defence of diminished responsibility is a serious lacuna that should be remedied. As the following discussion will show, automatism and insanity do not fill the gap.

Automatism

From a defendant's perspective, automatism⁷⁵ is the more attractive mental condition defence as it leads to acquittal: an accused who succeeds with a plea of automatism walks free from court. However, automatism must be from an external cause.⁷⁶ In *Charlson* the accused who was suffering from a brain tumour succeeded in a claim of automatism; however subsequent case law means this decision is unlikely to be followed.⁷⁷ PTSD on the other hand might, depending on the facts, be

⁷³ Perhaps he thought he had a better chance of acquittal if he claimed to have been elsewhere. Perhaps he genuinely was elsewhere and his conviction was a miscarriage of justice. Perhaps the neurological damage and psychological damage affected his memory. Perhaps he didn't really believe in the personality-change argument, but only later brought it up to pursue an action for negligence against his former employer. Or perhaps he realised from the precedent of *Meah* that in determinations of guilt for crimes other than murder evidence of brain-injury-induced criminal behaviour offers no defence and can lead courts to focus on the perceived dangerousness of the offender and the risk of reoffending.

⁷⁴ The reason why it exists as a defence for murder is the mandatory life sentence that applies under English law for those convicted of murder. The defence of diminished responsibility is only a partial defence: it reduces a conviction for murder to one for manslaughter. Whilst the maximum sentence for manslaughter is life imprisonment, this is not a mandatory sentence. The courts have the discretion to impose a more appropriate sentence. Arguably this means that for other offences where there is discretion as to sentence there is no need for a defence along the lines of the diminished responsibility defence. However, diminished responsibility has two further advantages. Firstly, in terms of fair labelling of criminal behaviour – the offender who successfully pleads diminished responsibility is not labelled a murderer. Secondly, and perhaps most importantly, the defence will, if the plea is not accepted by the prosecution, be tested in court.

⁷⁵ Automatism in this context is being differentiated from insane automatism. A finding of insane automatism leads to the same disposal options as the special verdict of not guilty by reason of insanity. Automatism is also sometimes referred to as non-insane automatism or sane automatism to differentiate it more clearly from insane automatism.

⁷⁶ English law distinguishes internal causes leading to a finding of insane automatism (insanity) and external causes leading to a finding of automatism. This leads to the strange result that an accused who commits a crime having taken insulin and suffering a hypoglycaemic episode will be acquitted, unless fault attaches to the taking of the insulin. An accused who commits a crime having failed to take insulin and then suffered a hyperglycaemic episode will be found to be insane.

⁷⁷ In *R v. Charlson* [1955] 1 WLR 317, Charlson was suffering from a cerebral tumour which led him to act 'as an automaton without any real knowledge of what he was doing'. He succeeded in his defence of automatism. However, in *R v. Kemp* Kemp who was suffering from arteriosclerosis which had caused a congestion of blood on the brain was found to be suffering from a 'disease of the mind'. Devlin J. held 'In my judgment the condition of the brain is irrelevant and so is the question of whether the condition of the mind is curable or incurable, transitory or permanent.' [1957] 1 QB 399 at 407. The issue came before the House of Lords in *Bratty v. Attorney General for Northern Ireland* where Lord Denning approved *Kemp* and stated that 'it seems to me that any mental disorder which has manifested itself in violence and is prone to recur is a disease of the mind. At any rate it is the sort of disease for which a person should be detained in

viewed, as automatism.⁷⁸ However, the authority for this proposition, *R v. T* is not the decision of an appellate court and therefore in the English system of precedent is less significant. Additionally, the cause of the PTSD in *R v. T* had happened only three days prior to the defendant's criminal act – a very different scenario than that in *Gray*, where a year had elapsed between the train crash and Gray stabbing to death the person who had stepped in front of his car. Whilst an automatism verdict might be attractive to the defendant, it is worrying from the perspective of public protection. If a person, who acts violently or in some other criminal manner because of for example PTSD or a brain tumour, is able to plead automatism successfully and as a result walks free, then the public are not protected. It may be appropriate to view the defendant as having been less blameworthy, but the needs of society at large also require consideration.

Insanity

The defence of insanity might appear a likely defence for those representing defendants with abnormal brain functioning of the kinds we have been considering in this chapter. However, the defence as developed through caselaw is unlikely to apply to many such defendants. The test of insanity as applied in the English courts dates back to 1843:

to establish a defence on the ground of insanity, it must be clearly proved that, at the time of the committing of the act, the party accused was labouring 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 he was doing what was wrong.⁷⁹

The elements of this test likely to present the greatest difficulty to defendants such as those we have been considering are those found in the final part. The first element – the 'defect of reason' – potentially applies in all the cases we have examined. The head injuries, brain tumours and PTSD all led to defective reasoning in the form of poor judgment, aggressive reactions and impulsiveness. The archaic term 'disease of the mind' has been interpreted by the courts widely. Brain tumours almost certainly fall within the phrase.⁸⁰ Whether brain injuries and psychological responses to traumatic events fit neatly within its ambit is more problematic. PTSD is a psychological state rather than a disease.⁸¹ Personality-changing brain injuries, such as those suffered by Meah, would similarly not normally be labelled by the medical profession as diseases of the mind or even the brain. However,

hospital rather than given an unqualified acquittal.' per Lord Denning *Bratty v. Attorney General for Northern Ireland* [1963] AC 386 p. 412.

In the Law Commission's 2013 Discussion Paper *Criminal Liability: Insanity and Automatism* they noted that Charlson should under the current law not have succeeded on the basis of sane automatism, but should have been found to be insane (p. 93).

⁷⁸ In *R v. T* [1990] Crim LR 256 a defendant who committed a robbery whilst suffering from PTSD as a result of having been raped was able to claim sane automatism. Similarly, though not an automatism case, in *R v. Huckerby* a security guard who was convicted of conspiracy to rob was allowed an appeal because he had not been able to show expert evidence that could have supported his contention that his PTSD, depression and acute stress disorder explained his failure to activate the alarm and a tracking device.

⁷⁹ *Daniel M'Naghten's Case* (1843) 10 Cl & Fin 200. It is taken from the guidance given by the senior judges to Parliament (the House of Lords) following the finding that Daniel M'Naghten was 'not guilty being insane' of the murder of Edward Drummond. Drummond was the Prime Minister Sir Robert Peel's Private Secretary and the killing was generally viewed as an attempt to kill the Prime Minister. Lord Tindal CJ responded on behalf of the majority of the senior judges and explained the common law defence of insanity. The quotation comes from Lord Tindal's explanation.

⁸⁰ Though note the earlier discussion of *R v Charlson* supra n.76 where a brain tumour led to a successful plea of automatism.

⁸¹ As noted above supra n.77 PTSD has in one reported case led to a finding of automatism.

both fall within the ambit set out by Lord Denning in the House of Lords in *Bratty v. Attorney General for Northern Ireland* 'that any mental disorder which has manifested itself in violence and is prone to recur is a disease of the mind.'⁸² This very wide definition would include Meah's head injury, Gray's PTSD and Hayes' tumour.

However, the final alternative limbs of needing to show that as a result the defendant either did not 'know the nature and quality' of the act or did not know what was being done was legally wrong⁸³ would appear to rule out all our examples. The American teacher described by Burns and Swerdlow appears to have known what he was doing when he made sexual advances towards his step daughter. Trevor Hayes appears to have known what he was doing, even though he behaved oddly while committing his offences. The same applies in the other criminal cases. Possibly by the time the American teacher was making sexual approaches to staff and people on the course he had ceased to know what he was doing, but his more general knowledge that what he was doing was wrong does not seem to have been eradicated.⁸⁴ Even Charles Whitman, whose actions were described as 'insane' by the Travis County Grand Jury, would not seem to satisfy the requirements of the English insanity defence as he appears to have known what he was doing and known that it was legally wrong.

Other defences

There are other general defences which some defendants might be able to use, but these commonly will not apply in the sort of cases we have been considering. For example, a defendant fearing a violent attack can act in self-defence, even if the belief of imminent attack is mistaken and unreasonable. Possibly a brain condition might lead to a defendant holding an honest, but mistaken and unreasonable belief either about the threat and/or the level of violent defence that was reasonable in the circumstances. There is guidance from the Ministry of Justice that indicates that self-defence is to be judged subjectively.⁸⁵ However, in *R v. Martin* the Court of Appeal indicated that in assessing self-defence the court could take into account physical characteristics, but should only take into account psychiatric characteristics in exceptional circumstances.^{86 87}

⁸² *Attorney General for Northern Ireland v. Bratty* supra note 77 p. 412.

⁸³ In *R v. Windle* [1952] 2 QB 826 it was held that the term 'wrong' in the *M'Naghten* test meant 'legally wrong' rather than for example morally wrong.

⁸⁴ Burns & Swerdlow note that when on the training programme: "Our patient could not refrain from acting on his pedophilia despite the awareness that this behaviour was inappropriate." Supra note 21 p. 440

⁸⁵ Ministry of Justice Circular 2010/13 para 25 relates to the test in the loss of control defence and states that: "in common with the complete defence of self-defence, this is a subjective test. The defendant does not need to prove that his or her fear was reasonable; the jury need only be convinced that the fear was genuine." The loss of control defence was introduced by the Coroners and Justice Act 2009 (supra note 4). The new defence replaced the provocation defence and like diminished responsibility has the effect, if successfully pleaded, of reducing murder to manslaughter.

⁸⁶ "We would accept that the jury are entitled to take into account in relation to self-defence the physical characteristics of the defendant. However, we would not agree that it is appropriate, except in exceptional circumstances which would make the evidence especially probative, in deciding whether excessive force has been used to take into account whether the defendant is suffering from some psychiatric condition." *R v. Martin (Anthony)* [2001] EWCA Crim 2245 [67]. In Martin's appeal there was also discussion as to whether psychiatric evidence could be relevant to the question of whether he honestly believed that he needed to defend himself [68] – [74], but on the facts the Court of Appeal considered that the question of Martin's honest belief had already been fully explored at trial.

⁸⁷ Arguably a brain tumour or a brain injury might be seen as physical, whereas PTSD might be seen as psychiatric.

Towards a better approach

Is the medical condition linked to the behaviour?

In framing the law, one should differentiate between defendants who have a medical condition which is linked to their criminal behaviour and those whose medical condition is not linked. In the case of Kerrie Gray the expert witnesses were agreed that he would not have killed had he not suffered PTSD. In Christopher Meah's case the experts were not all in agreement, but the judge found the expert evidence that he would not have committed the crimes but for his head injury more persuasive. The disciplinary tribunal in Derek Chisnall's case were persuaded that his misuse of client money would not have arisen but for the head injury sustained when he fell from his horse.⁸⁸ In these three cases there was evidence not just that the individual was suffering from a medical condition which could lead to the sort of behaviour that had been shown by the defendant, but also that in other ways the individual's behaviour had changed.

Was the medical condition an operative factor at the time of the act?

In Whitman's case the Governor's expert panel, whilst acknowledging that organic brain disease could lead to abnormal aggressive behaviour, was unable to determine definitively whether the tumour explained the killings. The argument that it might have been in his case, was however, arguably stronger than in the case of Graham Worrall. Whitman definitely had a tumour, he had suspected that there might be something wrong with him and wrote of his concerns about 'the overwhelming violent urges'⁸⁹ that he could not explain or understand. Worrall, on the other hand, claimed to have been knocked unconscious for 30 minutes by a severe electric shock and that subsequently as a result of his injuries he had to take time off work, but the evidence from the hospital which he attended⁹⁰ and the evidence of his employer⁹¹ did not support his account. In framing the law, the aim should be to determine whether the medical condition was a factor at the time of the offence.

What part did other factors play?

There may be other factors at play which could offer alternative explanations. It was noted that Derek Chisnall had been drinking more following his accident. Kerrie Gray had similarly been drinking more and had consumed alcohol on the night on which he committed his crime. It was also reported that he had recently split up from his girlfriend.⁹² The victims of the first two attacks by Christopher Meah reported that at the time of the offences Meah appeared high on drink or drugs.⁹³ However, these alternative explanations may be linked to the medical condition and/or might not have been causally linked to the offence. Derek Chisnall's drinking could have been exacerbated by the problems he found in maintaining his solicitor's practice, just as the problems of managing his practice could have been exacerbated by the drinking. His head injury may have adversely affected

⁸⁸ In the other cases this was not an issue which the courts were called upon to determine.

⁸⁹ *Supra* note 30.

⁹⁰ The hospital record noted that Graham Worrall blood pressure and pulse had been checked and then simply noted: 'Had an electric shock. Didn't feel it at all. Walked in. No cut. No blackouts. Reassured.' *Worrall v. British Railways Board* *supra* note 52.

⁹¹ According to his employer's records he had not taken time off following the accident. He had subsequently taken time off, but this was for reasons unconnected with the accident.

⁹² A. Fresco, 'Rail Crash Survivor became a Killer', *The Times*, March 4 2003; the Court of Appeal report merely refers to the deterioration of their relationship *supra* note 40 [7]

⁹³ *Meah v. McCreamer* *supra* note 34 pp. 376-377

his judgement on these matters. Expert evidence linked the problems in Gray's relationship with his PTSD; so whilst the relationship problems may have affected his equilibrium on the night of the killing, this could still be linked back to the PTSD. There is no suggestion in the case report that he was drunk or that his drinking had led to his violent reaction. Meah's drinking and drug taking may have made him more aggressive and less inhibited, but so may the head injury. In his case the drinking and drug taking were not out of line with his behaviour prior to his accident, but the vicious sexual assaults were – so again the head injury could be seen as linked to the criminal acts, at least on the balance of probabilities. It is contended that the medically explained personality change should be a factor in explaining the behaviour, not that it should necessarily be the only factor.

Lack of control

According to Burns and Swerdlow the teacher 'could not refrain from acting on his pedophilia despite the awareness that this behaviour was inappropriate'.⁹⁴ Such an individual would seem significantly less blameworthy, than an individual who acted in the same way, but from choice. However, it is not necessarily the case that earlier in the development of the tumour the same defendant was as blameless. When he was surreptitiously visiting prostitutes and viewing pornography was he more in control? The fact that he concealed his actions suggests a degree of control that seems absent later. Yet, it is not necessarily that simple, the fact that he was aware that his behaviour was inappropriate may not mean that he could in fact control it – possibly he could conceal it, but not control it.

Other defendants could be in the position that it was extremely difficult, though not necessarily impossible to control their impulses.⁹⁵ If such a defendant succumbs to the impulses she may not be as blameless as the defendant facing an irresistible impulse, but she is still arguably less blameworthy than a defendant who has free choice.

A Possible Reform

Currently English law has no defence of irresistible impulse,⁹⁶ however, if implemented, the Law Commission's proposal to reform the law of insanity and automatism would introduce one. The Law Commission propose a new defence of 'not criminally responsible by reason of a recognised medical condition'.

The party seeking to raise the new defence must adduce expert evidence that at the time of the alleged offence the defendant wholly lacked the capacity:

- (i) rationally to form a judgment about the relevant conduct or circumstances;
- (ii) to understand the wrongfulness of what he or she is charged with having done; or
- (iii) to control his or her physical acts in relation to the relevant conduct or circumstances as a result of a qualifying recognised medical condition.⁹⁷

The proposed defence would replace the existing insanity defence and cover some cases currently falling within automatism. A person who successfully pleads the new defence could be sentenced to a hospital order (with or without a restriction of liberty order), a supervision order or could receive

⁹⁴ Burns & Swerdlow supra note 21 p. 440.

⁹⁵ E.g. Whitman wrote of 'overwhelming violent impulses' and of being 'a victim of many unusual and irrational thoughts. These thoughts constantly recur, and it requires a tremendous mental effort to concentrate on useful and progressive tasks'. Supra note 30.

⁹⁶ Some jurisdictions have such a defence e.g. Ireland *The People (Attorney General) v Hayes* (30 Nov 1967) (unreported). Approved in *Doyle v Wicklow County Council* [1973] IESC 1, [1974] IR 55.

⁹⁷ Law Commission, 'Criminal Liability: Insanity and Automatism', 2013, p. 193, Proposal 3

an absolute discharge.⁹⁸ Such a defence would potentially provide a defence for the teacher unable to prevent himself from making sexual advances whilst on the rehabilitation course as he arguably 'wholly lacked the capacity' 'to control his physical acts' as a result of the tumour (a recognised medical condition). However, the bar is set very high – to avail herself of the defence a defendant must 'wholly' lack capacity – diminished capacity is not enough. The way in which it is proposed that the new defence should be structured means that defendants who are in that grey area where it is unclear whether their capacity is wholly lacking or not may get the benefit of any reasonable doubt.

We provisionally propose that if sufficient evidence is adduced on which, in the opinion of the court, a properly directed jury could reasonably conclude that the defence might apply, the defence should be left to the tribunal of fact to consider. The prosecution then bears the burden of disproving the defence beyond reasonable doubt.⁹⁹

However, as noted above, the proposed new defence would not cater for the defendant who simply had diminished capacity. This is a real problem as many of the cases we have been considering are cases of diminished capacity.

Diminished responsibility

Section 2 of the Homicide Act 1957 sets out the partial defence of diminished responsibility:

- (1) A person ("D") who kills or is a party to the killing of another is not to be convicted of murder if D was suffering from an abnormality of mental functioning which—
- (a) arose from a recognised medical condition,
 - (b) substantially impaired D's ability to do one or more of the things mentioned in subsection (1A), and
 - (c) provides an explanation for D's acts and omissions in doing or being a party to the killing.
- (1A) Those things are—
- (a) to understand the nature of D's conduct;
 - (b) to form a rational judgment;
 - (c) to exercise self-control.
- (1B) For the purposes of subsection (1)(c), an abnormality of mental functioning provides an explanation for D's conduct if it causes, or is a significant contributory factor in causing, D to carry out that conduct.¹⁰⁰

There are similarities between the diminished responsibility defence and the proposed defence of not criminally responsible by reason of a recognised medical condition. Both have to be based on a 'recognised medical condition' and both relate to rationality, understanding and self-control. There are however significant differences. Diminished responsibility applies only to murder: it is a partial defence reducing a conviction for murder to one for manslaughter. It applies where the defendant's ability is 'substantially impaired' whereas the Law Commission's proposed new defence is generally applicable, leads to a special not guilty verdict and requires that the defendant 'wholly' lacks capacity.

⁹⁸ Id. p. 194, Proposal 10. These are similar possible outcomes to those currently available under English law for an individual found not guilty by reason of insanity in the Crown Court.

⁹⁹ Id. p. 193, Proposal 6

¹⁰⁰ As amended by s.52 of the Coroners and Justice Act 2009

A better option: a general diminished capacity defence

Whilst the diminished responsibility defence could be extended to become a general defence; there would be problems with this approach. Its operation relies upon an underlying lesser offence – this works for murder, but would potentially require the creation of a host of lesser offences that would apply if diminished responsibility was successfully argued. A better option would be to create a new partial defence based on the proposed ‘not criminally responsible by reason of a recognised medical condition’ defence to cover cases of substantial impairment. Replacing the word ‘wholly’ with ‘substantially’ as used in the diminished responsibility defence could provide a workable option.¹⁰¹ This defence would then apply where a defendant substantially lacked capacity; the wording of the new defence otherwise being identical to that proposed by the Law Commission for their new defence.

The new defence would recognise that there is not a simple bifurcated division between defendants who have capacity and those who lack capacity. It would allow for recognition of a middle area where capacity is substantially lacking. This overcomes one problem noted by the Law Commission:

it is simply not possible to determine scientifically the difference between an impulse which has not been resisted and an impulse which could not be resisted, either in a person who is clinically sane or a person who has a psychiatric illness.¹⁰²

This diminished capacity defence would note that some blameworthiness was still attached to the defendant, but that it was less than that attaching to a defendant with full capacity. The idea of a

¹⁰¹ The term ‘substantially impaired’ as used in s. 2 (1) of the Homicide Act has been the subject of case law see particularly *R v. Golds* [2016] UKSC 61. In *Golds*, Lord Hughes giving the unanimous decision of the Supreme Court stated at [44]:

- (1) Ordinarily in a murder trial where diminished responsibility is in issue the judge need not direct the jury beyond the terms of the statute and should not attempt to define the meaning of “substantially”. Experience has shown that the issue of its correct interpretation is unlikely to arise in many cases. The jury should normally be given to understand that the expression is an ordinary English word, that it imports a question of degree, and that whether in the case before it the impairment can properly be described as substantial is for it to resolve.
- (2) If, however, the jury has been introduced to the question of whether *any* impairment beyond the merely trivial will suffice, or if it has been introduced to the concept of a spectrum between the greater than trivial and the total, the judge should explain that whilst the impairment must indeed pass the merely trivial before it need be considered, it is not the law that *any* impairment beyond the trivial will suffice. The judge should likewise make this clear if a risk arises that the jury might misunderstand the import of the expression; whether this risk arises or not is a judgment to be arrived at by the trial judge who is charged with overseeing the dynamics of the trial. Diminished responsibility involves an impairment of one or more of the abilities listed in the statute to an extent which the jury judges to be substantial, and which it is satisfied significantly contributed to his committing the offence. Illustrative expressions of the sense of the word may be employed so long as the jury is given clearly to understand that no single synonym is to be substituted for the statutory word.

This approach of giving the words their normal meaning and providing where necessary illustrative examples would appear a useful starting point for interpreting the term ‘substantially impaired’ if used in a diminished capacity defence.

¹⁰² P. Shea, “M’Naghten Revisited – Back to the Future?” (2000) 12(3) *Current Issues in Criminal Justice* 347, 357 quoted by the Law Commission p. 64 at 4.51

diminished capacity defence has been argued for by others, notably Stephen Morse.¹⁰³ It has advantages over simply viewing the issue as going to mitigation. As Morse explained:

Although partial responsibility can in principle be fully considered at sentencing, this method suffers from substantial defects. First and most important, sentencing is a matter of discretion. Judges may refuse to give reduced rationality its just mitigating force, and there may be wide disparities among judges sentencing similarly situated defendants. Judges, like all members of a society, have some implicit or explicit “theory” of responsibility and how it should guide punishment. Judges’ responsibility theories will also differ substantially. There is no guarantee that any individual judge’s theory will be consonant with what the legislature or other more representative groups would agree is fair, and thus, the judge’s mitigation decision may not comport with community norms. Moreover, mitigating primarily at sentencing removes this important culpability determination from the highly visible trial stage, at which the community’s representative—the jury—makes the decision, and relegates it to the comparatively low visibility sentencing proceeding. Our criminal justice system has a preference for making crucial culpability determinations that affect punishment at trial. Partial responsibility is an explicitly normative judgment that should be made, therefore, by the community’s representatives at the guilt phase, and not by judges at sentencing.¹⁰⁴

The importance of leaving culpability decisions to the jury is illustrated by one of the earliest recorded personality-change-based defences. In 1874 Eadward Muybridge was charged with the murder of his wife’s lover. His defence counsel argued in his opening speech that:

We shall prove that years ago, the prisoner was thrown from a stage, receiving a concussion of the brain, which turned his head from black to gray in three days and has never been the same since.¹⁰⁵

The jury rejected the defence despite evidence from friends and acquaintances as to how his character had changed following the stagecoach accident.¹⁰⁶

Comparison with Morse’s proposed defence

In his 2003 work Morse proposes that his proposed general partial defence of guilty but partially responsible (GPR) would apply ‘if, at the time of the crime, the defendant suffered from substantially diminished rationality for which the defendant was not responsible and which substantially affected the defendant’s criminal conduct.’¹⁰⁷ There is much to commend in the idea of a general partial defence, the requirement for substantial diminution and substantial effect and the exclusion of the defence where it arises from the defendant’s prior fault. However, whilst recognising the merits of Morse’s proposed defence, it has some limitations.

Morse focusses on ‘substantially diminished rationality’ whereas my proposed variant of the Law Commission’s proposed new defence covers diminished rationality, understanding and control. In cases such as those of Meah, Gray, Whitman and the American teacher, whilst rationality may have been affected, the most obvious impairment relates to impulse control. As Penney concludes having reviewed the neuroscientific literature ‘it is empirically true that a person can understand the

¹⁰³ See S.J. Morse, ‘Diminished Rationality, Diminished Responsibility’, *Ohio State Journal of Criminal Law*, 2003, pp. 289-308

¹⁰⁴ *Id.* pp. 298-299 (references to footnotes in the original omitted)

¹⁰⁵ A. Shimamura ‘Muybridge in Motion: Travels in Art, Psychology and Neurology’, *History of Photography*, 26 (4), 2002, pp. 341-350

¹⁰⁶ Muybridge was however acquitted on the grounds that killing one’s wife’s lover was justifiable homicide. Muybridge subsequently achieved fame for his photographs of animals and people in motion.

¹⁰⁷ *Supra* note 103 p. 300

wrongfulness of an act yet be powerless to refrain from committing it'.¹⁰⁸ He later comments: 'science does suggest that some people, in some situations, may find it next to impossible to control their behavior, even if they know it is wrong.'¹⁰⁹

In one way, Morse's proposed defence is considerably wider than the one which I propose. Mine requires that the defence stems from a recognised medical condition,¹¹⁰ Morse's has no such requirement. There may be circumstances where a deserving defendant will have impaired capacity which can't be linked to a recognised medical condition – in my proposal that would simply go to mitigation. In the current political climate, a medically based partial defence would, I believe, be more likely to be politically acceptable than a potentially much wider defence.

Morse proposes that sentencing should be reduced for GPR defendants. He builds on the Federal Sentencing Guidelines' provisions¹¹¹ and proposes a fixed sentence reduction for GPR,¹¹² which would be inversely linked to the seriousness of the crime.¹¹³ This has the merit of consistency, but in treating all cases the same it is incapable of adjustment to particular circumstances. I would propose that where the court has been satisfied that the partial defence applies the sentencing judge should have to explicitly address the impact of the finding of partial responsibility on sentence. This would force the judge to explain the impact in the particular case. In some cases, such as a treatable brain tumour, this could lead to a much-reduced sentence as not only might it be thought that the defendant's blameworthiness was substantially reduced, but it might also be considered that her future dangerousness following treatment was minimal. In other cases, notwithstanding a finding of partial responsibility, a judge might conclude that the defendant would continue to pose a serious danger to the public and that therefore a lengthy sentence remains warranted. In an ideal world, the creation of this new defence would coincide with the development of innovative new sentencing options. The Solicitors' Disciplinary Tribunal demonstrated a novel approach in Chisnall's case. This fitted their view of the need for public protection, the defendant's blameworthiness and the possibility of recovery. Recovery is possible not just in brain tumour cases. The traditional image of Phineas Gage after his accident as a 'dirty, scary, sociopathic drifter'¹¹⁴ appears only to have been temporary; later in life he held down a responsible job in Chile as a long-distance stagecoach driver.¹¹⁵ Van Horn *et al*'s analysis of Gage's injuries¹¹⁶ noted the impact on connections within the brain; greater understanding of the brain's ability to recreate networks¹¹⁷ suggest that whilst these may have profound impact in the short term, in the longer term in some cases new neural networks

¹⁰⁸ S. Penney, 'Impulse Control and Criminal Responsibility: Lessons from Neuroscience', *International Journal of Law and Psychiatry*, 2012 pp. 99-103, 99.

¹⁰⁹ *Id.* p. 100.

¹¹⁰ The Law Commission's proposed defence requires supporting reports from two experts and I see no reason not to follow this for my proposed partial defence.

¹¹¹ Morse cites the U.S. Sentencing Guidelines Manual 2002 § 5K2.13 provision that sentence should be reduced if a 'significantly reduced mental capacity . . . contributed to the commission of the offense'. The 2018 Manual § 5K2.13 provides that: 'A downward departure may be warranted if (1) the defendant committed the offense while suffering from a significantly reduced mental capacity; and (2) the significantly reduced mental capacity contributed substantially to the commission of the offense.'

¹¹² S. J. Morse, *supra* note 103, p.303.

¹¹³ In other words, the sentence reduction would be greater for less serious offences.

¹¹⁴ S. Kean, *supra* note 8.

¹¹⁵ See: M. B. Macmillan, *An Odd Kind of Fame: Stories of Phineas Gage*, MIT Press, 2000.

¹¹⁶ Van Horn *et al* *supra* note 19.

¹¹⁷ See e.g. R. J. Nudo, 'Recovery after Brain Injury: Mechanisms and Principles', *Front. Hum. Neurosci.*, 24 December 2013

may develop. Similarly, counselling may have a very positive impact for some patients suffering from PTSD.¹¹⁸

Conclusion

A general partial diminished capacity defence would avoid the stigma of the insanity defence and avoid the risk to the public of an automatism finding attaching to dangerous individuals. It would complement the Law Commission's proposed 'not criminally responsible by reason of a recognised medical condition', providing a way of marking out reduced blameworthiness where a defendant's capacity for rationality, knowledge or control when committing a crime is substantially impaired. The burden of proof could be framed in the same way as the Law Commission proposal – placing an evidential burden on the defence and requiring the support of a minimum of two expert witnesses. Once this evidential burden had been cleared it would then be for the prosecution to prove beyond doubt that the defence did not apply. Where the defence is found to apply a verdict of guilty but only partially responsible by reason of a recognised medical condition would be returned and the judge when sentencing would have to explain how the finding had impacted on the sentence imposed.¹¹⁹

¹¹⁸ See e.g. E. B. Foa, 'Psychological Processes related to Recovery from a Trauma and an Effective Treatment for PTSD', *Annals of the New York Academy of Sciences*, 17 Dec 2006; R. A. Bryant RA, 'Psychological Interventions for Trauma Exposure and PTSD', *Post-Traumatic Stress Disorder*, 2011, pp. 171 - 202,

¹¹⁹ This chapter was first submitted in March 2019 and is based on a paper first given in Maastricht in April 2018. Subsequent to the submission of the first draft of this chapter the Sentencing Council for England and Wales announced a consultation (see: www.sentencingcouncil.org.uk/consultations/sentencing-offenders-with-mental-health-conditions-or-disorders-consultation/) on draft sentencing guidelines for offenders with mental health conditions or disorders. At the time of submitting this final version of the chapter that consultation is still open. Whilst the proposals (see: www.sentencingcouncil.org.uk/offences/magistrates-court/item/sentencing-offenders-with-mental-health-conditions-or-disorders-for-consultation-only/) are generally to be welcomed they suffer from the weaknesses identified by Morse (supra note 103) in that they would keep the crucial culpability assessments away from the trial stage where they could be determined by the jury and would keep them relegated to the relatively less visible sentencing stage. Time will tell whether these new sentencing guidelines are implemented, but, even if they are, they will not negate the need for a new partial defence of diminished capacity.