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Metaphysics & Morals in Canadian Criminal Justice: A Pragmatic Analysis of The Conflict Between Neuroscience and Retributive Folk Psychology

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METAPHYSICS & MORALS IN CANADIAN CRIMINAL JUSTICE: A PRAGMATIC ANALYSIS OF THE CONFLICT BETWEEN NEUROSCIENCE AND RETRIBUTIVE FOLK PSYCHOLOGY

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For all who show dignity and those who cannot.
We will get there together.
Someday.

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ABSTRACT

The foundational justifications of Canada's retributive criminal law contain several assumptions about human nature. This folk psychology claims that rationality can be used to override impulses and behave in compliance with the law. In sharp contrast, Neuroscience has established that conscious thought processes are enmeshed with the emotional responses of the unconscious limbic system. Furthermore, the capacity to refrain from acting on its impulses and make particular choices is shaped as we develop in the social environment and factors outside individual control.

The interdisciplinary discourse on this conflict between law and neuroscience has unnecessarily implicated the free will debate and is further stagnated by epistemic cultural differences between the two disciplines. To inquire beyond these roadblocks, this thesis applies methodological principles of pragmatic philosophy. Rather than asking which description of human nature is true, the pragmatic approach taken in this thesis focuses on the difference either would make in practice.

This thesis concludes that criminal law should discard retributive folk psychology because it functions in practice to confuse criminal law, veil the normative basis of judgements, and frustrate rather than support the realization of *Charter* values, as well as Canada's commitment to reconciliation with Indigenous people. Punishment practices justified by retributive folk psychology also function at cross purposes with the objectives of criminal justice to cause more crime. In contrast, alternative criminal justice practices, founded on norms that are compatible with neuroscience, perform better.

Furthermore, the common argument that retributive moral theory is necessary to justify protective individual rights is also be dismissed. Neuroscience, coupled with compatible norms developed in alternative legal theory, provide a foundation for the construction of rights that would better protect dignity and autonomy and guide the development of new practices which would function to support the achievement of its purposes, in harmony with *Charter* values.

LIST OF ABBREVIATIONS USED

AJS	Aboriginal Justice Strategy
ASPD	Antisocial Personality Disorder
BCCA	British Columbia Court of Appeal
BPD	Borderline Personality Disorder
dLPFC	Dorsolateral Prefrontal Cortex
EEG	Electroencephalogram
MRI	Magnetic Resonance Imaging
NCRMD	Not Criminally Responsible on account of Mental Disorder

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CHAPTER I

INTRODUCTION

> [I]t may be said that this concept of equal assessment of every actor, regardless of his particular motives or the particular pressures operating upon his will, is so fundamental to the criminal law as rarely to receive explicit articulation. However, the entire premise expressed by such thinkers as Kant and Hegel that man is by nature a rational being, and that this rationality finds expression both in the human capacity to overcome the impulses of one's own will and in the universal right to be free from the imposition of the impulses and will of others … supports the view that an individualized assessment of offensive conduct is simply not possible. If the obligation to refrain from criminal behaviour is perceived as a reflection of the fundamental duty to be rationally cognizant of the equal freedom of all individuals, then the focus of analysis of culpability must be on the act itself (including its physical and mental elements) and not on the actor.[1]

This statement from Justice Wilson's dissent in *Perka*, affirmed in *Creighton*, discloses that particular ideas about human nature and our capacity for rationality are fundamental to criminal law.[2] As she tells us, these ideas can be traced to long-dead philosophers who developed theoretical concepts foundational to the law's understanding of individual obligations and rights vis-a-vis the state and each other. Kant and Hegel also developed moral theories of retribution or the idea that when we choose to do wrong we deserve to suffer the punishment.[3]

Kant and Hegel were idealists who thought that the world as perceived through the senses was an illusion, but that reason could be used to arrive at absolute moral

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[1] *R v Perka,* [1984] 2 SCR 232 at 273, [1984] SCJ No 40.

[2] *R v Creighton*, [1993] 3 SCR 3 at 122, [1993] SCJ No 91.

[3] Immanuel Kant, *The Metaphysical Elements of Justice*, trans John Ladd, (Indianapolis & New York: Bobbs- Merril, 1965); and GWF Hegel in TM Knox trans, *Philosophy of Right*, (Oxford: Oxford University Press,1967). See for discussion: Simon Young, "Kant's Theory of Punishment in a Canadian Setting" (1996) 22 Queen's L J 347; and Markus Dirk Dubber, "Rediscovering Hegel's Theory of Crime and Punishment" (1992) 92:6 Mich L Rev 1577.

truths.[4] They believed their metaphysical moral theories corresponded with a foundational reality that transcended intersubjectivity and what could be perceived by the senses.[5] However, it does not appear that the law relies on their concepts because it presumes their ideas transcended the limitations of a localized human perspective. Canadian law does not mirror the original philosophies of Kant or Hegel.[6] Nor are they considered authorities on all contemporary moral issues.[7] Furthermore, retributive norms preceded both philosophers and can be traced back to Christian morality.[8] Kant and Hegel did not invent criminal punishment, they wrote

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[4] See: Paul Guyer and Rolf-Peter Horstmann, "Idealism" Edward N Zalta, ed, *The Stanford Encyclopedia of Philosophy* (Winter 2019), online:<https://plato.stanford.edu/archives/win2019/entries /idealism/>.

[5] *Ibid.* There were differences between Kant and Hegel's epistemology. Hegel was a traditional German idealist while Kant's orientation is referred to as 'transcendental idealism'. Kant describes Hegel's form of idealism as grounded in the belief that, "all cognition through the senses and experience is nothing but sheer illusion, and there is truth only in the ideas of pure understanding and reason" in contrast to his own belief that "[a]ll cognition of things out of mere pure understanding or pure reason is nothing but sheer illusion, and there is truth only in experience" in *Prolegomena to Any Future Metaphysics,* trans Paul Carus, 3rd ed (Chicago: Open Court Publishing,1902) at 190.

[6] We do not have the death penalty in Canada but Kant believed the death penalty the appropriate punishment for homicide. See: JC Merle, "A Kantian Critique of Kant's Theory of Punishment" (2000) 19:1 Law & Phil 311. Furthermore its not even clear that Kant intended his moral theories as a justification for state punishment. See: Mark Tunick, "Is Kant a Retributivist?" (1996) Hist Pol Thought 17 at 60-78; and J Angelo Corlett, "Making Sense of Retributivism" (2001) 76:295 Philosophy 77 at 87.

[7] In addition to being a proponent of the death penalty Kant was a racist. He wrote that "humanity exists in its greatest perfection in the white race...The yellow Indians have a smaller amount of talent...The Negroes are lower and the lowest are a part of the American peoples" in Immanuel Kant, "On the Different Races of Man" (1775) Emmanuel Chukwudi Eze ed, *Race and Enlightenment: A Reader,* (Oxford: Blackwell Publishers, 1997).

[8] Albert Levitt, "Origin of the Doctrine of Mens Rea" (1922) 17 Ill L Rev 117, at 128. See also: Freidrich Nietzsche in RJ Hollingdale trans, *Beyond Good and Evil,* (London: Penguin, 1973). Nietzsche also viewed philosophical ideas about free will and morality as hang overs from Christianity. At page 51 he states: "For the desire for 'freedom of will' in that metaphysical superlative sense which is unfortunately still dominant in the minds of the half-educated, the desire to bear the whole and sole responsibility for one's actions and to absolve God, world, ancestors, chance, society from responsibility for them, is nothing less than the desire to be precisely that causa sui and… pull oneself into existence out of the swamp of nothingness by one's own hair".

secular moral theory that justified state punishment within a liberal democracy. Their ideas are not foundational to law or liberalism because it is believed they seized on absolute and timeless truths. Rather, Kant and Hegel's theories about human nature and morality are embedded in the foundations of our law as received norms that have informed the doctrines and practices of justice in liberal democratic societies as they have developed together over many years. As Justice Wilson suggests these norms have become so foundational that they are rarely expressed, let alone unpacked for examination.

The package of assumptions about human nature embedded in the normative foundations of law has been referred to as folk psychology.[9] As will be discussed in chapter two, the folk psychology underlying Canadian criminal law contains many assumptions about human nature and our behavioural capacity which serve to justify the attribution of moral blame and the imposition of suffering through punishment. As Justice Wilson's statement implies, the law considers us rational beings with the ability to use rationality to control impulses and freely choose our conduct. Our rationality makes us equal in ways that render individual circumstances or limitations irrelevant in criminal law. Because we are rational, we are morally responsible for our actions, hence culpable for our crimes and deserving of punishment. As will also be discussed in chapter two, normative assumptions about the relationship between rationality and behaviour have also informed the interpretation of *Charter* rights in the criminal law context.[10]

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[9] For a discussion of folk psychology in law see: Robert Birmingham, "Folk Psychology and Legal Understanding" (2000) 32 Conn L Rev 1715.

[10] *Canadian Charter of Rights and Freedoms*, Part 1 of the *Constitution Act*, 1982, being Schedule B to the Canada Act 1982 (UK), 1982, c 11.=

Recently, empirical evidence has emerged from neuroscience that paints a radically different picture of human nature than that described by retributive folk psychology. As will be discussed in chapter three, neuroscience experiments have repeatedly produced results that suggest decisions are initiated in unconscious brain processes before we become conscious of our intentions. Despite initial resistance amongst neuroscientists, it is now well established that the region associated with conscious rational thought is enmeshed with the unconscious processes of the older limbic system in the brain. Furthermore, research has consistently demonstrated that developmental conditions and experiences in the social environment shape our neurological capacity to have particular thoughts and make particular behavioural choices. In short, neuroscience tells us that our capacity to behave in accordance with what we reason to be right and wrong, or in our interests for that matter, is determined by factors outside of our conscious control - not rationality.

As will also be discussed in chapter three, the apparent conflict between neuroscience and retributive folk psychology has sparked calls for reform and debate. However, in a manner consistent with the epistemic cultural differences of law and science, this debate is marked by impasse and lack of meaningful dialogue. Those who argue for reform based on neuroscience ("neuro-reformers") emphasize how its findings conflict with a belief in free will and that because retributive folk psychology is based on dubious metaphysical concepts, law reform is necessary. In response to these claims, it has been argued that resolving conflicts between law's folk psychology and neuroscience is not simply an empirical issue. Even if neuro-reformers are correct in their claims, concepts of autonomy and responsibility that have been derived from retributive folk psychology provide the normative justification of individual rights and protections from state interference. If we discard retributive folk psychology, we risk losing legal protections of freedom and autonomy. Neuro-

reformers do not engage with these challenges and rest their arguments on empirical validity. Furthermore, it has been suggested that utilitarian or consequentialist justificatory frameworks, which do not provide for individual rights or prevent over-punishment, should replace retributive norms in criminal law.

In chapter four, I put forward the pragmatic method as an appropriate way to consider the issue and move past the epistemological conflict between law and neuroscience. As will be discussed, pragmatism acknowledges that empirical science has relevance to normative or moral questions but ultimately does not resolve them. Based on principles derived from pragmatist writing, I argue that consideration of whether or not retributive folk psychology should be abandoned, and criminal law should integrate neuroscience into its norms, depends on the difference it would make in practice. Hinging the issue on metaphysical debates such as free will versus determinism is both unproductive and besides the point. What matters is which description of human behaviour can better support criminal justice practices that function to serve the broader purposes of criminal law and overarching values of our legal system.

In chapter five, I apply pragmatic analysis to examine how retributive folk psychology functions in practice. Alternative criminal justice practices that do not purport to punish moral blame are also discussed. Based on this analysis I argue that retributive folk psychology is wrong, not because of empirical invalidity, but because it causes problems in practice. As will be discussed, retributive folk psychology causes doctrinal problems, imposes suffering on the most vulnerable and marginalized members of society, causes more crime not less, and functions to frustrate the realization of *Charter* values.[11] Contemporary Canadian punishment

[11] See: *Law Society of British Columbia v Trinity Western University*, 2018 SCC 32 at para 41.

practices also conflict our commitment to human rights and reconciliation with Indigenous peoples. Regarding all of these concerns, alternative practices which are informed by norms consistent with neuroscience function better. For these reasons, I argue that neuroscience should, in part, inform criminal justice reform and the development of new legal norms.

Chapter six discusses selected alternative normative theories that are compatible with a neuroscientific understanding of human behaviour. It also responds to the concern that retributive folk psychology is necessary to maintain normative concepts of responsibility and autonomy along individual rights derived from them. As will be discussed, neuroscience leads us to the conclusion that responsibility for crime is shared, not individual. This conclusion is also compatible with the concept of autonomy offered by relational theory. From this theoretical framework, individual rights and state duties can be derived in a manner that provides more, not less protection of freedom and autonomy. In addition, restorative justice theory provides an alternative way to think about the goals of criminal justice, which is also harmonious with a neuroscientific understanding of human behaviour and crime. These alternative legal norms not only accord with neuroscience, but would also better serve greater respect for human dignity and autonomy in the law.

The conclusion in chapter seven emphasizes that the theories and concepts put forward in chapter six should not be taken as ‘true’ in any transcendent way. Thinking about law pragmatically necessitates maintaining this awareness. The validity of legal norms can only be derived by how they function in practice to support liberal democracy. To evolve within a pluralistic society, legal theorists and judges must remain cognizant that its concepts are contingent means to progressively realize the law’s institutional purpose and values. Nonetheless, neuroscience coupled with

normative language provides an understanding of human behaviour capable of guiding the development of doctrine and criminal justice practices that would function to better serve its purposes and overarching values. It also enables the discourse of law to reconstruct its language in ways that can support the growth of human solidarity necessary to extend to criminal offenders, the respect for dignity enshrined in the *Charter*. Chapter seven also summarizes the primary contributions of this thesis to legal scholarship and puts forward recommendations for future work.

CHAPTER II

RETRIBUTIVE FOLK PSYCHOLOGY IN CANADIAN CRIMINAL LAW

This chapter identifies the retributive folk psychology in Canadian criminal law and how it functions to justify punishment. As will be discussed, although punishment is not mentioned in the *Criminal Code*, jurisprudence has established that retribution is the overarching unifying purpose of criminal law and therefor punishment for moral blame is the fundamental purpose of sentencing.

i) *Choice & Moral Blame*

The principle that conduct cannot be justly punished unless it was committed with a blameworthy state of mind is foundational in Canadian criminal law.[12] The necessary blameworthy state of mind is defined by the *mens rea* element of an offence. The *Leary* decision explains:

> The notion that a court should not find a person guilty of an offence against the criminal law unless he has a blameworthy state of mind is common to all civilized penal systems. It is founded upon respect for the person and for the freedom of human will. A person is accountable for what he wills. When, in the exercise of the power of free choice, a member of society chooses to engage in harmful or otherwise undesirable conduct proscribed by the criminal law, he must accept the sanctions… to be criminal, the wrongdoing must have been consciously committed.[13]

[12] See for example: *R v Rees*, [1956] SCR 640, 24 CR 1,115 CCC 1; *Beaver v The Queen*, [1957] SCR 531, 26 CR 193; and *R v King*, [1962] SCR 746, 133 CCC 1.

[13] *Leary v The Queen*, [1978] 1 SCR 29 at 34 [emphasis added].

This reasoning served to inform interpretations of the scope of protection of life, liberty and security of the person provided by section 7 of the *Charter.*[14] *Reference re Motor Vehicles Act* established that "punishment of the morally innocent" violated the principles of fundamental justice and therefore section 7.[15] Imprisonment for absolute liability offences, for which no *mens rea* element is required, was held unconstitutional.[16]

Because punishment is not justified without moral blame, section 7 also prohibits punishment of people who commit crimes in a morally involuntary way.[17] Criminal conduct must be both physically and morally voluntary for guilt to be found. As *King* states, "there can be no *acts reus* unless it is the result of a willing mind at liberty to make a definite choice or decision, or in other words, there must be a willpower to do an act."[18] The decision in *Bouchard-Lebrun* articulates many normative assumptions regarding how humans use rationality to control their conduct. Justice Lebel states:

> An individual's will is expressed through conscious control exerted by the individual over his or her body... The control may be physical, in which case voluntariness relates to the muscle movements of a person exerting physical control over his or her body. The exercise of a person's will may also involve moral control over actions the person wants to take, in which case a voluntary act is a carefully thought out

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[14] *Reference re s 94(2) of Motor Vehicle Act (British Columbia)*, [1985] 2 SCR 486 at para 69, [1985] SCJ No 73, states: "It has from time immemorial been part of our system of laws that the innocent not be punished. This principle has long been recognized as an essential element of a system for the administration of justice which is founded upon a belief in the dignity and worth of the human person and on the rule of law".

[15] *Ibid* at paras 81 and 121; and *Charter, supra* note 10 at s 7.

[16] *Ibid, Reference re s 94(2) of Motor Vehicle Act (British Columbia)* at para 73 and 80, citing *R v Sault Saint Marie,* [1978] 2 SCR 1299, [1978] SCJ No 59.

[17] *R v Ruzic,* 2001 SCC 24.

[18] *King, supra* note 12 at 749.

> act that is performed freely by an individual with at least a minimum level of intelligence.[19]

The decision goes on to emphasize that our capacity for rationality is what enables us to exercise moral control over our "will":

> Will is also a product of reason. The moral dimension of the voluntary act, … reflects the idea that the criminal law views individuals as autonomous and rational beings …human behaviour will trigger criminal responsibility only if it results from a "true choice" or from the person's "free will". This principle signals the importance of autonomy and reason in the system of criminal responsibility.[20]

Bouchard-Lebrun also explains that because individuals with the capacity for rationality are presumed to know the difference between right and wrong, they are also assumed to be able to use it to control their actions in accordance with those judgements. This is why individuals are deemed morally culpable for their conduct:

> This essential basis for attributing criminal responsibility thus gives rise to a presumption that each individual can distinguish right from wrong. The criminal law relies on a presumption that every person is an autonomous and rational being whose acts and omissions can attract liability.[21]

Individuals with the capacity for rationality, are also assumed to be able to control their thoughts in a way that makes them morally blameworthy when they unintentionally cause harm. For negligence-based offences the presence of

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[19] *R v Bouchard-Lebrun*, 2011 SCC 58 at para 47. [emphasis added]

[20] *Ibid* at 47, citing *Perka, supra* note 1.

[21] *Ibid* at 49.

conscious intention is not necessary to establish guilt.[22] *Creighton* established that the failure to exercise conscious thought or intention can, in itself, establish moral blameworthiness.[23] The reasoning in that decision cited HLA Hart.[24] Hart states:

> What is crucial is that those whom we punish should have had, when they acted, the normal capacities, physical and mental, for doing what the law requires and abstaining from what it forbids, and a fair opportunity to exercise these capacities. Where these capacities and opportunities are absent, as they are in different ways in the varied cases of accident, mistake, paralysis, reflex action, coercion, insanity, etc, the moral protest is that it is morally wrong to punish because "he could not have helped it" or "he could not have done otherwise" or "he had no real choice". But as we have seen there is no reason (unless we are to reject the whole business of responsibility and punishment) always to make this protest when someone who 'just didn't think' is punished for carelessness. For in some cases at least we may say 'he could have thought about what he was doing' with just as much rational confidence as one can say of any intentional wrong doing 'he could have done otherwise.[25]

Moral blameworthiness deserving of punishment can thus be imputed from the failure to think and choose rightly when one has "normal capacities" to do so if their conduct is deemed a "marked departure" from the "reasonable person" standard.[26] The so-called "normal capacities" have been described by Hart as not simply a "legal

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[22] Subjective *mens rea* requires determining the real presence of a particular state in the conscious mind of accused and what they actually knew, intended, or considered as opposed to what they should have or could have been expected to know in comparison to an objective standard. See: *R v H(AD)*, 2013 SCC 28 at 3.

[23] *Creighton, supra* note 2.

[24] *Ibid* at 120.

[25] HLA Hart, *Punishment and Responsibility* (Oxford: Clarendon Press, 1968) at 152 [emphasis added].

[26] *Creighton, supra* note 2 at 144. See also *R v Roy*, 2012 SCC 26 at at para 16: "a subjective standard means, in the context of an offence under s 218 of the *Code*, that the fault element requires proof at least of recklessness, in other words that the accused persisted in a course of conduct knowing of the risk which it created. Subjective fault, of course, may also refer to other states of mind. It includes *intention* to bring about certain consequences; actual *knowledge* that the consequences will occur; or *wilful blindness* — that is, knowledge of the need to inquire as to the consequences and deliberate failure to do so."

status" but referring to "certain complex psychological characteristics of person," consisting of "understanding, reasoning, and control of conduct: the ability to understand what conduct legal rules or morality require, to deliberate and reach decisions concerning these requirements, and to conform to decisions when made".[27] *Creighton* held that these capacities could be assumed to be present.[28] As Justice McLachlin explains, Canadian criminal law rejects "experiential, educational and psychological defences falling short of incapacity".[29]

Pursuant to the Not Criminally Responsible on account of Mental Disorder ("NCMD") doctrine, the normal capacities are deemed present in individuals unless they suffer from a mental disorder rendering them "incapable of appreciating the nature and quality" of their criminal conduct.[30] Justice Dickson explains that this determination turns on whether the offender has the capacity to use rationality to make decisions about right and wrong:

> One looks at capacity to reason and to reach rational decisions as to whether the act is morally wrong. If wrong simply means "illegal" this virtually forecloses any inquiry as to capacity. The question for the jury is whether mental illness so obstructed the thought processes of the

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[27] *Hart, supra* note 25 at 218 and 227- 228.

[28] *Creighton, supra* note 2 at 124.

[29] *Ibid* at 128. This is the general principle, but the distinction is blurred in the application of defence doctrines. See for example: *Ruzic, supra* note 17. As will be discussed more in this thesis, although the analysis in that case focused on circumstances, it implicitly acknowledges how these factors altered her decision making process. See also: *R v Lavallee,* [1990] 1 SCR 852, [1990] SCJ No 36. In that case psychological characteristics short of incapacity were considered. Furthermore, the reasonable person standard is not static but is defined by the role or capacity the accused was acting in. For example, see: *R v Javanmardi,* 2019 SCC 54. In that case, to determine whether a naturopathic doctor was criminally negligent in giving a particular treatment, the inquiry assessed whether the skills, training, and knowledge of a naturopathic doctor were reasonably applied.

[30] *Criminal Code*, RSC, 1985, c C-46, s 16.

> accused as to make him incapable of knowing that his acts were morally wrong.[31]

In summary, retributive folk psychology assumes that the human capacity for rationality can be used to control behavioural choices, override impulses, and think particular thoughts to avoid acting in ways that place others at risk for harm. Possessing a 'normal' capacity for rationality is also assumed to make us all equally capable of using it in these ways to comply with the law. Based on these assumptions when an individual commits a crime they are deemed blameworthy and deserving of punishment. These normative assumptions have also been embedded in the interpretation of individual rights under the *Charter.* As will be discussed in the next section, retributive folk psychology is so foundational in Canadian criminal law, it has also influenced the interpretation of sentencing provisions of the *Code* in ways that arguably conflict with legislative intent.

ii) *Sentencing in the Criminal Code*

If one were to look solely at legislation, the retributive nature of our criminal law could not be ascertained. The *Corrections and Conditional Release Act* states as its purpose the rehabilitation of offenders and their reintegration into their communities.[32] Section 718 of the *Criminal Code* states that the "fundamental purpose of sentencing is to protect society and to contribute, along with crime prevention initiatives, to respect for the law and the maintenance of a just, peaceful and safe society" imposing "just sanctions" to achieve one or more listed objectives.[33] Traditional sentencing goals, such as denunciation, deterrence,

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[31] *R v Chaulk* [1990] 3 SCR 1303 at 91, [1990] SCJ No 139, citing Justice Dickson's dissent in *R v Schwartz*, [1977] 1 SCR 673 at 675.

[32] *Corrections and Conditional Release Act,* SC 1992, c 20, s 3 (b).

[33] *Criminal Code, supra* note 30, at s 718.

separation of offenders from society, and rehabilitation, are listed in subsections (a) through (d). Subsections (e) and (f) list objectives derived from restorative justice theory.[34] Section 718 does not include punishing moral blame as a purpose or in its list of sentencing objectives.

The present sentencing provisions in *Criminal Code* were added by amendments enacted by Bill C-41.[35] The product of decades of consultation and review, Bill C-41 was intended to target long-standing problems of high incarceration and recidivism, disparity in sentencing, as well as indigenous over–representation in the system.[36] More generally the sentencing reforms sought to move away from retributive normativity to an approach consistent with the modern understanding of crime as a complex social problem.[37] It introduced provisions authorizing non-custodial conditional sentences and diversion to alternative measures such as restorative

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[34] Section 718 (d) states: "[t]o provide reparations for harm done to victims or to the community". Section 718 (e) states: "to promote a sense of responsibility in offenders, and acknowledgment of the harm done to victims or to the community". *Ibid.* Parliaments adoption of these concepts was an intentional departure from retributive punishment. See also: Canada, Parliament, House of Commons, Standing Committee on Justice and Solicitor General, *Taking Responsibility: Report of the Standing Committee on its Review of Sentencing, Conditional Release and Related Aspects of Corrections,* 33rd Parl, 2nd Sess, No 65 (16 August 1988 and 17 August 1877) (Chair: David Daubney, MP) at 46-47.

[35] Bill C-41, *An Act to Amend the Criminal Code (Sentencing) and Other Acts in Consequence Thereof*, SC 1995, c 22.

[36] Canada, The Canadian Sentencing Commission, *Sentencing Reform: A Canadian Approach* (Ottawa: Minister of Supply and Services, 1987) (Chair: Archambault, O) at 40-44 and 49-85; and Daubney, *supra* note 34 at 211-217 and 236-240.

[37] See: Archambault, *Ibid,* at xxviii, and 36- 40; and Daubney, *supra* note 34 at 46- 52. The shift away from retributive intent in Canadian sentencing was earlier stated in Canadian Committee on Corrections, *Toward Unity: Criminal Justice and Corrections,* Information Canada, Ottawa, (March, 1969) (Chair: Roger Ouimet). *Ibid* at page 194 states: "The primary purpose of sentencing is the protection of society. Deterrence, both general and particular, through knowledge of penalties consequent upon prohibited acts; rehabilitation of the individual offender into a law-abiding citizen; confinement of the dangerous offender as long as he [or she] is dangerous, are major means of accomplishing this purpose. Use of these means should, however, be devoid of any connotation of vengeance or retribution." [emphasis added].

justice.[38] Provisions intended to restrain use of imprisonment were also included. Subsection 718.2 (d) states that less restrictive sanctions should be considered before imprisonment, and 718.2 (e) includes a direction to consider "all available sanctions other than imprisonment that are reasonable in the circumstances", with "particular attention to the circumstances of Aboriginal offenders".[39]

To target discrepancy and unpredictability in sentencing, under the heading "fundamental principle," section 718.2 directs that a "sentence must be proportionate to the gravity of the offence and the degree of responsibility of the offender".[40] Based on the discussion within the reports of the Sentencing Commission and the parliamentary standing committee tasked with review of sentencing reform ("Daubney Report"), it does not appear this was intended to import an additional statement of normative purpose into the *Criminal Code.*[41] Legislative intent notwithstanding, reference to the principle of proportionality in section 718.2 was the basis upon which retribution or punishing moral blame was

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[38] *Criminal Code, supra* note 30 at ss 717 (alternative measures) 718 -718.2 (purpose and principles), and 742 (conditional sentence), and 743 (imprisonment and parole).

[39] *Ibid* at s 718.2 (e). For a breakdown and analysis of the amendments see: Julian V Roberts & Andrew von Hirsch "Statutory Sentencing Reform: The Purpose and Principles of Sentencing", 1995 37 CLW 220.

[40] *Criminal Code, supra* note 30.

[41] See: Archambault, *supra* note 36 at 129 - 131 and 143. At page 131 the report quotes from Andrew von Hirsch in "Commensurability and Crime Prevention: Evaluating Formal Sentencing Structures and Their Rationale" (1983) 74 J Crim L & Criminol 209 at 211 which states: "The principle of commensurate- deserts addresses the question of *allocation* of punishments — that is, how much to punish convicted offenders. This allocation question is distinct from the issue of the *general justification* of punishment — namely, why the legal institution of punishment should exist at all (our emphasis)". See also Daubney, *supra* 34 at 46.

maintained as the fundamental purpose and consideration in sentencing determinations under Canadian law.[42]

iii) *Punishing Moral Blame*

Despite the apparent intent of Bill C-41, retributive punishment was maintained as an overarching purpose of sentencing through judicial interpretation of its amendments. The amendments were not in force when the case of *M(CA)* was determined, but the decision turned on the proper purpose and application of the then common law principles of proportionality and totality in sentencing determinations.[43] The reasoning with respect to retribution and proportionality was later applied in *Proulx,* which turned on the interpretation of the Bill C-41 amendments.[44] Read side by side, these cases demonstrate how the emphasis on moral blame and punishment in the jurisprudence prevailed after the Bill C-41 amendments despite the normative shift away from punishment evident in the drafting language as well as the Sentencing Commission and Daubney reports.

The facts of *M(CA)* are disturbing. Authorities discovered nine malnourished minors living in deplorable conditions who had been abandoned a year earlier by their

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[42] As will be discussed more in the next section, the sentencing provisions of the code have been interpreted to import report retributive values. See: Marie-Eve Sylvestre, *Moving Towards a Minimalist and Transformative Criminal Justice System: Essay on the Reform of the Objectives and Principles of Sentencing,* (Ottawa: Department of Justice Canada, Research and Statistics Division, 2016), online: Department of Justice Canada, <https://www.justice.gc.ca/eng/rp-pr/jr/pps-opdp/pps-opdp.pdf>. *Ibid* at page 18 states: "Even though they are not fundamentally repressive from an ontological point of view,the sentencing objectives set out in paragraphs (a) to (f) of section 718 and in sections 718.01 and 718.02 of the *Criminal Code* have been interpreted as reflecting negative values of affliction and punishment."

[43] *R v M(CA),* [1996] 1 SCR 500, [1996] SCJ No 28.

[44] *R v Proulx*, 2000 SCC 5.

father, the accused.[45] The accused was 55 years old, had a diagnosed personality disorder, was abused as a child himself, and expressed remorse for his crimes.[46] The evidence established that in the three years prior to his departure he had brutally and routinely physically, sexually, and emotionally abused his children.[47] The trial judge, expressing outrage at the egregiousness of the crimes and the conduct of the accused, ordered a cumulative, 25 year sentence.[48] The British Columbia Court of Appeal ("BCCA"), following a well-established appellate line of authority limiting cumulative sentencing to twenty years, reduced the sentence to 18 years and 8 months.[49] The crown appealed on grounds that the BCCA erred in applying a cap on cumulative sentences, and in holding that retribution was not a legitimate purpose of sentencing.[50]

Justice Lamer, writing for the court, held that the BCCA erred in applying the cap stating that only clear legislative direction could constrain judicial discretion with a strict limit on cumulative sentences.[51] Although not necessary to determine the appeal, Justice Lamer went on to discuss the role of retributive principles in sentencing determinations.[52] Stating a "profound belief" in retribution as an important

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[45] *M(CA), supra* note 43 at paras 1- 19.

[46] *Ibid* at paras 5 and 15.

[47] *Ibid* at paras 20 - 23.

[48] *R v M(CA),* [1994] BCJ No 51at 7, 40 BCAC 7 (BCCA).

[49] *Ibid* at paras 31- 37, 42- 44, and 68.

[50] *M(CA), supra* note 43 at 32.

[51] *Ibid* at paras 70 - 74.

[52] *Ibid* at para 76.

unifying principle in criminal law, he held that the assessment of moral blameworthiness was not only valid but of paramount importance in sentencing.[53] In *M(CA)* Justice Lamer draws support for this conclusion from prior jurisprudence that interpreted section 7 in the context of criminal liability doctrines :

> it is a principle of "fundamental justice" under s. 7 of the Charter that criminal liability may only be imposed if an accused possesses a minimum "culpable mental state" in respect of the ingredients of the alleged offence. … It is this mental state which gives rise to the "moral blameworthiness" which justifies the state in imposing the stigma and punishment associated with a criminal sentence…. it is this same element of "moral blameworthiness" which animates the determination of the appropriate quantum of punishment for a convicted offender as a 'just sanction.'[54]

To further support the conclusion that punishment for moral blame was the proper focus of sentencing, Justice Lamer interpreted the principle of proportionality in a manner that is arguably inconsistent with legislative intent. Scholarly opinion was divided on whether or not the principle functioned to avoid both disproportionately harsh and lenient sentences.[55] Noval Morris viewed proportionality as rooted in fairness, intended to prevent unjustly harsh punishment, and as having a limiting

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[53] *Ibid* at para 79.

[54] *Ibid* at para 78 [emphasis added].

[55] See: Malcolm Thorburn & Allan Manson, "The Sentencing Theory Debate: Convergence in Outcomes, Divergence in Reasoning" (2007) 10:2 New Crim L Rev 278; and Allan Manson, "The Appeal of Conditional Sentences of Imprisonment" (1997) 5:5 C R 279. There were other debates surrounding the principle of proportionality prior to its codification in Canada. See for example: Joel Feinberg, *The Moral Limits of the Criminal Law: Volume 1: Harm to Others*, (New York: Oxford University Press, 1990); David Bazelon, "The Morality of the Criminal Law", 1976) 49 S Cal L Rev 385; and Richard Singer, *Just Deserts: Sentencing Based on Equality and Desert*, (Cambridge: Ballinger, 1979) at ch 5.

function only.[56] Andrew von Hirsch agreed that the principal was rooted in fairness, but disagreed with Morris's conclusion that it functioned only as an upper limit.[57]

He describes proportionality as an ordinal principle that ensures predictability and parity in sentencing and achieves proportionate sentences through comparative analysis of sentences in similar cases.[58] Applying proportionality only as a cardinal principle would "presuppose a heroic kind of intuitionism: that if one only reflects enough, one will "see" the deserved quanta of punishment for various crimes."[59] Furthermore, von Hirsch says proportionality analysis focuses on the seriousness of the conduct, not the moral character of an offender. As he explains, proportionality requires "a reasonable proportion…between overall levels of punitiveness and the gravity of the criminal conduct".[60] The report of the Sentencing Commission, which had engaged von Hirsch as an advisor, indicates that the principle was most likely intended to function as he describes it.[61]

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[56] Noval Morris, *The Future of Imprisonment*, (Chicago: University of Chicago Press, 1974) at 73 and 78-80. See also for discussion: Richard S Frase, "Limiting retributivism: The Consensus Model of Criminal Punishment.", Michael Tonry, ed, *The Future of Imprisonment in the 21rst Century,* (New York: Oxford University Press, 2003), online: Social Science Research Network, <https://ssrn.com/ abstract=420324>.

[57] Andrew von Hirsch, "Proportionality in the Philosophy of Punishment" (1992) 16 Crime and Jusitice at 75- 76.

[58] *Ibid* at 75- 85. The manner von Hirsch describes proportionality is cardinal, in the sense it is based on the important general rule that the overall levels of punitiveness of a sentence must be proportional to the gravity of the criminal conduct and also ordinal because it calls for the sentencing judge to seek parity in a sentence compared to crimes of similar seriousness.

[59] *Ibid* at 76.

[60] *Ibid* at 83.

[61] Archambault, *supra* note 37 at 142-144. However the report also emphasizes restraint, *ibid* at page 30 states, "[s]ince the emphasis is on the accountability of the offender rather than on punishment per se, a sentence should be the least onerous sanction appropriate." See also: A von Hirsch, *Past or Future Crimes:Deservedness & Dangerousness in the Sentencing of Criminals* (New Brunswick, NJ: Rutgers University Press,1985), at 40; and Julian V Roberts & Andrew von Hirsch, "Conditional Sentences of Imprisonment and the Fundamental Principle of Proportionality in Sentencing", (1998) 10 CR (5) 222.

The definition of proportionality upheld in *M(CA)* is starkly different from von Hirsch's conceptualization of the principle and presumes judges have the "heroic kind of intuitionism" he is sceptical of.[62] Justice Lamer states that "punishment must be proportionate to the moral blameworthiness of the offender" and "those who cause harm intentionally [should] be punished more severely than those causing harm unintentionally".[63] To distinguish the legitimate retribution required by the principle of proportionality from vengeance Justice Lamer states:

> Retribution in a criminal context, by contrast, represents an objective, reasoned and measured determination of an appropriate punishment which properly reflects the moral culpability of the offender, having regard to the intentional risk-taking of the offender, the consequential harm caused by the offender, and the normative character of the offender's conduct. Furthermore, unlike vengeance, retribution incorporates a principle of restraint; retribution requires the imposition of a just and appropriate punishment, and nothing more.[64]

After Bill C-41 was enacted Justice Lamer affirmed and expanded the reasoning in *M(CA)* in the *Proulx* decision which directly implicated the interpretation of subsections 718.2 (d) and (e) of the *Code*, as well as section 742.1 authorizing conditional sentences for terms of imprisonment less than two years in length.[65] Mr. Proulx was a newly licensed eighteen year old driver sentenced to eighteen months in prison for dangerous driving causing death and bodily harm.[66] The trial judge acknowledged the offender did not require rehabilitation and served no risk to the

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[62] A von Hirsch, *supra* note 57.

[63] *M(CA), supra* note 43 at 40, citing *R v M(JJ)*, [1993] 2 SCR 421, at 431 and *R v Martineau*, [1990] 2 SCR 633, at 645.

[64] *R v (M(CA)*, *ibid* at para 8 [emphasis added].

[65] *Proulx, supra* note 44, and *Criminal Code, supra* note 30.

[66] *Proulx, ibid* at paras 3 - 9.

community but determined that a conditional sentence would not appropriately achieve the purposes of denunciation and general deterrence.[67] The Manitoba Court of Appeal substituted a conditional sentence on the grounds that the trial judge erred in attaching undue weight to denunciation when considering the appropriateness of a conditional sentence.[68]

The decision in *Proulx* granted the Crown's appeal and held that the legislature did not intend to constrain the judicial discretion by creating a presumption in favor of non-custodial conditional sentences or precluding terms of imprisonment under two years. To support this conclusion, the decision reasoned that application of the principle of proportionality in section 718.2 granted sentencing judges with wide discretion to assess the moral blameworthiness of offenders, and that a presumption in favour of conditional sentences would unduly restrain its intended scope and function.[69]

Subsequent decisions have continued to uphold moral blameworthiness as the primary consideration in proportionality and parity as a "secondary concern".[70] Accordingly, proportionality has been interpreted in a manner that conflicts with the legislative intent of Bill C-45 and the goal of achieving better parity and predictability in sentencing. Instead, it has been interpreted in *M(CA)* and *Proulx* as a cardinal principle intended to provide sentencing judges wide discretion to assess "moral blameworthiness".

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[67] *Ibid* at para 5.

[68] *Ibid* at at para 7.

[69] *Ibid* at paras 82 - 83 and 116.

[70] *R v Lacasse,* 2015 SCC 64 at para 12.

Furthermore, the court has elevated its interpretation of proportionality to constitutional status. In *Ipeelee*, it is stated that proportionality in sentencing "could aptly be described as a principle of fundamental justice" pursuant to section 7 of the *Charter.*[71] This suggests that proportionality functions to protect an offenders rights, but generally the principle is applied to justify harsher sentences.[72] As Marie-Eve Sylvestre notes, proportionality "generally implies an obligation and a duty to punish in the first place as well as the idea that the punishment must be sufficiently afflictive in order to be just and appropriate".[73]

In conclusion, retributive folk psychology and its implicit norms regarding rationality have shaped criminal legal doctrine and guided both the interpretation of section 7 of the *Charter* and legislated sentencing reform. Retributive folk psychology functions as a foundation of assumed truths about human nature from which the law concludes that when an individual commits a crime they deserve to suffer punishment. Principles constructed from or interpreted based on retributive folk psychology such as "moral involuntariness" and proportionality have been embedded into interpretation of the scope of protection provided by section 7 in the criminal law context. Thus, retributive folk psychology and its assumptions about our

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[71] *R v Ipeelee*, 2012 SCC 13 at para 36.

[72] See for example: *R v Fice,* 2005 SCC 32; and *Lacasse, supra* note 70. As will be further discussed in chapter five, in *Ipeelee, supra* note 71, the principle was exceptionally applied to reduce the sentences of two indigenous offenders who, due to background and systemic factors ,were held to have reduced moral culpability.

[73] Marie-Eve Sylvestre, "The (Re)Discovery of the Proportionality Principle in Sentencing in Ipeelee: Constitutionalization and the Emergence of Collective Responsibility" (2013) 63:2 SCLR 461 at 14 (QL).

capacity to use rationality to exert "moral control" over our behaviour are foundational to criminal law in Canada.[74]

[74] *Bouchard- Lebrun, supra* note 19.

CHAPTER III

THE CONFLICT BETWEEN

NEUROSCIENCE AND RETRIBUTIVE FOLK PSYCHOLOGY

In recent decades, the rapid progress of neuroscience has attracted significant media attention and prompted discussion in legal scholarship concerning a variety of issues.[75] The picture of human nature that has emerged from neuroscience has also sparked discussion and debate regarding retributive folk psychology.[76] This chapter will review the arguments in that discussion, the neuroscience at issue, and discuss the epistemic cultural differences between law and neuroscience that have prevented the debate from moving beyond impasse into meaningful interdisciplinary dialogue.

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[75] See for example: David Disalvo, "Can Neuroscience Debunk Free Will?", Time (2014), online: <https://time.com/3529770/neuroscience-free-will/>; Cliodhna O'Connor et al,"Neuroscience in the Public Sphere", (2012) 74:2 Neuron 220; Jennifer A Chandler, "The Use of Neuroscientific Evidence in Canadian Criminal Proceedings" (2015) 2:3 J L & Biosci, 550; Jennifer A Chandler "Health Law The Impact of Biological Psychiatry on the Law: Evidence, Blame, and Social Solidarity" (2017) 54:3 Alta L Rev 831 (QL); Morris B Hoffman, "Nine Neuro-law Predictions", (2018) 21 New Crim L Rev 212; Betsy J Grey, "Implications of Neuroscience Advances in Rort Law: a General Overview" (2015) 12 Ind H L Rev 671; Stacey A Tovino, "Will Neuroscience Redefine Mental Injury? Disability Benefit Law, Mental Health Parity Law, and Disability Discrimination Law", (2015) 12 Ind H L Rev 695; Sydney B Roth, "The Emergence of Neuroscience Evidence in Louisiana" (2012) 87 Tul L Rev 197; Arielle R Baskin-Sommers & Karelle Fonteneau, "Correctional Change Through Neuroscience", (2016) 85 Fordham L Rev 42; John B Meixner Jr, "Neuroscience and Mental Competency: Current Uses and Future Potential", (2018) 81 Alb L Rev 995; and Oliver R Goodenough and Micaela Tucker , "Law and cognitive neuroscience" (2010) 6 Ann Rev L Soc Sci 61.

For a review of the development and progress of interdisciplinary research in law and neuroscience see: Francis X Shen, "The Law and Neuroscience Bibliography: Navigating the Emerging Field of Neurolaw" (2010) 38 Int'l J Legal Info 352.

[76] See for example: Stephen J Morse, "Criminal Law and Common Sense: An Essay on the Perils and Promise of Neuroscience" (2015) 99 Marq L Rev 39; Elizabeth Bennett, "Neuroscience and Criminal Law: Have We Been Getting it Wrong for Centuries and Where Do We Go From Here?" (2016) 85 Fordham L Rev 437; Nicole A Vincent, "On the Relevance of Neuroscience to Criminal responsibility" (2010) 4 Crim L & Phil 77; and Deborah W Denno, "Neuroscience and the Personalization of Criminal Law" (2019) 86 U Chicago L Rev 359.

i) *The 'Neuroscience of Free Will'*

Benjamin Libet's research is commonly referred to as the "neuroscience of free will".[77] His initial experimental design involved electroencephalogram ("EEG") measurement of brain activity as research subjects were asked to choose when to flex their wrists and record the time at which they arrived at their intention. Even when accounting for margin of error in subject reporting, the results demonstrated that the readiness potential that occurs when flexion is signalled occurred *before* subjects became conscious of their intention to flex.[78]

More recent studies utilizing Magnetic Resonance Imaging ("MRI") also report results indicating that behavioural choices are determined before the chooser becomes conscious of their choice,[79] even in studies involving abstract choices.[80] Observing MRI images of neurological activity, researchers have been able to accurately predict subject's choices *before* they are able to consciously identify it.[81]

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[77] See for example: WP Banks, & S Pockett, "Benjamin Libet's Work on the Neuroscience of Free Will" in Velmans & S Schneider eds,*The Blackwell Companion to Consciousness,* (Hoboken: Blackwell Science, 2007), at 657.

[78] Benjamin Libet, Curtis A Gleason, Elwood W Wright and Dennis K Pearl, "Time of Conscious Intention to Act in Relation to Onset of Cerebral Activity (Readiness- Potential): The Unconscious Initiation of a Freely Voluntary Act" (1985) 106 Brain 623; and Benjamin Libet, "Unconscious Cerebral Initiative and the Role of Conscious Will in Voluntary Action" (1985) 8:4 Behavioural and Brain Sci 529.

[79] JD Haynes, "Decoding and Predicting Intentions" (2011) 1224:1 Ann NY Acad Sci 9; I Fried, R Mukamel & G Kreiman, "Internally Generated Preactivation of Single Neurons in Human Medial Frontal Cortex Predicts Volition" (2011) 69:3 Neuron 548; Chun Siong Soon, et al, "Unconscious Determinants of Free Decisions in the Human Brain" (2008) 11:5 Nature 543; and Masao Matsuhashi & Mark Hallett, "The Timing of the Conscious Intention to Move" (2008)11 Eur J Neurosc 28.

[80] Chun Siong Soon et al, "Predicting Free Choices for Abstract Intentions", (2013) 110:15, Proc Natl Acad Sci 6217.

[81] See for example: Stefan Bode et al, "Tracking the Unconscious Generation of Free Decisions Using Ultra-High Field fMRI" (2011) 6:6 PLOS One 1; and John-Dylan Haynes et al, "Reading Hidden Intentions in the Human Brain" (2007) 17 Curr Biol 323.

One study predicted the choices of subjects undertaking a “thought-based mental imagery decision task” eleven seconds before they became conscious of their intention.[82]

Based on results of this kind, it has been argued that neuroscience has proven that free will does not exist and the universe is deterministic.[83] However, interpreting these experiments as offering conclusive evidence refuting the existence of free will is controversial. Both the validity of the data and the methodology of Libet’s experimental design have been questioned.[84] Similar studies have resulted in conflicting data and interpretations.[85] Doubts have also been voiced regarding the simple motor-based binary choices involved in Libet’s experiments and whether they are replicable in more complex cognitive decision making.[86] Libet himself had difficulty accepting his findings, and maintained the belief that conscious thought processes could still determine choice, at the very least through *veto* decisions to

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[82] Roger Koenig-Robert & Joel Pearson, “Decoding the Contents and Strength of Imagery Before Volitional Engagement” (2019) 9 Scientific Reports 3504.

[83] See for example: Sam Harris, *Free Will,* (New York: Free Press, 2012).

[84] See for example: Victoria Saigle et al, “The Impact of a Landmark Neuroscience Study on Free Will: A Qualitative Analysis of Articles Using Libet and Colleagues' Methods” (2018) 9:12 AJOB Neuroscie 29; and Aaron Schurger, et al, “An Accumulator Model for Spontaneous Neural Activity Prior to Self-initiated Movement” (2012) 109:42 Proc Nat Acad Sci USA E2094.

[85] See for example: Judy Trevena & Jeff Miller, "Brain Preparation Before a Voluntary Action: Evidence Against Unconscious Movement Initiation" (2010) 19:1 Conscious & Cogn 447; and Aaron Schurger, et al, “Neural Antecedents of Spontaneous Voluntary Movement: A New Perspective” (2016) 20 Trends Cogn Sci 20 77.

[86] For example, Stephen J Morse,“Determinism and the Death of Folk Psychology” (2008) 9 Minn J L Sci & Tech 1, at 29 states: “Libet's task involved “random” finger movements that involved no deliberation whatsoever and no rational motivation for the specific movements involved. This is a far cry from the behavioural concerns of the criminal law or morality, which address intentional conduct in contexts when there is always good reason to refrain from harming another or to act beneficently. In fact, it is at present an open question whether Libet's paradigm is representative of intentional actions in general because Libet used such trivial behaviour.”

stop initiated choices (free won't).[87] Subsequent research has demonstrated that choices can be vetoed after the readiness potential is initiated, but have not conclusively identified the precise neurological processes and brain structures involved in veto decisions or whether these decisions are also initiated in unconscious processes.[88]

Whatever the findings might imply, it is important to remember that free will is a metaphysical concept that has been defined in different ways.[89] Determinism is also still debatable in science. The classical Newtonian world view in physics that supported the deterministic conclusion was disrupted in the early 20th century by quantum mechanics.[90] Empirical study at the quantum level repeatedly demonstrates unpredictability, indeterminacy and a probabilistic rather than deterministic world view.[91] John Searle has offered a novel definition of free will that

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[87] Benjamin Libet, *Mind Time: The Temporal Factor in Consciousness*, (Cambridge: Harvard University Press, 2004), at 123. See also for discussion: Andrea Lavazza, "Free Will and Neuroscience: From Explaining Freedom Away to New Ways of Operationalizing and Measuring It" (2016) 10 Front Hum Neurosci 262.

[88] See for example: Matthias Schultze- Krafta et al , "The Point of No Return in Vetoing Self-Initiated Movements" (2016) 109:42 Proc Nat Acad Sci USA 1080; Simone Kühn, & Marcel Brass, "Retrospective Construction of the Judgement of Free Choice" (2009) 18:1 Conscious & Cogn 12; and Marcel Brass & Patrick Haggard, "To Do or Not to Do: The Neural Signature of Self-Control" (2007) 27:34 J Neurosci 9141.

[89] See for examples: Timothy O'Connor & Chistopher Franklin, "Free Will" in Edward N Zalta, ed, *The Stanford Encyclopedia of Philosophy* (Spring 2020 Edition), online: Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/archives/spr2020/entries/freewill/>.

[90] Werner Heisenberg, *Physics and Philosophy: The Revolution in Modern Science,* (London: Penguin, 1989).

[91] *Ibid* at 5: Paul Davies writes in the introduction, "This unpredictability in quantum systems does not imply anarchy… quantum mechanics still enables relative probabilities of the alternatives to be specified precisely".

harmonizes neuroscience with quantum indeterminacy.[92] He maintains that the question of free will remains open:

> The problem of free will is unusual among contemporary philosophical issues in that we are nowhere remotely near to having a solution. I can give you a pretty good account of consciousness, intentionality, speech acts and of the ontology of society but I do not know how to solve the problem of free will.[93]

ii) *Sapolsky's Synthesis*

Regardless of whether it establishes or disproves anything conclusive regarding free will and determinism, the neuroscience of free will is consistent with findings in other areas of neuro-behavioural research. Cognitive research produces results consistent with the conclusion that conscious rational thought processes do not control, or have an independent determinative role in, behavioural choices.[94] Meta-analysis of thirty five years of research studying the role of emotions in decisions indicates that emotional responses, even when acknowledged by the conscious mind, affect the content and quality of reasoning processes.[95] Conscious thoughts modify emotions,

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[92] John R Searl, *Freedom & Neurobiology: Reflections on Free Will, Language, and Political Power,* (Columbia University Press: New York, 2004).

[93] *Ibid* at 10. See also: John Searle, *Talks at Google (*November, 2007), online: YouTube, <https://www.youtube.com/watch?v=vCyKNtocdZE>; and "What is free will?", *Closer to Truth,* online: YouTube, <https://www.youtube.com/watch?v=_rZfSTpjGl8>.

[94] See for example: H Aarts et al, "Preparing and Motivating Behaviour Outside Awareness" (2008) 319 Science 1639; R Custers & H Aarts, "The Unconscious Will: How the Pursuit of Goals Operates Outside of Conscious Awareness" (2010) 329 Science 47; R Gaillard, et al, "Nonconscious Semantic Processing of Emotional Words Modulates Conscious Access" (2006) 203:19 Proc natl acad sci 7524; MT Diaz & G McCarthy, "Unconscious Word Processing Engages a Distributed Network of Brain Regions" (2007) 19:11 J Cogn Neurosci 1768; Simon van Gaal et al, "The Role of Consciousness in Cognitive Control and Decision Making" (2012) 6 Front Hum Neurosci 121; and Guillermo Horga & Tiago V Maia, "Conscious and Unconscious Processes in Cognitive Control: A Theoretical Perspective and a Novel Empirical Approach" (2012) 6 *Front Hum Neurosci* 199.

[95] Jennifer S Lerner et al, "Emotion and Decision Making" (2015) 66 Annu Rev Psychol 799, at 800; and Elizabeth A Phelps et al "Emotion and Decision Making: Multiple Modulatory Neural Circuits" (2014) 37:1 Annual Review of Neuroscience 263.

but emotional processes also influence thought processes and cause behavioural choices that conflict with consciously held ethics or intentions.[96] Furthermore, the infinitely complex bigger picture that has emerged from the totality of neurobehavioural science is wholly inconsistent with the assumption in law that rationality functions independent from unconscious emotional processing or that it overrides emotional impulse. Stanford neurobiologist and best selling science writer Robert Sapolsky successfully paints this picture in *Behave: The Biology of Humans at Our Best and Worst*.[97]

Behave describes the complexity of the neuro-biological determinants of human behaviour and how our capacity for choice is formed in an inseparable, causal feedback relationship with the social environment. Genes, developmental experiences, cultural conditioning, and unconscious sensory cues shape our neurological capacity for behaviour.[98] Variables such as exposure to stress hormones in gestation, childhood poverty and abuse are linked to the development of neurological impairments associated with dysfunctional adult behaviour.[99] Rather than being reduced to brains, humans are described as unique and complex social

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[96] *Ibid.* See also: N Frijda, "The Laws of Emotion" (1988) 43 Am Psychol 349; N Frijda et al, "Relations Among Emotion, Appraisal, and Emotional Action Readiness" (1989) 57 J Personal Soc Psychol 212; G Loewenstein, "Out of Control: Visceral Influences on Behaviour" (1996) 65 Organ Behav Hum Decis Proc 272; G Loewenstein, (2000) "Emotions in Economic Theory and Economic behaviour", 90 Am Econ Rev 426.

[97] Robert Sapolsky, *Behave: The Biology of Humans at Our Best and Worst*, (New York: Penguin, 2018).

[98] *Ibid* at 95, 97 (culture), 85 (smells),93 (words), 85, 90, and 91 (pain).

[99] For example,Sapolsky explains exposure in gestation to stress hormones from the mother is linked to impaired cognition, impulse control, and empathy. *Ibid* at 195.

animals. In *Behave*, human behaviour seems less determined than overdetermined: many factors are in play.[100]

With dysfunctional or anti-social behaviour there is not usually a single smoking gun, although brain tumours have been linked to specific crimes in the past.[101] Traumatic childhood stress can cause multiple neurological impairments that together function to limit capacity for behavioural choice in a manner that reinforces itself and prevents access to social environmental conditions and experiences which might support positive neurological changes. For example, the amygdala, a brain structure involved in aggression, fear and anxiety, is inextricably linked with other regions of the brain it receives and sends signals to, as well as biochemical systems involved in those communicative processes.[102] Traumatic stress in childhood is linked to development of an overactive amygdala, alongside other neurological impairments in emotional regulation, impulse control, empathy, and cognition such as learning and memory.[103] Therefore an adult who suffered abuse in childhood is at risk for multiple neurological impairments that can prevent the formation of stable, supportive relationships, social integration and limit economic opportunities.[104]

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[100] I use the word overdetermined in the meaning coined by Louis Althusser. See: William Lewis, "Louis Althusser", Edward N Zalta, ed, *The Stanford Encyclopedia of Philosophy (Spring 2018 Edition)*, online: Stanford Encyclopedia of Philosophy, <https://plato.stanford.edu/archives/spr2018/entries/althusser/>.

[101] Tumours impairing amygdala function have also been linked with high profile murders case of Ulrike Meinhof and Charles Whitman. Sapolsky, *supra* note 97 at 32- 33.

[102] *Ibid* at 31- 44.

[103] *Ibid* at 194- 196. For example adults with Post Traumatic Stress Disorder as a result of childhood trauma, in addition to amygdala changes may also have decreased volume of hippocampus which is involved in learning and memory.

[104] *Ibid* at 194- 201.

The discussion of genetic and epigenetic research in *Behave* demonstrates the entanglement of nurture and nature and provides a basis for understanding how intergenerational trauma is passed on in both genes and parenting.[105] Developmental experiences are encoded in genes which in turn initiate neurological change.[106] Our genetic inheritance from our parents contains coding they acquire through their experiences in the social environment, which is then modified during our own development.[107] Genetics and epigenetics, along with research establishing neuroplasticity in adults, undercuts the stereotype of the bad apple by demonstrating how interactions with the social and physical environment continue to shape neurological capacity throughout our life span.[108]

Sapolsky also harnesses neuroscience to challenge the Cartesian dichotomy between thought and emotion, or mind and body, that is at the root of common sense misunderstandings of the role rationality plays in behaviour.[109] Such misunderstandings are also at the root of retributive folk psychology. Despite initial resistance within neuroscience itself, it is now well established that the dorsolateral prefrontal cortex (dLPFC), the region associated with conscious rational thought

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[105] *Ibid* at 229.

[106] *Ibid* at 227- 228.

[107] *Ibid* at 229- 231.

[108] *Ibid* at 147- 153.

[109] Sapolsky cites Antony Damasio, *Descartes Error,* (New York: Penguin, 1994), as an authoritative synthesis of the science in relation to this argument. *Ibid* at 28**.**

processes does not function independently, but is enmeshed with the much older, limbic system that regulates emotional affect.[110]

All of this suggests that conscious reasoning processes, their content or quality, are modified by emotional responses triggered by particular decisions in their particular contexts.[111] This conclusion is supported by research. For example, moral reasoning and judgments differ when subjects consider their own behaviour against the same behaviour in others.[112] Furthermore, there appears to be no link between conscious moral reasoning and moral, altruistic or prosocial behaviour. Evidence of inactivity or activity of the dlPFC in decision making does not reliably predict "good" (or moral) decisions. In fact, patterns of activation in the limbic regions associated with unconscious stress and emotional response are a much better predictor of altruistic or prosocial behaviour.[113] Damage to the limbic system, coupled with unimpaired dlPFC function, produces practical, or "cold hearted", moral judgments.[114] Numerous studies demonstrate that a human can "know the difference between right and wrong but, for reasons of organic impairment, not be able to do the right thing."[115] By

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[110] *Ibid* at 28- 29.

[111] *Ibid* at 481 and 489- 491

[112] *Ibid* at 482 and 493.

[113] *Ibid* at 480.

[114] *Ibid* at 483 and 487.

[115] *Ibid* at 481 states: "[T]he dlPFC doesn't adjudicate in contemplative silence. The waters roil below".

contrast, those who consistently demonstrate moral or pro-social behaviour tend to think about their decisions less, not more.[116]

Sapolsky's analysis arrives at conclusions that apply to all humans, not just those with diagnosed disorders. However, neuroscientific research into impulse control disorders such as antisocial personality Disorder (ASPD) and borderline personality disorder (BPD) also evidences the conclusion that criminal conduct is not controlled by conscious thought processes. As will be discussed in chapter five, ASPD and BPD are mental disorders which are highly prevalent amongst criminal offenders. Development of ASPD and BPD has been linked to adverse childhood events and experiences.[117] Research involving individuals with these disorders confirms Sapolsky's claim that the capacity to use moral reasoning to form intentions, values or moral judgments is distinct from the capacity to make choices and behave in accordance with them. ASPD and BPD have been linked to neurological differences in brain structures involving emotional regulation, empathy, and impulse control but

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[116] Sapolsky explains how higher levels of dlPFC activation preceding decision can indicate internal debate self serving rationalizations, and that those who consistently do the right thing do not need to deliberate doing the right thing. *Ibid* at 512 - 520,

[117] P Coehn et al, "Socioeconomic Background and the Developmental Course of Schizotypal and Borderline Personality Disorder Symptoms" (2008) 20:2 Dev Psychopathol 633-650; JG Johnson et al, "Childhood Maltreatment Increases Risk for Personality Disorders During Early Adulthood" (1999) 56:7 Arch Gen Psychiatry 600; JJ Washburn et al, "Development of antisocial Personality Disorder in Detained Youths: the Predictive Value of Mental Disorders" (2007) 75:2 J Consult Clin Psychol 221; Z Shi et al, "Childhood Maltreatment and Prospectively Observed Quality of Early Care as Predictors of Antisocial Personality Disorder Features" (2012) 33:1 Infant Ment Health J 55; and JG Johnson et al, "Parenting Behaviours Associated with Risk for Offspring Personality Disorder During Adulthood (2006) 65:5 Arch Gen Psychiatry 579.

are not associated with impaired capacity for reasoning.[118] This suggests a need to reform the "Not Criminally Responsible on account of Mental Disorder" (NCRMD) doctrine in Canada.[119] As Stephen Penny explains, although ASPD and BPD impair the capacity to act in accordance with intentions, because they do not impair the capacity to appreciate the difference between right and wrong, they do not meet the criteria for the NCRMD verdict.[120] Within the NCRMD doctrine, awareness of the difference between right and wrong is collapsed into an ability to act in accordance with such distinctions.

Sapolsky, who was publishing in the law and neuroscience field before *Behave,* devotes a chapter to the relevance of neuro-behavioural science to criminal justice.[121] In his view, the retributive folk psychology is based around the mythical idea that somewhere in the brain there is a "homonculus" or mini-me at a control panel who remains vigilant and in charge of behaviour apart from exceptional circumstances that disable it.[122] For Sapolsky, moral progress in criminal justice

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[118] See for example: Yaling Yang & Adrian Raine, "Prefrontal Structural and Functional Brain Imaging Findings in Antisocial,Violent, and Psychopathic Individuals: A Meta-analysis", (2009) 174 Psychiatry Res: Neuroimaging 81; Ami Sheth Antonucci et al, "Orbitofrontal correlates of Aggression and Impulsivity in Psychiatric Patients" (2006) 147 Psychiatry Res: Neuroimaging 213; Nora D Volkow & Laurence Tancredi, "Neural Substrates of Violent Behaviour, a Preliminary Study With Positron Emission Tomography" (1987) 151 Brit J Psychaitry 668; Romuald Brunner et al, "Reduced Prefrontal and Orbitofrontal Gray Matter in Female Adolescents with Borderline Personality Disorder: is it Disorder Specific?" (2010) 49 NeuroImage 114 ;Thomas Zetzsche et al, "Hippocampal Volume Reduction and History of Aggressive Behaviour in Patients with Borderline Personality Disorder" (2007) 154 Psychiatry Res 157; A Bechara, et al, "Emotion, Decision Making and the Orbitofrontal Cortex", (2000) 1:3 Cerebral Cortex 295.

[119] *Criminal Code, supra* note 30 at s 16.

[120] Steven Penny, "Impulse Control and Criminal Responsibility: Lessons from Neuroscience", (2012) 35 Int J L & Psychiatry 99.

[121] Sapolsky, *supra* note 97 at 580.

[122] *Ibid* at 588- 589.

coincides with the abandonment of such metaphysical explanations of criminal behaviour.[123] Yet discussions of criminal responsibility continue to demonstrate a pernicious contradiction where individual proclivities, personality or physical limitations are accepted as biologically determined, while our ability or inability to resist acting on these dispositions is attributed to a transcendent moral agency.[124] Sapolsky states, "of all the stances on mitigated free will, the one that assigns aptitude to biology and effort to free will, or impulse to biology and resisting it to free will, is the most permeating and destructive".[125] Imputing moral blame and punishing offenders based on myths regarding our capacity for rationality is no different from convicting epileptics for witchcraft.

Sapolsky does not claim that neuroscience has all the answers, but thinks that what it has demonstrated should be enough to accept that the criminal justice system has

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[123] Sapulsky lists the following as examples: (1) that before epilepsy was understood, seizures were listed as of witchcraft in an American legal treatise (2) understanding mental illness led to the development of the M'Naghten rule and insanity defence, and (3) development of criminal law as it applies to minor defenders in the United States was directly influenced by neuroscience. *Ibid* at 586 - 589.

In Canada, neuroscience has not had this same influence and the Supreme Court has instead rested on the conclusion it is "widely acknowledged that age plays a role in the development of judgment and moral sophistication". [See: *R v D(B),* 2008 SCC 25 at 96]. For discussion of differences in this jurisprudence see: Brock Jones, "Accepting That Children are Not Miniature Adults: A comparative Analysis of Recent Youth Criminal Justice Developments in Canada and the United States," (2015) 19:11 Can Crim L Rev 95.

[124] *Ibid* at 586- 597. As an example, Sapulsky points out that pedophilia and alcoholism are considered biologically determined but resisting the urge to molest a child or drink is attributed to moral grit and determination. Sapolsky also points out, as Stephen Penny, *supra* note 120 at 20, does in the Canadian context, that the law is inconsistent and arbitrary in the manner the insanity defence draws nebulous conceptual boundaries around circumstances defining when it is applicable. Sapolsky, *ibid* at 586 - 580, discusses this in the American legal context, where the defence requires that the disorder gave rise to a "compulsion" to act such that hallucinations must be found to have caused the act. In Canada, as Penny discusses, access to NCRMD verdict turns on whether the mental disorder *caused* the individual to become unable to acknowledge and understand the nature and consequences of their actions or their moral or legal wrongfulness.

[125] *Ibid* at 598.

been founded on false beliefs and is in need of reform. Although some neuroscientific data is merely descriptive, causation has been demonstrated in some experiments that use transcranial magnetic stimulation to trigger decisions and behaviour in subjects.[126] Prediction of individual behaviour is much less reliable but research has established strong variable correlates that support probabilistic predictions at group level. In Sapolsky's view, neuro-science based criminal justice reform should not wait because "perfectly smart" people fill in unexplained gaps with an imaginary homonculus.[127]

iii) *Neuroscience Versus Folk Psychology*

The description of human choice and behaviour based on the neuroscience has been critically characterized by some as "mechanistic," "reductionist," merely "descriptive," and of dubious relevance to normative questions in criminal law.[128] Stephen J Morse argues that the neuroscience of free will describes conscious thought processes as superfluous, or mere narration, and as if humans act as mere

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[126] In these types of experiments, individuals still believe their decisions are consciously chosen and intentional, despite the determinative cause being the TCM stimulation. *Ibid* at 599.

[127] *Ibid* at 607.

[128] See: Stephen J Morse, "Avoiding Irrational NeuroLaw Exuberance: A Plea for Neuromodesty", (2011) 62 Mercer L Rev 837 at 856; and Hilary Bok "Want to Understand Free Will? Don't Look to Neuroscience" Chronicle Review of Higher Education, March 18, 2012, online: Chronicle Review of Higher Education, <https://www.chronicle.com/article/Hilary-Bok-Want-to-Understand/131168>.

automata with a capacity for reasoning that has no causal consequence.[129] In reaction to a study in which researchers were able to predict shopping choices from brain images he decries, "[neuroscience] betrays once again the mechanistic view of human activity. What people do is simply a product of brain regions and neurotransmitters. The person disappears. There is no shopper. There is only a brain in a mall."[130]

For Morse, the neuroscientific account of human behaviour is wholly incompatible with legal concepts of personhood, agency and responsibility.[131] Morse's reductionist arguments target particular neuroscience experiments that are by their nature reductive in the manner that limited variables are isolated for observation.[132] He has not published any specific response to Sapolsky's more holistic neuroscientific description of behaviour in *Behave.* However it would not likely change his position or arguments. Morse unequivocally maintains that until neuroscience supplies a

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[129] Stephen J Morse, "Determinism and the Death of Folk Psychology", (2008) 9 Minn J L Sci Tech 1 at 19 states: "if humans are not conscious and intentional creatures who act for reasons that play a causal role in our behaviour, then the foundational facts for responsibility ascriptions are mistaken. If it is true, for example, that we are all automata, then no one is an agent, no one is acting and, therefore, no one can be responsible for action."

Stephen J Morse is a long time critic of neuro-reform and proponent of the retributive status quo. See for example: "Brain and Blame" (1996) 84:3 Georgetown L J 527; "Culpability and Control" (1994) 142 U Pa L Rev 1587; "The New Syndrome Excuse Syndrome" (1995) 14 Crim Just Ethics 3; "Neuroprediction: New Technology, Old Problems" (2015) 8 Bioethica Forum 128; "The Non-Problem of Free Will in Forensic Psychiatry and Psychology, (2007) 25 Behav Sci & L 203; and "Criminal Responsibility and the Disappearing Person" (2007) 28 Cardozo L Rev 2545.

[130] Morse (2008), *ibid* at 24.

[131] *Ibid* at 24 states: **"**If accounts such as these from both scientists and the media are correct and their implications were properly understood, rationality would require either that we abandon agency-based conceptions and practices of responsibility or that we learn to live with the illusion that we are agents. The rich explanatory apparatus of intentionality is simply a post-hoc rationalization we hapless homo sapiens construct to explain what our brains have already done. We are just mechanisms…"

[132] *Ibid.*

sufficiently totalitarian account of human behaviour disproving the "laws view of a person" it is irrelevant to criminal law. He states:

> the law's "official" position …. is justified unless and until neuroscience or any other discipline demonstrates convincingly that humans are not the creatures we think we are. That is, if humans are not conscious and intentional creatures who act for reasons that play a causal role in our behaviour, then the foundational facts for responsibility ascriptions are mistaken. If it is true, for example, that we are all automata, then no one is an agent, no one is acting and, therefore, no one can be responsible for action.[133]

As Morse understands, the folk psychological justifications of criminal punishment do not even depend on a free will. Rationality need only function as *a* cause, but not *the* dominant or controlling cause of behaviour in law's folk psychology as he describes it:

> The law's view of the person is thus the so-called "folk-psychological" model: a view of the person as a conscious (and potentially self-conscious) creature capable of practical reason, an agent who forms and acts on intentions that are the product of the person's desires and beliefs. We are the sort of creatures that can act for and respond to reasons. The law properly treats persons generally as intentional creatures and not as mechanical forces of nature. Law and morality are action- guiding and could not guide people ex ante and ex post unless people could use rules as premises in their practical reasoning. Otherwise, law and morality as action-guiding normative systems of rules would be useless, and perhaps incoherent. Law is a system of rules that, at the least, is meant to guide or influence behaviour and thus to operate as a potential cause of behaviour.[134]

Based on this description of folk psychology derived from existing American legal doctrines, Morse argues that even if neuroscience has debunked free will, it poses

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[133] Morse (2008), *ibid* at 19.

[134] *Ibid* at 4.

no challenge to the status quo.[135] As discussed in chapter two, Canadian liability doctrines developed in post-Charter jurisprudence have relied on moral philosophy and established that moral voluntariness is required for culpability.[136] In contrast, American liability doctrines do not include concepts like 'moral voluntariness'. In the *Model Penal Code*, physical voluntariness is all that is required to establish intent.[137] Morse's description of retributive folk psychology is thus very different from Canada's which explicitly states that our capacity for rationality is what enables us to overcome our impulses and control our behaviour.[138]

As Morse's folk psychology does not rely on traditional retributive moral theory, it is also quite different from the folk psychology under attack from neuro-reformers.[139]

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[135] Morse's concept of the law's folk psychology is derived from existing American legal doctrines and consistent with the theory of law as 'practical reason' most commonly associated with HLA Hart and Joseph Raz. In general, both Hart and Raz characterize law as social or conventional, and treat questions of authority as dependent on social recognition that can be demonstrated by widespread compliance with the law. Questions of *moral* legitimacy are set aside or answered affirmatively when socially confirmed authority is present. This orientation enables Morse to define retributive folk psychology according to existing doctrines and avoid examining the retributive moral theory at its foundation. [See: HLA Hart, *The Concept of Law,* (Oxford: Oxford University Press, 1961) at 79-88; Joseph Raz, "*Practical Reason and Norms* (Oxford: Oxford University Press, 1975) at 35-49. Law as 'practical reason' is distinct from positivism in its normative emphasis placed on social institutions and particularly for Hart the manner in which the normativity of law is evidenced when the law is regarded as reasons for action by participants who accept the rules. See for discussion: Stephen J Burton, "Law as Practical Reason" (1987) 62 S Cal L Rev 747.

[136] *Ruzic, supra* note 17. The prevalence and importance of moral philosophy to Canadian criminal doctrine has been noted by others. See for example: Diana Young, " Excuses and Intelligibility in Criminal Law", (2004) 53 UNBLJ 79 at 83.

[137] Model Penal Code § 2.01 cmt 1 (Official Draft and Revised Comments, 1985) 2.01 at 215. Branden D Jung also argues that criminal law is justified based on physical voluntariness in, "Criminal Law's Folk Psychological Dilemma: Resolving Neuroscientific and Philosophical Challenges to the Voluntary Act Requirement" (2019) 122:2 W Virginia L Rev 561.

[138] *Perka, supra* note 1. See also discussion in chapter two herein.

[139] See for example: Randolph Clarke, "Toward a Credible Agent-Causal Account of Free Will" (1993) 27 Noûs 191; and *Libertarian Accounts of Free Will*, (Oxford: Oxford University Press, 2003).

None have denied that the law performs a behavioural guiding function that influences choices or that its presence or absence makes no difference in how we behave. However this alone does not support the conclusion that when individuals do not behave in accordance with the law it is an individual moral failure deserving of punishment. Greene and Cohen argue that retributive folk psychology is not suitable for public policy because it is based on a metaphysical overestimation of the capacity for rationality that conflicts with neuroscience.[140] As opposed to blameworthy and deserving of punishment, they argue that criminals are more accurately understood as **"**victims of neuronal circumstance".[141] Sapolsky's arguments are less philosophical and more humanitarian. He is concerned with the morality of a criminal justice system that blames and imposes suffering on individuals when neuroscience has demonstrated that our biological capacity for behavioural choices is shaped by genetic and developmental variables outside conscious control.

While neuro-reformers acknowledge the limits of present science, they maintain that there is no evidence in science that supports the theoretical assumptions within retributive folk psychology. As Sapolsky emphasizes, gaps in science do not justify blame and punishment.[142] These core concerns are never addressed by Morse, who still rests on the conclusion that those found criminally responsible or culpable

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[140] Joshua Greene & Jonathan Cohen, "For the Law, Neuroscience Changes Nothing and Everything" (2004) 359:1451 Phil Trans R Soc Lond 1775.

[141] *Ibid* at 1781.

[142] As will be discussed in chapter four, science is still a human activity, limited by the human perspective and therefor cannot provide totalitarian or transcendent certainty.

should be given their just deserts.[143] As others have pointed out, Morse provides no reasons for his conclusion that retributive folk psychology remains valid until "science conclusively demonstrates that human beings cannot be guided by reasons and that mental states play no role in explaining behaviour".[144] It is left hanging as an assertion.

Unlike Morse, Michael S Moore concedes that the entire notion of culpable wrongdoing and moral desert is based on the folk psychology and metaphysical concepts of traditional retributive moral theory.[145] What he calls “cheap compatibilism” should not be used to side step inquiry into the challenges posed by neuroscience.[146] However, Moore maintains that even if neuroscience has debunked free will, the debate about retributive folk psychology cannot be resolved based on empirical evidence alone.[147] Whether the scientific claims of neuroscience are true is only the threshold question. Moore also notes that answering it necessarily involves

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[143] Stephen J Morse, “Protecting Liberty and Autonomy: Desert/Disease Jurisprudence” (2011) 48 San Diego L Rev 1077 at 1079 states: “no agent should be punished without desert for wrongdoing which exists only if the agent culpably caused or attempted prohibited harm”.

[144] For critique of this and other aspects of Morse’s arguments see: John A Humbauch, “Neuroscience, Justice and the “Mental Causation” Fallacy” (2019) 11 Wash U Jur Rev 191 at 212 -213.

[145] Michael S Moore, “Responsible Choices, Desert-Based Legal Institutions and the Challenges of Contemporary Neuroscience” (2012) 29:1 Soc Phil & Pol’y 233. See also: Michael Moore, *Law and Psychiatry: Rethinking the Relationship,* (Cambridge: Cambridge University Press, 1984); and *Placing Blame: A General Theory of the Criminal Law* (Oxford: Clarendon Press, 1997).

[146] *Ibid* at 234. Moore characterizes “cheap compatibilism” as “retributivist political philosophy… [that is a] disguised form of utilitarianism” and enabling the observation “that much in contemporary neuroscience that seems to challenge punishment practices—such as, the claim that there is no free will—in fact does not challenge”. As an example of cheap compatibilism, Moore cites Stephen Pinker, “The Fear of Determinism,” in J Baer, J Kaufman, & R Baumeister, eds, *Are We Free? Psychology and Free Will*, (Oxford: Oxford University Press, 2008) at 317.

[147] *Ibid* at 234.

both empirical data *and* interpretation or philosophizing. If true, the next line of inquiry is "whether [the neuroscientific claim] matters to our basic sense of ourselves, our agency, our responsibility and our punishability".[148] He also says that In consideration of the social and political dimensions of legal institutions it is necessary to consider "whether many or most people now believe them to be true and relevant, or whether many or most people will in the future or would in certain circumstances come to believe certain things about such issues".[149]

Neuro-reformer arguments do not meet the standards put forward by Moore, in part because their arguments unnecessarily implicate concepts of determinism and free will. As discussed there is not a consensus in science in this regard and may never be. Furthermore, as John Searle points out, "the special problem of free will is that we cannot get on with our lives without presupposing free will."[150] Meaning, regardless of what one concludes about it they still experience their lives as involving choices, deliberating options and making decisions. Accordingly, if the claim being assessed within Moore's framework is broadly framed around the existence of free will, it would fail to proceed past his first question and would fail the second step of his test as well.

Neuro-reformer arguments would also fail the second step of Moore's test in their failure to engage with traditional legal concepts such as agency, responsibility, and autonomy. As both Morse correctly points out these concepts are intended to

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[148] *Ibid* at 276-77.

[149] *Ibid* at 278.

[150] Searle, *supra* note 92 at 11.

correspond with our sense of self, inform how the law governs our interactions with each other and the state and are therefore of central importance to criminal law.[151] Liability doctrines based on folk psychology are what delimit the authority of the state to intervene with the liberty of citizens and impose punishment.[152] According to Morse, retributive folk psychology "enhances liberty, dignity, and autonomy by leaving people free to pursue their projects unless they responsibly commit a crime" or commit crimes while lacking "responsible agency." It is therefore essential to protect the possibility of a "good life".[153] For these reasons he also argues that the insanity defence should be limited to apply only to mental disorders that impair rationality to preserve protection of autonomy and free choice.[154] For Morse and others, law's folk psychology and understanding of personhood and responsibility provide the theoretical bulwark that prevents the state from interfering with individual liberty.[155]

Sapolsky concedes that brain scan images have been given inappropriate weight in US courtrooms, but is otherwise dismissive of Morse's arguments. Morse's self identification as a "thoroughgoing materialist" is seen as fundamentally at odds with other statements he makes like "Brains don't kill...people kill people" and "We live in

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[151] Morse, *supra* note 143 at 1078- 1080.

[152] *Ibid* at 1079.

[153] *Ibid* at 1079.

[154] *Ibid.*

[155] *Ibid.* See also for example: John Lemos, "Moral Concerns about Responsibility Denial and Quarantine of Violent Criminals" (2016) 35 L & Phil 461.

a causal universe, which includes human actions."[156] Sapolsky takes these as empirical claims, and cannot see how this distinction can be maintained without invocation of a homunculus that occasionally is "overwhelmed by compulsion" but which otherwise is in charge of behavioural choices.[157] Morse's concerns that the account of behaviour offered by neuroscience indicates that no one is responsible*,* is set aside as a "crazy-making, inane challenge."[158] *Behave* also offers very little comment regarding alternative normative justifications of criminal justice or how sentencing offenders for criminal conduct can be justified without moral blame. Ignoring the obvious fact that violent crimes form only a portion of criminalized conduct, Sapulsky states that "no rational person who rejects free will actually believes this" because "people must be protected by individuals who are dangerous".[159]

Sapolsky is cognizant of the cultural differences between law and neuroscience, such as the law's use of categorical distinctions and linear thinking to arrive at conclusions.[160] His efforts to explain neuroscience in lay terms legal scholars can understand, and identify how the categorical distinctions in law are incompatible with it, are commendable. However, Sapolsky stops short of bridging the cultural gap. He makes attempt to redefine autonomy or responsibility to harmonize with

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[156] Sapolsky, *supra* note 97 at 600.

[157] *Ibid* at 600.

[158] *Ibid* at 607.

[159] *Ibid* at 608 - 609.

[160] Robert Sapolsky, "The Frontal Cortex and the Criminal Justice System" (2004) 359:1451 Phil Trans R Soc Lond 1787.

neuroscience, or translate neuroscience into new categorical distinctions the law can use to draw conclusions. Sapolsky also does explain why doing so may not be necessary to inform a criminal justice system consistent with the foundational values of liberal democratic societies.

Other neuro-reformer arguments also fail to engage with the normative challenges Morse and Moore put forward. According to Greene and Cohen, retributive folk psychology should be abandoned, but wholesale reform of criminal law is not necessary because "there are perfectly good, forward-looking justifications for punishing criminals that do not depend on metaphysical fictions."[161] They offer up consequentialist or utilitarian justifications to replace retribution, while offering very little attention to criticisms of this model with respect to the lack of protective individual rights and constraints on the state's authority to punish.[162] In response to the concern of over-punishment, no consideration is given to the history of indeterminate sentencing during the rehabilitative penal era in the United States or

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[161] Greene & Cohen, *supra* note 140 at 1783.

[162] Utilitarian moral theories generally hold that the "morally right action is the action that produces the most good", which is generally described as greater happiness for greater amounts of people. Consequentialism encompasses utilitarian and all forward looking moral theories. [See: Driver, Julia, "The History of Utilitarianism", Edward N Zalta ed, *The Stanford Encyclopedia of Philosophy* (Winter 2014), online: Stanford Encyclopedia of Philosophy, <https:// plato.stanford.edu/archives/win2014/entries /utilitarianism-history/>.]

Greene and Cohen, *supra* note 140, use the word consequentialist which generally refers to all forward looking moral theories, including utilitarianism. Greene and Cohen aren't very specific regarding what goal criminal justice should seek, they use the term social welfare often and mention "making society happier" once.

its legacy of indeterminate sentences.[163] They state that "[t]he idea that such practices could, in the real world, make society happier... is absurd".[164] In response to the criticism that consequentialism better justifies punishment practices but provides inadequate justification for imposing it on a particular individual, they offer the counter criticism that because retributive justifications are grounded in metaphysics and scientifically dubious they should not be used in law.[165]

More fleshed out proposals from neuro-reformers also fail to offer alternative justificatory frameworks that provide for individual rights that protect against over-punishment. Philosopher Gregg Caruso identifies as a free will skeptic.[166] He

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[163] For a critical discussion of the history of rehabilitative penology see: Anthony Grasso, "Broken Beyond Repair: Rehabilitative Penology and American Political Development" (2017) 70 Political Research Q 394.

Regarding criticisms of utilitarian justifications of punishment see:John Rawls, *A Theory of Justice,* (Cambridge, Massachusetts: Harvard University Press, 1971) at 23 - 31 and 180 - 185. Rawls criticized the failure to take seriously distinctions amongst persons nor their inherent worth, that utilitarianism defines 'right' as 'good' and that it does not accord with moral intuitions.

HLA Hart, "Between Utility and Rights," (1979) 79:5 Columbia L Rev 828 similarly characterizes the criticism of modern theorists including Rawls as targeted at how utilitarianism treats people as means to with no inherent worth of their own to serve the goal of aggregate greater happiness, which as a moral goal has no self evident value. Another common criticism is that it justifies over punishment and punishment of the innocent in service of its goals. See: F Rosen,"Utilitarianism and the Punishment of the Innocent" (1997) 9(1) Utilitas 23; and Saul Smilansky, "Utilitarianism and the 'Punishment' of the Innocent: The General Problem", (1990) 50:4 Analysis 256.

[164] Greene & Cohen, *supra* note 140 at 1783.

[165] *Ibid* at 1783.

[166] Gregg Caruso has written extensively on determinism, morality, and criminal justice without retribution. See for example: Gregg Caruso, *Free Will and Consciousness: A Deterministic Account,* (Plymouth UK: Lexington Books, 2012), 2012; "Free Will skepticism and its Implications: An Argument for Optimism" in Elizabeth Shaw, Derk Pereboom, and Gregg Caruso eds, *Free Will Skepticism in Law and Society: Challenging Retributive Justice*, (New York: Cambridge University Press, 2019) at 43; Gregg D Caruso, "Justice without Retribution: An Epistemic Argument Against Retributive Criminal Punishment," (2020) 13:1 *Neuroethics 13;* Gregg Caruso "Consciousness, Free Will, and Moral Responsibility," Rocco J Gennaro ed, *The Routledge Handbook of Consciousness*, (London: Routledge, 2018) ar 78; G Caruso,& D Morriss, "Compatibilism and Retributivist Desert Moral Responsibility: On What is of Central Philosophical and Practical Importance", (2017) 82:4 Erkenntnis 837.

advocates for a public health-quarantine model of criminal justice.[167] It is founded on the conclusion that crime should be treated akin to a public health problem because research demonstrates that the very same variables that are determinative of poor health are also linked with adverse brain development, impulsivity and criminal behaviour.[168] His model would abolish punishment and prisons as they currently exist in North America and require criminal justice interventions to function in accordance with treatment practices supported by scientific evidence established in mental health fields of practice.[169]

Under Caruso's model the sentence must be proportionate to the danger posed by an individual and impose the least infringement on liberty necessary for public safety.[170] However indeterminate sentences and indefinite confinement would be justified if necessary to protect the public. Like the rehabilitative model, the public health quarantine model does not restrict sentence length to the seriousness of the criminal conduct. It also does not provide for individual rights that limit or constrain the state discretionary power to determine sentence length and impose treatments to pursue its public safety objective.[171] Because of this shortcoming, John Lemos

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[167] Greg D Caruso, "The Public Health-Quarantine Model" forthcoming in Dana Nelkin and Derk Pereboom eds, *Oxford Handbook of Moral Responsibility*, (New York: Oxford University Press), online: Social Science Research Network <https://ssrn.com/abstract=3068021>.

[168] Gregg Caruso, "Public Health and Safety: The Social Determinants of Health and Criminal Behaviour" (UK: ResearchLinks Books, October 17, 2017), online: Social Science Research Network, <https://ssrn.com / abstract=3054747>.

[169] Caruso, *supra* note 167 at 5.

[170] *Ibid,* at 5.

[171] Caruso, *supra* note 167 at 5 citing Derk Pereboom, *Free Will, Agency, and Meaning in Life* (Oxford: Oxford University Press, 2014),at 156: "if a criminal cannot be rehabilitated, ...and our safety requires his indefinite confinement, this [model] provides no justification for making his life more miserable than would be required to guard against the danger he poses."

argues that Caruso's framework enables over-punishment and could justify a removal of trial protections.[172] He shares Morse's central concern: if "one rejects belief in moral responsibility then one loses the resources to explain the inherent wrongness of punishing the innocent".[173]

iv) *Epistemological Impasse*

Apart from lack of agreement, the debate regarding neuro-reform demonstrates a deeper disconnect between the way neuroscience describes human behaviour and the way we think about personhood in the law. It is evident in Morse's assertions that brains do not commit crimes, people do. The lack of meaningful engagement can also be observed in the cursory responses neuroscientists offer to thick normative challenges from their critics, and their failure to offer alternative frameworks responsive to such concerns.

This impasse is consistent with epistemic differences between science and law.[174] Scientific inquiry produces empirical data that, when consolidated, provides explanatory causal descriptions of phenomenological events and processes. While inquiry is driven and influenced by the values of investigators and the community of inquirers, the empirical data and causal relationships established in scientific inquiry do not direct one particular interpretive meaning with regard to normative

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[172] Lemos, *supra* note 155.

[173] *Ibid* at 483.

[174] See for discussion: Sheila Jasanoff, "Symposium: Science Challenges for Law and Policy: Serviceable Truths: Science for Action in Law and Policy" (2015) 93 Tex L Rev 1723.

questions.[175] Empiricism is a genuine attempt to transcend the variance of subjective interpretation. Its “basic building block of knowledge” is sense or “brute datum,” which can be “verified” by repeated recordings by multiple recorders and cannot be questioned by alternative interpretations.[176] Interpretations of datum are inferential conclusions constructed from an epistemology of logical empiricism.[177] Interpretations must themselves be verifiable through brute datum to be considered empirical. In Charles Taylor’s words, the empiricist orientation must be innately “hostile to enquiry based on interpretation” such as political science or law, because it “cannot meet the requirements of intersubjective, non-arbitrary verifications which it considers essential to science.”[178]

Neuroscience has enabled us to observe and better understand the causal variables and underlying mechanisms that prevent, limit, or support particular behavioural choices, but it does not, and cannot, tell us what concepts such as responsibility, agency or autonomy mean in light of its empirical data.[179] Neuro-reformers who are also jurists can also fail to acknowledge the limits of empiricism. Peter Alces reasons that to accomplish its goals “law must affect the human agent” and “take the qualities

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[175] See: Hilary Putnam, *Words and Life,* (Cambridge: Harvard University Press, 1994) at 463-480

[176] Charles Taylor, “Interpretation and the Science of Man”, *Philosophy and Social Science: Philosophical Papers 2,* (Cambridge: Cambridge University Press, 1985) at 18 - 19.

[177] *Ibid* at 20. Also referred to as logical positivism, logical empiricists can generally be described that truth or knowledge can be derived only from empirical observation and formal logic that extrapolates from it. See: Creath, Richard, "Logical Empiricism" in Edward N Zalta ed, *The Stanford Encyclopedia of Philosophy,* (Summer 2020 Edition), online: Stanford Encyclopedia of Philosophy, <https://plato. stanford.edu/ archives/sum2020/entries/logical-empiricism/>.

[178] *Ibid* at 20- 22.

[179] See discussion in: Ariane Bigenwald & Valerian Chambon, “Criminal Responsibility and Neuroscience: No Revolution Yet” (2019) 10 Frontiers in Psychol 1406.

of the human agent, what we are, seriously".[180] He claims "research into how the brain defines what and who we are" and from this foundation he purports to reconceive law "from the moral foundations up".[181] In doing so, Alces proceeds as if morality is an object, and does not acknowledge the interpolative leaps and metaphysical construction within his arguments. Although empirical observations and knowledge may provoke intuitive moral judgements, it does not in itself give objective reasons for those judgements.

Epistemic murkiness is also evident in the debate around what neuroscience must disprove to necessitate reform. Neuroscience can only produce knowledge regarding 'free will' when neuroscience pre-defines what it means, or what *brute datum* establishes its presence or absence. A 'mental state' has no correspondence to any object, but cognitive processes, defined according to brute datum, can be identified

[180] Peter Alces, *The Moral Conflict of Law and Neuroscience,* (Chicago:University of Chicago Press, 2018) at 2.

[181] *Ibid* at 2,3, 6 and 35. For a critical review discussing these shortcomings in Alces arguments see: Dennis Patterson, "Review of *The Moral Conflict of Law and Neuroscience*" (2018) 5:2 J Law & Biosci 377.

and observed in neuronal and biochemical activity within the brain.[182] Neuroscience cannot establish determinism, because the field of inquiry is localized in the brain, and the data it produces cannot support empirical claims about matters external to it. Furthermore, neuroscience has no knowledge of the subjective, experiential realm of human life, which remains permanently "outside the bounds of its epistemological orientation" that relies on intersubjective verification.[183] Justice itself is not an object, but a concept outside the epistemological boundaries of science.[184] The argument that retribution theory *must* be abandoned as a justification of punishment because science conflicts with its normative metaphysical concepts is not so clear cut in the legal tradition, or in science.[185]

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[182] Jurgen Habermas concludes that the sorts of conditions that make actions intelligible are different in kind conceptually from the phenomena described by laws of nature such that the two language games are inherently distinct and separate. See: "The Language Game of Responsible Agency and the Problem of Free Will: How can Epistemic Dualism be Reconciled with Ontological Monism?" (2007) 101 Philosophical Explorations 13

In reply, John Searle disagrees that conflict is unavoidable and the two games can connect if they are taken as applying to different levels of abstraction. He states: "There is one level of description of my mental processes where they can be described as neurobiological processes in the brain. There is another level of description of those very same processes where they intrinsically have intentionalistic and semantic properties. Same processes, different levels of description." See: John R Searle in "Neuroscience, Intentionality and Free Will: Reply to Habermas" (2007) 10:1 Philosophical Explorations 69.

Searle's explanation of how this occurs involves the two disciplines seeking to harmonize and unify their distinct language games to enable translation. Accordingly, Habermas's conclusion still holds: the language games remain separate, even if one or both games come up with a method of translation.

[183] Habermas, *ibid* at 21.

[184] In John Rawls theory justice is not a metaphysical object but politically defined, *supra* note 163. For discussion see: Patrick Neil, "Justice as Fairness: Political or Metaphysical?" (1990)18:1 Pol Theory 24.

[185] Arguably, legal scholarship as a discipline has grappled with and accepted that metaphysical concepts within its theory and doctrine are not *true* in an empirical sense, but derive their validity from political consensus. See:*Ibid;* and Charles M Yablon, "Law and Metaphysics: Wittgenstein on Rules and Private Language" (1987) 96 Yale L J 613.

Morse's arguments regarding the disconnect between neuroscience and central legal concepts, such as agency and responsibility, apprehend these limitations and the normative void abandonment of folk psychology would leave. His orientation is also consistent with the epistemic culture of law, which prefers its "own institutional self-understandings" when balancing "factual assertions of science and the normative dictates of law against one another."[186] He states:

> Law addresses problems genuinely related to responsibility, including consciousness, the formation of mental states such as intention and knowledge, the capacity for rationality, and compulsion, but it never addresses the presence or absence of free will. People sometimes use "free will" loosely to refer to genuine responsibility doctrines, but this distracts from the real issues and perpetuates confusion. The only practical free will problem in law is the confusion among lawyers, scientists and others who think that free will is a legal criterion or who speak and write as if it is.[187]

Morse entertains the possibility that neuroscience "can be potentially helpful… if the findings are properly translated into the law's psychological framework."[188] This position effectively insulates law's normative understanding of human behaviour and concepts like rationality and compulsion from the empirical knowledge produced by the disciplines dedicated to studying it. It also stagnates the law's working definition of human nature to ideas formed in the minds of philosophers centuries ago, living in a very different world with different concerns.

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[186] Jasanoff, *supra* note 174 at 1723 & 1736. For more discussion of epistemic cultural differences between law and neuroscience see: Alex Yijia Ding, "Blame the Brain: Neuroscience for Action in Criminal Courtrooms" (2018) 11:2 Intersect 4.

[187] Morse, *supra* note 129 at 4.

[188] Stephen J Morse, "Lost in Translation? An Essay on Law and Neuroscience" in Michael Freeman ed, *Law and Neuroscience, Current Legal Issues 2010, Volume 10,* (Oxford: Oxford University Press, 2010) at 537.

The position that contemporary neuroscience is only relevant to criminal law if it corresponds with its already defined concepts is also inconsistent with overarching principles of the Canadian justice system. As will be discussed more in chapter four, contemporary Canadian jurisprudence acknowledges that legal norms and political values are not fixed objects, but fluid concepts with meanings that vary across contexts and evolve according to our experiences, observations and understanding of our social environment and practices.[189] For the law to meaningfully serve established values at any particular time, or in any particular case, it must evolve with society. This is demonstrated in the approach taken to constitutional interpretation. To ensure these instruments are “capable of adapting with the times by way of a process of evolutionary interpretation within the natural limits of the text”, and "accommodates and addresses the realities of modern life", the metaphorical principle of the ‘living tree’ has been adopted.[190] Evolution is still constrained, as the law must grow “from its roots” in a manner connected to foundational democratic values and those enshrined in the *Charter*.[191]

In summary, the current discourse between law and neuroscience regarding retributive folk psychology is akin to two people attempting to have a conversation in

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[189] For example, the evolution in how ‘spouse’ is defined in law. See: *Hislop v Canada (Attorney General)*, 2007 SCC 10.

[190] *Hislop, ibid* at para 94; *Reference re Same-Sex Marriage*, *ibid* at para 22; and Peter Hogg, *Constitutional Law of Canada,* 5th ed (Toronto: Carswell, 2007) at 15-51.

[191] See for example: *R v S(N),* 2012 SCC 72 at para 72. Because a free and democratic society depends on the rule of law, other values and principles central to the Western tradition of justice must be considered in interpretation of the *Charter* values such as legitimacy, and principles of stare decisis and incrementalism intended to reign in judicial activism. For discussion concerning how this should be approached and how competing values or principles should be weighed and reconciled see: Debra Parkes, “Precedent Revisited: *Carter v Canada (AG)* and the Contemporary Practice of Precedent” (2016) 10 McGill J L & Health S123; Julia Hughes et al, “Equality & Incrementalism: The Role of Common Law Reasoning in Constitutional Rights Cases” (2013) 344 Ottawa L Rev 467; or Mathieu Devinat, “The Trouble with Henry: Legal Methodology and Precedents in Canadian Law” (2006) 32 Queen's L J 278.

different languages that lack corresponding terms. While Sapolsky provides a rich synthesis of meaningful information regarding human behaviour and the manner it is constrained by our developmentally shaped neurological capacity, he does not translate this into foundational legal concepts such as responsibility and autonomy. Neuro-reformers also advance consequentialist or utilitarian justifications for criminal justice, but do not offer any other framework for deriving individual rights that limit state interference. Both Morse and Moore maintain that to be relevant to criminal justice, neuroscience must be considered in light of established concepts such as autonomy and responsibility. However, neither contemplate whether the meaning of these concepts can or should be redefined based on the new knowledge offered by neuroscience. Furthermore, the discourse is hindered by its focus on free will, a metaphysical concept subject to ongoing philosophical debate, and its failure to focus on the implications of less controversial empirical conclusions, such as the enmeshment of the limbic system with the dlPFC.

To further explore the relevance of neuroscience to retributive folk psychology and the morality of the punishment practices it justifies, a way around the epistemic divide between criminal law and neuroscience is necessary. The next chapter sketches out a framework for inquiry derived from principles developed by pragmatist philosophers as an appropriate means to do so.

CHAPTER IV

PRAGMATIC INQUIRY

The poem of the mind in the act of finding
What will suffice. It has not always had
To find: the scene was set; it repeated what
Was in the script.
Then the theatre was changed
To something else. Its past was a souvenir.

- *Wallace Stevens* [192]

Philosophy has long grappled with the questions of what truth is, how it can be known, or whether humans can know it at all.[193] The advent of modern science intensified this concern.[194] Some camps in philosophy attempted to make their methods as rigorous as science to ensure the legitimacy of their knowledge claims.[195] Others attempted to carve out an orientation that would enable philosophy

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[192] "On Modern Poetry" in Stephen French Morse ed, *The Collected Poems of Wallace Stevens,* (London: Faber and Faber, 1984) at 239.

[193] It is common to characterize philosophy as the search for truth. See for example: Lloyd Strickland, "Philosophy and the Search for Truth", (2013) 41 Philosophia 1079. However, as soon as philosophy began, the preliminary question of how do you know something is true also arose. See: Elizabeth Laidlaw-Johnson ed, *Plato's Epistemology: How Hard It Is to Know*, (New York: Peter Lang, 1997).

[194] See: Willem R de Jong, "How Is Metaphysics as a Science Possible? Kant on the Distinction Between Philosophical and Mathematical Method" (1995) 49:2 Rev Metaphysics 235.

[195] Logical empiricists and philosophers of language fit this description. See: Richard J Bernstein, *The Pragmatic Turn,* (Cambridge: Polity Press, 2010) at 12-15.

to contribute meaningfully to political discourse and human progress.[196] Pragmatism belongs to the latter camp.[197]

Holistically, principles of pragmatist writing provide a methodological approach to normative and moral inquiry aimed at conclusions capable of supporting progressive institutional practices in democratic societies. This chapter discusses the general principles of pragmatic philosophy and explains how an application of its methods can move inquiry past the epistemological impasse identified in the law and neuroscience debate.

i) *Acceptance of Uncertainty and Contingency*

Pragmatist writings are founded in the acceptance of an inconvenient acknowledgement: language and rationality can never arrive at a bedrock of truth.[198] There is no doorway through which we can apprehend a mind-independent reality that exists out there.[199] This does not mean we must abandon rationality and retire to solipsism or skepticism. Pragmatist writings re-conceive rational discourse and moral inquiry and explain why letting go of the pretense of absolutist justifications can better support social progress in democratic societies.

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[196] *Ibid* at 2 - 31.

[197] *Ibid* at 1- 22.

[198] *Ibid* at 17- 22.

[199] *Ibid.* Kant called the mind-independent reality "out there" the "noumenal world". Although Kant did not think the mind could conceive of the nominal world as it actually is, human ideas could be relied on to correspond to it in so far as it mattered to human concerns. [See: Immanuel Kant, P Guyer and A Wood eds, *Critique of Pure Reason*, (Cambridge: Cambridge University Press, 1998) at 249.]

This belief that philosophy was able to penetrate and gain knowledge about the mind independent reality began with Descartes. CS Pierce, the first pragmatist, denied the assumptions of Cartesianism. [See: Christopher Hookway, *Pierce*, (Routledge & Kegan Paul: London, 1985) at 229.]

Acknowledging the elusiveness of certainty, and that facts and values are irretrievably entangled, prompts inquirers to recognize unconscious, epistemological values or biases they bring to the task.[200] This, they suggest, is better than trying to pretend they do not exist.

In law, a pragmatic lens forces us to acknowledge the contingent, man-made nature of what we take in law to be given, or 'natural', such as the assumptions that underpin retributive folk psychology. As Justice Oliver Wendell Holmes points out, nature and culture are not two distinct categories but "porous, permeable and continuous with one another".[201] It follows, necessarily, that our theories of human nature are going to be contingent products of our culture. Pragmatism works to interrogate and undermine the founding assumptions of epistemologies, hence its characterization as an anti-foundationalist movement.[202]

From a pragmatic viewpoint, an anti-foundationalist perspective is the only way to acknowledge pluralism and respect difference when engaging in inquiry and discourse with respect to moral and political issues.[203] Recognizing that absolute truth is undiscoverable, William James describes pluralism as the permanent form of

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[200] Bernstein*, supra* note 195 at 157- 158.

[201] Jay Schulkin, *Oliver Wendell Holmes Jr., Pragmatism and Neuroscience,* (London: Palgrave Macmillan, 2019) at 79.

[202] Bernstein*, supra* note 195 at 2- 31.

[203] As Bernstein explains, William James viewed experience as the touchstone of all knowledge, and that this orientation led him to diverge from British empiricism for failing to acknowledge that it is the perceiver who divide the flow of experience into discrete and separate units of impressions and events. For James this acknowledge necessitates the conclusion that these categorical distinctions did not actually exist as objects 'out there'. *Ibid* at 56- 58.

the world.[204] Accordingly, there will always be various "points of view" which must be accounted for.[205] Pluralism also implicates important cultural and ethical consequences for autonomy and social justice. James was concerned with the "blindness with which we are all afflicted in regard to the feelings of creatures and people different from ourselves" and the falsity of judgements that "presume to decide in an absolute way on the value of other person's conditions or ideals."[206]

Starting with a recognition of pluralism and the elusiveness of certainty, the pragmatic method accounts for real differences amongst individuals as well as contingencies of time, place, and circumstances.[207] It thus allows for the continual revision of our understanding and reconstruction of our norms as experience evolves over time. With respect to retributive folk psychology, the pragmatic conclusion is that no matter how foundational it has become in law, it cannot be said that it corresponds to transcendent, timeless justice or morality. It is a collection of ideas about human nature and morality formed in response to contingencies of a past world. Its longevity does not provide evidence that retributive folk psychology corresponds with any unquestionable, universal sense of self or morality shared in society now. A real acknowledgement of pluralism prompts the necessary conclusion that when he makes that claim, Professor Morse can only speak for himself.[208]

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[204] Bernstein, *supra* note 195 at 56-58; and William James, *A Pluralistic Universe,* (Cambridge: Harvard University Press,1977) at 275.

[205] James, *ibid* at 211- 14.

[206] William James in JJ McDermot ed, *The Writings of William James* (Chicago: University of Chicago Press, 1997) at 629- 30.

[207] *Ibid* at 61.

[208] Morse, *supra* note 143.

Pragmatism also rejects any notion that rigid adherence and application of its doctrines ensures just outcomes. Justice Holmes's pragmatic jurisprudence exemplifies a rejection of the idea that "correct outcomes can be deduced from some overarching principle".[209] Prioritizing context over precedent, Holmes's jurisprudence applies historical analysis to expose seemingly timeless abstract legal concepts as originally derived from contingent and context-specific needs.[210] For Holmes, "absolute truth is a mirage," and systems of concrete fixed principles and axiomatic rules are symptomatic of what Richard Bernstein calls 'Cartesian anxiety'.[211] Judicial decision making must be able to evolve with social experience and respond to contingencies.[212] Constraining this task to logically derived principles is inconsistent with this function because "whatever is right in one moment may be wrong in the

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[209] See: Thomas F Cotter, "Legal Pragmatism and the Law and Economics Movement" (1996) 84 Georgetown L J 2071 at 2085.

[210] For an analysis of Holme's legal pragmatism see: Susan Haack, "Exploring Jurisprudence Symposium: The Pragmatist Tradition: Lessons for Legal Theorists" (2017) 95 Wash U L Rev 1049 at 1060 and 1070.

[211] Richard A Posner ed, *The Essential Holmes,* (Chicago: University of Chicago Press, 1992) at 107. See also: Oliver Wendell Holmes, "Natural Law" (1918) 32 Harv L Rev 40, at 40 - 41; Brian Z Tamanaha, "Pragmatism in US Legal Theory: Its Application to Normative Jurisprudence, Socio-legal Studies, and the Fact-Value Distinction", (1996) 41 *Am J Juris* 315; Oliver Wendell Holmes, "Book Notices" (1880) 14 Am L Rev 233 at 234. Holmes rejected Christopher Columbus Langdell's rational or scientific system of legal analysis in *Selection of Cases on the Law of Contracts* (Boston: Little Brown, 1879).

Richard Bernstein coined the phrase 'Cartesian Anxiety' in *Beyond Objectivism and Relativism: Science, Hermeneutics, and Praxis,* (Philadelphia: University of Pennsylvania, 1983). In his view Descartes work wasn't simply in search of a device to solve metaphysical or epistemological problems, but was motivated by a felt need to arrive at a fixed point. *Ibid* at page 19 he states: "It would be a mistake to think that Cartesian Anxiety is primarily a religious, metaphysical, epistemological or moral anxiety… It is "ontological"... for it seems to lie at the very centre of our being in the world. Our 'god terms' may vary and be very different from those of Descartes. We may even purge ourselves of the quest for certainty and indubitability. But at the heart of the objectivist's vision, and what makes sense of his or her passion, is the belief that there are or must be some fixed, permanent constraints to which we can appeal and which are secure or stable."

[212] See for a review and analysis of Holme's pragmatism in judicial decisions regarding freedom of expression: Jared Schroeder, "The Holmes Truth: Toward a Pragmatic, Holmes-Influenced Conceptualization of the Nature of Truth" (2016) 7:1 Brit J of Am L Stud 169.

next."[213] To remain responsive to social experience, the law must change with changing circumstances and benefit from, and contribute to, the progress of knowledge. Holme's understood law as a never-ending experiment aimed at progress:

> [T]he theory of our Constitution […] is an experiment, as all life is an experiment. Every year, if not every day, we have to wager our salvation upon some prophecy based upon imperfect knowledge. While that experiment is part of our system, I think that we should be eternally vigilant against attempts to check the expression of opinions that we loathe.[214]

Contemporary legal pragmatist Judge Richard Posner joins Justice Holmes in rejecting the belief that a fixed set of rules enables judges to discern the 'correct' outcome. Posner advocates approaching legal problems concretely, free from illusions, with awareness of the limits of rationality, pluralism, the 'localness' of human knowledge, and the unattainability of absolute truth.[215]

Canadian jurisprudence, outside of the criminal context, appears to have apprehended the concerns of pragmatist writers and judges. To foster the peaceful co-existence of different values and practices,[216] the Supreme Court has held that constitutional interpretation must seek both to accommodate and promote "diversity

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[213] *Essential Holmes*, *supra* note 211 at 7.

[214] *Abrams v United States,* (1919) 250 US 616 (QL).

[215] Richard A Posner, "A Pragmatist Manifesto" in *Problems of Jurisprudence* (Cambridge: Harvard University Press, 1990) at 465. See also: Richard A Posner, "Legal pragmatism" (2004) 35 1:2 Metaphilosophy 147; and Daniel A Farber, "Legal Pragmatism and the Constitution" (1988) 72 Minn L Rev 1331 at 1332.

[216] *Loyola High School v Quebec (Attorney General)* 2015 SCC 12 at para 45.

and pluralism in the public life of our communities."[217] Respect for differences in the law is necessary to support social stability and progress in a multicultural society:

> These shared values — equality, human rights and democracy — are values the state always has a legitimate interest in promoting and protecting. They enhance the conditions for integration and points of civic solidarity by helping connect us despite our differences...This is what makes pluralism work. … [a] multicultural multireligious society can only work ... if people of all groups understand and tolerate each other...Religious freedom must therefore be understood in the context of a secular, multicultural and democratic society with a strong interest in protecting dignity and diversity, promoting equality, and ensuring the vitality of a common belief in human rights...[218]

When pluralism is accepted, contextual pragmatic analysis naturally emerges as the only means through which constitutional cases can be decided.[219] The Supreme Court has, on multiple occasions, dismissed or avoided metaphysical questions.[220] Consistent with the living tree doctrine, constitutional interpretation has taken a pragmatic turn in the latter half of the twentieth century and abandoned "rigid template[s]" that risk "consideration of irrelevant matters on the one hand, or overlooking relevant considerations on the other".[221] Instead, contextual analysis is

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[217] *Law Society of British Columbia, supra* note 11 at para 81.

[218] *Loyola, supra* note at 216, at para 5 citing Jürgen Habermas, "Religion in the Public Sphere" (2006) 14 Euro J Phil 1 at 5.

[219] See for example, adoption of standards of review which allow for margins of error led the court to adopt the "pragmatic and functional" approach which provides parameters for contextual analysis *Union des Employés de Service, Local 298 v Bibeault*, [1988] 2 SCR 1048, [1988] SCJ No 101; *Dr Q v College of Physicians and Surgeons of British Columbia*, 2003 SCC 19; and *Ryan v Law Society (New Brunswick)* 2003 SCC 20. See also for discussion: Martin Loughlin, "The Functionalist Style in Public Law" (2005) 55 UTLJ 361.

[220] See for example: *Harvard College v Canada (Commissioner of Patents)*, 2002 SCC 76 at para 45; *Dunsmuir v New Brunswick*, 2008 SCC 9 at para 122; *R v MacKenzie*, 2013 SCC 50 at 73; *Gibbens v Co-operators Life Insurance Co*, 2009 SCC 59 at para 57; *Retail, Wholesale and Department Store Union, Local 558 v Pepsi-Cola Canada Beverages (West) Ltd,* 2002 SCC 8 at para 79; and *R v DAI,* 2012 SCC 5 at para 56.

[221] *Whithler v Canada (Attorney General)*, 2011 SCC 12 at para 66. See also: *R v Kapp*, 2003 SCC 41.

applied to consider the "larger social, political and legal context" of a claim, and changes in human activity.[222]

ii) *Practices & Values*

Abandoning the search for absolute foundations does not defeat normative inquiry but directs and guides it towards its real purpose: solving legal problems and progressively achieving better justice. The original pragmatic maxim was that inquiry should be grounded in consideration of the "practical bearings, we conceive the object of our conception to have."[223] Establishing absolutist principles of truth is beside the point. James states that pragmatism:

> [a]sks its usual question. 'Grant an idea or belief be true,' it says, 'what concrete difference will its being true make in anyone's actual life?' 'How will the truth be realized?' 'What existences will be different from those which would obtain if the belief were false?' 'What, in short, is the truth's cash-value in experiential terms?[224]

This does not mean the inquiry into practical consequences proceeds untethered. Rather, a pragmatic approach connects the assessment of consequences to the purposive values of the community of inquiry.

According to John Dewey, philosophical inquiry should be aimed at developing institutions and practices that support the realization of liberal democratic values.[225] Achieving meaningful freedom necessitates a continual willingness "to question

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[222] *R v Turpin* [1989] 1 SCR 1296 at 1333, [1989] SCJ No 47*;* and *Mounted Police Association of Ontario v Canada (Attorney General),* 2015 SCC 1 at para 48.

[223] CS Pierce, "How to Make Our Ideas Clear", (1878) 12 Popular Science Monthly 286.

[224] William James, *Pragmatism*, (London: Dover, 1995) at 77.

[225] Bernstein*, supra* note 195 at 71- 80.

received ideas in science and philosophy" and to "think and observe and experiment for themselves."[226] An ideal liberal society can only be achieved if the state provides the means through which citizens can develop their capacity to participate in democratic discourse and achieve their potential.[227] Institutional practices must remain the focus of inquiry because, "the ends of freedom and individuality for all can be attained only by the means that accord with those ends".[228]

Richard Rorty also agrees that the goal of moral inquiry, or questions about what is right, should be the realization of core liberal value.[229] Rather than asking what is truly right, Rorty suggests we instead ask what we should do; or what practices we should adopt to achieve freedom and reduce cruelty and suffering.[230] Social practices and institutions should be thought of "experiments in cooperation rather than attempts to embody a universal and ahistorical order."[231] This approach is consistent with the Supreme Courts purposive approach to *Charter* rights. Justices McLachlin and Lebel explain:

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[226] John Dewey, *Reconstruction in Philosophy,* (Mineola: Dover, 2004) at 27.

[227] "Personality" is the word Dewey uses to describe a type of individuation. See: Jo Ann Boydston ed, *The Early Works of John Dewey Volume 1, 1882- 1898,* (Carbondale: University of Southern Illinois Press, 1969) at 240- 244.

[228] Larry A Hickman & Thomas M Alexander eds, *The Essential Dewey: Pragmatism, Education, Democracy,* (Indianapolis: Indiana University Press, 1998) at 338.

[229] Richard Rorty, *Philosophy in the Mirror of Nature* (Princeton: Princeton University Press, 1979) at 394.

[230] *Ibid.* See also: Richard Rorty, *Contingency, Irony, and Solidarity,* (Cambridge: Cambridge University Press, 1989). He argues that philosophy intended to inform law and politics, or the public sphere, should not attempt to construct or derive justification from any universal idea of human nature.

[231] Richard Rorty, *Objectivity, Relativism, and Truth: Philosophical Papers Volume 1* (Cambridge: Cambridge University Press, 1990) at 196.

> The purposes underlying Charter rights and freedoms may be framed at the broadest level, a purposive interpretation must be consistent with the "larger objects of the Charter", including "basic beliefs about human worth and dignity" and the maintenance of "a free and democratic political system"...At the same time, however, while Charter rights and freedoms should be given a broad and liberal interpretation, a purposive analysis also requires courts to consider the most concrete purpose or set of purposes that underlies the right or freedom in question, based on its history and full context....[232]

The rigid adherence to the retributive folk psychology in section 7 jurisprudence in the criminal law context does not accord with the purposive approach taken in the adjudication of *Charter* rights in other contexts. It is assumed, without contextual, purposive analysis that retributive folk psychology is both adequate and necessary to protect individual's section 7 rights, and then applied to foreclose any inquiry into individual and social constraints on choice.[233] This will be discussed more in the next chapters. In contrast, outside of the criminal context, section 7 jurisprudence engages in contextual analysis to determine what protections the right to life, liberty, and security of person provides individuals.[234] Furthermore, the jurisprudence has acknowledged that the right to both dignity and autonomy are engaged by section 7, and that psychological suffering impacts the integrity of the individual.[235] As will be discussed in the next chapters, consideration of the psychological suffering involved in punishment and its impact on integrity is foreclosed when proportionality is assessed in sentencing determinations.

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[232] *Mounted Police, supra* note 222 at para 50.

[233] See for example: *Creighton*, *supra* note 2.

[234] See for example analysis in: *Carter v Canada (Attorney General)*, 2015 SCC 5.

[235] *Ibid* at para 64.

iii) *Objectivity*

Pragmatic inquiry also does not occur in a vacuum of subjectivity. We can still make distinctions and judgements, establish practical standards and norms, so long as we treat them as contingent rather than absolute. In pragmatic inquiry and practice, some beliefs should be treated as indubitable, but all must be considered fallible.[236] Beliefs are not taken to be true in any empirical or metaphysical sense and should be thought of as William James puts it, “rules for action” arrived at based on the difference in practice they support.[237] An example of this balance can be found in the practice of law. When advising clients, lawyers treat current law as indubitable while knowing it can change and that their advice is therefore fallible.

Treating beliefs as fallible and norms as contingent does not mean pragmatic inquiry is relativistic. Rorty avoids this by focusing inquiry away from principles to practice:

> In short, my strategy for escaping the self-referential difficulties into which "the Relativist" keeps getting himself is to move everything over from epistemology and metaphysics into cultural politics, from claims to knowledge and appeals to self-evidence to suggestions about what we should try.[238]

Other pragmatist writers have placed higher importance on objectivity and rationality, while still emphasizing that transcendent objectivity independent of any perspective cannot be apprehended or appealed to for authority. Hilary Putnam explains that inquiry can still achieve objectivity in the standards adopted to arrive at concrete

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[236] James E Broyles, “Charles S Peirce and the Concept of Indubitable Belief,” (1965) 1:2 Trans Charles S Peirce Soc 77.

[237] James, *supra* note 224 at 17- 32.

[238] Richard Rorty, *Truth and Progress: Philosophical Papers, Volume 3*, (Cambridge: Cambridge University Press, 1998) at 57 [emphasis added]..

conclusions and resolutions to problems situated in a particular place and time.[239] Even science cannot be seen as arriving at absolute objectivity because empirical observation does not escape the filter of human perception and cognition. However, the type of objectivity Putnam identifies in science, is in its standards applied in methodology, peer review and replication. These objective standards enable progress to occur by providing a framework for participation, collaboration, and discourse in the scientific community.[240] This type of objective validity is maintained in law through precedent, procedural standards, rules of evidence, and standards of review, all of which allow for its evolution within a framework of objective standards.

Furthermore, objectively ascertainable concepts and principles of law still perform an important function in enabling legal norms to be discovered, understood, discussed and recreated in democratic processes and institutions. According to Jurgen Habermas, rationality and objectivity is still of central importance to a liberal democracy in the manner it enables communication, understanding, and agreement across *life worlds* through discourse.[241] Only legal norms validated in discourse are legitimate in a liberal democracy.[242] As Habermas states:

> Norms appearing in the form of law entitle actors to exercise their rights or liberties. However, one cannot determine which of these laws are legitimate simply by looking at the *form* of individual rights. Only by bringing in the discourse principle can one show

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[239] Hilary Putnam, *Realism With a Human Face,* (Cambridge: Harvard University Press, 1990).

[240] *Ibid* at 20- 25, 175- 180 and 225- 230.

[241] Bernstein*, supra* note 195 at 172 - 175.

[242] Jurgen Habermas, Thomas McCarthy trans, *The Theory of Communicative Action: Reason and Rationalization of Society*, (Cambridge: Polity Press, 1984) at 308, Habermas identifies necessary preconditions that must be satisfied for discourse ethics to provide validity: (i) inclusion of all who could participate (ii) equal opportunity to contribute (iii) honesty, no manipulative intent and (iv) agreement motivated by the strength of reasons rather than coercion or inducement.

> that *each person* is owed a right to the greatest possible measure of *equal* liberties that are mutually compatible.[243]

For Habermas, rational discourse is necessary to maintain freedom in a liberal state because, "to the degree that interactions cannot be coordinated through achieving understanding, the only alternative that remains is force exercised by one against others."[244]

Accordingly a pragmatic approach in law requires we both acknowledge that our standards do not correspond to some transcendent form of justice, but must still be arrived at through reasons and articulated in objective terms capable of validation in democratic discourse. All of this suggests, that although retributive folk psychology derives no validity from its origin, there is nothing inherently wrong with criminal law using concepts originally derived from metaphysics or folk psychology to determine legal questions if those norms are capable of being understood and validated in discourse.

iv) *Legal Theory*

Some have characterized pragmatists as anti-theory, but this is not accurate.[245] According to Posner, pragmatism only rejects theories which purport to correspond or derive authority from a truth that exist "out there" in a speculative "mind

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[243] Jurgen Habermas, *Between Facts and Norms* (Cambridge: Polity Press, 1997) at 123.

[244] Jurgen Habermas, "A Reply to My Critics", John B Thompson & David Held eds, *Habermas: Critical Debates*, (London: The Macmillan Press, 1982) at 269.

[245] See: Burton, *supra* note 135; and Stephen J Burton, "Judge Posner's Jurisprudence of Skepticism" (1988) 87:3 Michigan L Rev 710.

independent reality."[246] Useful *a posteriori* theories of law that support the construction of legal doctrine and institutions that respond meaningfully to evolving human activity are still valid. As Posner explains, it is their functionality that gives these theories validity:

> I do not want to claim that these theories are successful because they are true, or even that they are true. They are successful because they help us control our physical and social environments. […] I am not against moral theory tout court. Rather, I distinguish between theories about morality and theories of morality, the latter being normative theories about the content of our moral obligations. […] A theory of morality, in contrast, is a theory of how we should behave. It tries to get at the truth about our moral obligations.[247]

In Posner's pragmatism moral judgments are not irrelevant, but if something is objectionable for whatever reason, a moral theory will not, and should not, convince otherwise. He explains, "we can decide to treat criminals with dignity because we buy into the Kantian notion that people are entitled to be treated as ends", or because, "knowing or caring nothing of Kant's ideas, it is believed that a "we-they" or "enemy within or even a 'medical' mentality of criminal punishment" causes negative social consequences.[248] Using the example of police torture, Posner points out that one need not make a utilitarian assessment (indeed, doing so would be an abstraction that misses the point) to conclude that it is wrong, because it obstructs

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[246] Richard Posner, *The Problematics of Moral and Legal Theory,* (Cambridge: Belknap Press, 1999) at 28; and "The Problematics of Moral and Legal Theory" (1997) 111 Harvard Law Review 1637 at 1649.

Not all theorists who reject metaphysical foundations are pragmatist, see for example: Hillary Nye, "Staying Busy While Doing Nothing? Dworkin's Complicated Relationship with Pragmatism" (2016) 29 Can J L & Juris 71.

[247] Posner (1997), *ibid* at 1647. See also: Brian Leiter, "Realism, Hard Positivism, and Conceptual Analysis" (1998) 4 Legal Theory 533.

[248] Posner, *ibid* at 1697. This is a key difference between the pragmatic method I am sketching out here and consequentialist theories. A pragmatic lens looks at the current law to identify the values it is trying to serve, but doesn't just look to the future for crafting a response to serve them, It also looks to the past social experience and outcomes to determine what is right and wrong.

"specific political and criminological objectives of our society, having mainly to do with reducing the amount of unauthorized violence".[249] With a pragmatic approach, we develop normative theories about the content of our obligations or rules to achieve social, legal, and political objectives, but these should not gain particular support from theories that make absolutist claims regarding right and wrong.[250]

This approach suggests that regardless of what neuroscience says, retributive folk psychology may still be legitimate if it functions in a way to produce results that are consistent with legal and political objectives and values. However, it also means that retributive folk psychology gains no validity just because it was derived from philosophical theories that purport to correspond with transcendent morality. As will be discussed more in the next section, this applies equally to neuroscience. Whether or not neuroscience should inform law reform ultimately depends on whether it can better support the realization of the objectives and values the law is bound to serve.

v) *Science and Law*

A pragmatic approach recognizes that epistemological values permeate all experience, and that normative judgments are essential in all practices, even

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[249] *Ibid* at 1697 at 1702- 1708. Posner's argues that abandoning moral theory enables resolution of debates. Competing moral judgements formed in distinct moral universes Americans, formed through experience, give rise to conflicting moral judgments that cannot be resolved through theory which purports to transcend rather than respond and bridge different lived realities. This is the essence that pragmatism attempts to get beyond: the futility of claiming moral authority for your position in a pluralistic society.

[250] Rorty, the most radical and anti-theory of contemporary pragmatists generally agrees with Posner's approach see: "Pragmatism and the Law: A Response to David Luban (1996)", in *Philosophy and Social Hope*, (London: Penguin, 1999) at 104 -112.

science.[251] It also recognizes the distinct focus and purpose of science in comparison to law.[252] Science, as discussed, seeks to obtain *brute datam* and establish causal relationships. In contrast, law is tasked with developing and applying legal norms. When the area of inquiries of law and science overlap, as it does in attempting to produce a functional understanding of human behaviour, science can help inform the law, but it does not trump it.

Susan Haack offers a pragmatic approach that rejects both anti-science cynicism and what she calls scientism.[253] She describes cynicism as an "uncritically critical attitude to science, an inability to see or an unwillingness to acknowledge its remarkable intellectual achievements, or to recognize the real benefits it has made possible".[254] On the other hand, scientism is an "over-enthusiastic and uncritically

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[251] Putnam uses the example of the preference for simplicity and coherence in scientific theory as examples of epistemological values that guide science but which do not correspond with any empirical object.

[252] See: Richard Rorty, *Objectivity, Relativism, and Truth: Philosophical Papers, Volume 1*, (Cambridge: Cambridge University Press, 1991).

[253] Philosopher and legal scholar Susan Haack has written extensively on pragmatic philosophy, and the role of science in normative discourse, as well legal issues involving science, in particular evidence law. See for example: *Defending Science Within Reason: Between Scientism and Cynicism,* (Buffalo: Prometheus, 2011); *Evidence Matters: Science, Proof, and Truth in the Law*, (Cambridge: Cambridge University Press, 2014); *Pragmatism, Old And New: Selected Writings,* (Buffalo: Prometheus, 2006); and "The Growth of Meaning and the Limits of Formalism, in Science and Law" (2009) 29:1 Analisis Filosofico 5.

[254] Susan Haack, "Six Signs of Scientism" (2012) 3:1 *Logos and Episteme* 75 at 76.

deferential attitude towards science, an inability to see or an unwillingness to acknowledge its fallibility, limitations, and potential dangers."[255]

According to Haack, science should not be seen as threatening, but as supportive of legal systems when approached pragmatically. In particular, it supports law's capacity to evolve by "growth, expansion, adaptation to new niches and so on" and shed norms and concepts that have lost functionality, in a manner similar to language.[256] Science does this by providing the law with a richer understanding of contextual variables that lay outside its institutional expertise. The case of *Lavallee* provides an example of this in Canadian law. In that case the court consulted expert testimony and social science evidence to understand the impact domestic abuse had on the accused's perception to determine whether she acted in self defence.[257] Justice Wilson explains why expert testimony was necessary:

> [L]ong-standing recognition that psychiatric or psychological testimony also falls within the realm of expert evidence is predicated on the realization that in some circumstances the average person may not have sufficient knowledge of or experience with human behaviour to draw an appropriate inference from the facts before him or her.[258]

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[255] *Ibid* at 79. At page 81, Haack summarizes six signs of scientism: (1) Using the words "science", "scientific", "scientifically", "scientist", etc., honorifically, as generic terms of epistemic praise. (2) Adopting the manners, the trappings, the technical terminology, etc., of the sciences, irrespective of their real usefulness. (3) A preoccupation with demarcation, i.e., with drawing a sharp line between genuine science, the real thing, and "pseudo-scientific" imposters. (4) A corresponding preoccupation with identifying the "scientific method," presumed to explain how the sciences have been so successful. (5) Looking to the sciences for answers to questions beyond their scope.(6) Denying or denigrating the legitimacy or the worth of other kinds of inquiry besides the scientific, or the value of human activities other than inquiry, such as poetry or art.

[256] Haack, *supra* note 210 at 1079.

[257] *R v Lavallee,* [1990] 1 SCR 852, [1990] SCJ No 36.

[258] *Ibid* at 28.

Retributive folk psychology purports to provide an account of human capacities for cognition and behaviour. This sort of knowledge lies outside the expertise of law. Neuroscience, on the other hand, is a discipline devoted to identifying and understanding the root causal variables and neurological structures and processes engaged in human cognition and behaviour. It thus should be viewed as supporting the law's understanding of these things and not rejected based on the belief that law or its practitioners "are thoroughly knowledgeable about 'human nature' and that no more is needed".[259]

vi) *Moving Beyond Impasse*

Applying a pragmatic method to assess the conflict between retributive folk psychology and neuroscience avoids the pitfalls identified in the debate discussed in the last chapter. Pragmatism guides the inquiry away from philosophical debate regarding free will and determinism. Even if these claims were established in science, they are not helpful or relevant to the issue. In liberal democracies, criminal justice seeks to maintain standards of social conduct and order in a way that respects individual autonomy. A belief in either free will or determinism does not help us figure out what to do about crime in a manner responsive to those concerns. Furthermore, pragmatic assessment of the relevance of neuroscience to criminal law cannot rest on its empirical validity, but rather the difference it might make in practice if believed to be true.

Morse's assertions that retributive folk psychology should be maintained unless neuroscience proves that its related concepts are false also does not put to rest the debate. This argument amounts to a defensive assertion of the self-evident value of a contingent claim. It implicitly assumes that legal concepts of autonomy and

[259] *Ibid* at 29.

responsibility as they are currently conceived, adequately function to ensure just outcomes and could not be made better. They are convincing only to those who share his beliefs that the law's current language is just and neuroscientific knowledge has no functional value on offer. In ignoring the epistemological values and biases at the foundation of his arguments, Morse reduces interdisciplinary discourse with neuroscience to a language-game rigged in favour of preserving the law's current norms and concepts.[260] As Rorty says, "if we understand the rules of a language-game, we understand all that there is to understand about why moves in that language-game are made."[261] The conclusions Morse arrives at are thus valid within the framework and rules he has established within his own argument, but they do not engage with the substantive issues raised in neuro-reformer arguments.

Neither side of the debate discussed in chapter three manages to escape the epistemic culture and language to engage in a meaningful discourse that bridges the knowledge of law and neuroscience. The next chapter applies principles discussed herein to further inquire into the relevance of neuroscience to the normative assumptions of criminal law by examining how retributive folk psychology functions in practice in the Canadian criminal justice system and whether neuroscience has anything to offer in this regard.

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[260] Morse, *supra* note 188.

[261] Rorty, *supra* note 229 at 174.

CHAPTER V

THE TERRIBLE DIFFERENCE BLAME & PUNISHMENT MAKES

Pragmatic principles tell us that when embarking on an assessment of legal norms in consideration of reform, the question of what is true should be set aside and consequences in practice should be the focus. With respect to retributive folk psychology, the punishment practices its supports should be assessed according to how they serve the overarching purpose and values of criminal justice and the Canadian legal system. As will be discussed in this chapter, they produce negative effects in several ways. Retributive folk psychology is applied inconsistently in jurisprudence and confuses rather than unifies the law. Application of retributive doctrines in judicial practice functions to foreclose inquiry into causal variables giving rise to crime and veil the moral and normative basis of legal judgments. Sentencing principles derived from retributive norms and punishment practices justified by folk psychology function at cross purposes with both the aims of criminal justice and overarching values of the legal system. In comparison, alternative practices that do not seek to punish moral blame achieve better results and function more in harmony with *Charter* values. For these reasons, retributive folk psychology and the punishment practices it justifies should be discarded, and neuroscience should, in part, inform a new way of thinking about criminal justice without retribution.

i) *Doctrinal Problems*

As discussed in the second chapter, central to criminal law is the notion that punishment is not justified absent a conscious freely willed intention, that is particularized in the mens rea element of criminal offences. This is characterized as

respecting and protecting individual autonomy.[262] In the case of *Sault Ste Marie,* Justice Dickson summarized the principle *:*

> Where the offence is criminal, the Crown must establish a mental element, namely, that the accused who committed the prohibited act did so intentionally or recklessly, with knowledge of the facts constituting the offence, or with wilful blindness toward them. Mere negligence is excluded from the concept of the mental element required for conviction. Within the context of a criminal prosecution a person who fails to make such inquiries as a reasonable and prudent person would make, or who fails to know facts he should have known, is innocent in the eyes of the law.[263]

After the *Charter* was enacted, the jurisprudence appeared to be moving towards the conclusion that actual intention or subjective mens rea was necessary to justify conviction and punishment.[264] *Reference Re Motor Vehicles* held that because section 7 prohibited punishment of the morally innocent imprisonment for absolute liability offences was prohibited under the *Charter*.[265] Writing for the majority in *Vaillencourt*, Justice Lamer went so far as to state that "[i]t may well be that, as a general rule, the principles of fundamental justice require proof of a subjective mens rea with respect to the prohibited act, in order to avoid punishing the 'morally innocent'".[266] However subsequent decisions departed from this line of authority and

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[262] RA Duff "Virtue, Vice, and Criminal Liability: Do We Want an Aristotelian Criminal Law?" (2002) 6:1 Buff Crim L Rev 147 at 149 states: "by making our fate at the law's hands depend on our choices, it increases the extent to which we can predict and so control that aspect of our lives. It claims to respect our autonomy, by making the law respond to us on the basis of our choices."

[263] *R v Sault St Marie,* [1978] 2 SCR 1299, 85 DLR (3d) 161.

[264] See: James Stribopoulos, "The Constitutionalization of 'Fault' in Canada: A Normative Critique" (1999) 42 Crim L Q 227.

[265] *Reference Re Motor Vehicles,* supra note 14.

[266] *R v Vaillencourt,* [1987] 2 SCR 636, 60 CR (3d) 289 at 325. See also: *R v Martineu.* [1990] 2 SCR 633, 79 CR (3d) 129.

post-*Charter* criminal jurisprudence has been criticized for lacking a "coherent theoretical vision" of criminal law.[267]

As discussed in chapter two, *Creighton* was a point of departure in post-*Charter* jurisprudence. In that case it was held that the mens rea element for negligence offences punishable in prison was "not concerned with what was actually in the accused's mind, but with what should have been there, had the accused proceeded reasonably."[268] The assessment of mens rea in negligence offences purports to establish blameworthiness by comparing the action of the accused against a reasonable person standard. This holding has been criticized for inserting confusion and unfairness into criminal law based on incoherent reasons.[269] In particular, assessing moral culpability according to an objective standard has been criticized for unjustly foreclosing inquiry into relevant considerations such as race, gender, education, class, and actual cognitive capacity. [270]

Pre-*Creighton* jurisprudence appeared more or less to adhere to the principles of traditional retributive moral theory or what Justice Wilson might identify as the

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[267] Alan N Young, "Done Nothing Wrong: Fundamental Justice and the Minimum Content of Criminal Law" (2008) 40:2 Sup Ct L Rev 441 (QL) at para 108. See also: Morris Manning, "20 Years Under the Charter: Rethinking Criminal Law in the Age of the Charter of Rights and Freedoms: The Necessity for a 21ST Century Criminal Code" (2002) 21 Windsor YB Access Just 455.

[268] *Creighton, supra* note 2 at 111. See also: *R v Hundal,* [1993] 1 SCR 867, 79 CCC (3d) 97*;* and *R v DeSousa,* [1992] 2 SCR 944, 95 DLR (4th) 595*.*

[269] Tim Quigley, "Constitutional Fault During the Lamer Years," (2000) 5 Can Crim L Rev 99; and Gerry Ferguson, "Causation and the *Mens Rea* for Manslaughter: A Lethal Combination," (2013) 99 CR-ART 351.

[270] See for example: Marie-Eve Sylvestre, "The Redistributive Potential of Section 7 of the *Charter*" (2011) 42 Ottawa L Rev 389*;* Terry Skolnik, "Objective Mens Rea Revisited" (2017) 22 Can Crim L Rev 307; and Kent Roach & Andrea Bailey,"The Relevance of Fetal Alcohol Spectrum Disorder in Canadian Criminal Law From Investigation to Sentencing", (2009) 42 UBC L Rev 1.

Kantian foundations of our legal system. *Creighton* relied on normative theory developed by HLA Hart which distinguishes moral guilt from legal guilt.[271] As Hart observes, the act of imposing suffering through punishment "appears to be a mysterious piece of moral alchemy in which the combination of two evils of moral wickedness and suffering are transmuted into good."[272] Consistent with the linguistic turn in philosophy at the time, Hart's theory avoids metaphysical claims that purport to arrive at moral conclusions.[273] Instead he describes a closed, internally coherent system of positive law and their purported justifications that is normative, rather than moral in its conclusions. Accordingly, the Hartian approach taken in *Creighton* is inconsistent with the entire notion replete in the jurisprudence that criminal proceedings purport to determine, not simply legal guilt, but the moral blameworthiness of the accused.

As Sylvestre points out, there is a fundamental inconsistency between the rhetorical importance given to choice in determining moral blame and the lack of inquiry into the actual state of mind of an accused or the circumstantial variables relevant to their

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[271] Hart, *supra* note 25 at 162. Hart viewed the distinction as necessary in light of impossibility of truly giving effect to moral ideals of retribution theory. At page 181 he states: "can human judges discover and make comparisons between the motives, temptations, opportunities and wickedness of different individuals?" He also viewed imputing responsibility as consistent with freedom within a liberal democracy stating "the ability which the present system in some degree guarantees to us, to predict and plan the future course of our lives within the coercive framework of the law. For the system which makes liability to the law's sanctions dependent on a voluntary act not only maximizes the power of the individual to determine by his choice his future fate; it also maximizes his power to identify in advance the space which will be left open to him free from the law's interference."

[272] *Ibid* at 234– 235.

[273] For a review of the history of philosophy and how the linguistic turn followed acceptance that the goals of logical positivism were futile and philosophy could not arrive at scientific conclusions about external reality, see: Bernstein, *supra* note 195.

conduct.[274] She argues that the emphasis on finding personal fault in criminal legal doctrines has long suffered from a lack of real connection to the philosophical reasoning underlying retributive principles.[275] Culpability assessments rely on interpretive constructions that involve "technical and descriptive cognitive states of mind such as intent and recklessness" and arrive at inferential conclusions about internal states from the conduct of the accused.[276] Because it functions in practice to inpute blame from conduct and foreclose inquiry into the actual causal variables involved in criminal conduct,[277] Sylvestre concludes that *mens rea* is "nothing more than a mythical legal category" or "simulacra".[278] For her, this issue is central to the social injustice systemically perpetrated within the criminal justice system:

> Key concepts such as mens rea and actus reus are constructed and applied in a very technical and descriptive manner that often casts aside practical considerations, proceeds on utilitarian grounds, and ignores or simplifies what it really means to be free, rational, and different in a grossly unequal and pseudo-meritocratic society. Offenders are thus convicted, irrespective of their differences and of the impact of socio-economic and political constraints on their choosing to commit crimes. [279]

Furthermore the importance placed on free will choices in the doctrine appears to be largely rhetorical. Normative concepts derived from it, like moral involuntariness, lack objective ascertainable meaning when applied in practice. This is problematic

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[274] Marie-Eve Sylvestre,"Rethinking Criminal Responsibility for Poor Offenders: Choice, Monstrosity, and the Logic of Practice" (2010) 55 McGill L J 771.

[275] *Ibid.*

[276] *Ibid* at 778.

[277] Sylvestre, *ibid* at 774.

[278] *Ibid* at 778, citing Mark Kelman, "Interpretive Construction in the Substantive Criminal Law" (1981) 33 Stan L Rev 591.

[279] *Ibid* at 774.

because legal norms that lack the objectivity necessary to understand how they will be applied cannot be validated in discourse, and are therefore illegitimate in a liberal democracy.[280] Benjamin Berger apprehends this problem within criminal jurisprudence. In his view, incoherence in criminal liability doctrines are symptomatic of a deeper tension building in the jurisprudence.[281] Because of its emphasis on objectivity and impartiality, the liberal vision of the public sphere is fundamentally at odds with public moralizing.[282] He views the decision in *Ruzic* as an example of how the courts veil the actual normative basis of their decision by citing liberal principles regarding free will and choice.[283]

In *Ruzic,* the accused was directed under threat in Yugoslavia to smuggle heroin into Canada.[284] Because Ruzic was not under immediate threat from someone present when she committed the offence, the circumstances did not meet the requirements for the defence of duress as it was written in the Criminal Code.[285] The court found that Ruzic's will had been "overborne...by the threats of another" and that her actions were "morally involuntary" and "not, in a realistic way, freely chosen."[286] Because punishing those who act in a morally involuntary way "conflicts with the assumption in criminal law that individuals are autonomous and freely choosing agents", the

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[280] Habermas, *supra* notes 242- 244.

[281] Benjamin L Berger, "Emotions and the Veil of Voluntarism: The Loss of Judgment in Canadian Criminal Defences," (2006) 51 McGill L J 99.

[282] *Ibid* at 120.

[283] *Ibid* at 110- 111.

[284] *Ruzic, supra* note 17 at 1.

[285] *Ibid* at 9; and *Supra* note 29 (Criminal *Code)* s 17.

[286] *Ruzic, ibid* at 41.

decision held that moral voluntariness was a principle of fundamental justice pursuant to section 7.[287] The immediacy and presence requirements were struck down from the defence, and the accused was acquitted.[288]

The principle of moral voluntariness has been characterized as "confusing."[289] The *Ruzic* decision has also been criticized for expanding the duress defence without appropriately limiting it,[290] and elevating a vague and poorly defined principle to *Charter* protected status.[291] In Berger's opinion, the court acquitted the accused because it understood the emotional constraints the accused was under and veiled its real reasons behind the idiom of moral involuntariness.[292] This is problematic because the principle hides the true reasons for the judgment behind a principle that lacks objective meaning and predictability in its application. Berger states, "the objection is that public moralizing is going on whether hidden behind the veil or not, and the temperature of normative debate is still high. The idiom of moral involuntariness is not a cooling agent but an oven mitt."[293] In his view, until the inadequacy of the liberal, mechanistic view of human choice is addressed directly,

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[287] *Ibid* at 46.

[288] *Ibid* at 101.

[289] Don Stuart, *Charter Justice in Canadian Criminal Law*, *4th ed,* (Toronto: Carswell, 2005) at 109.

[290] Stephen G Coughlan, ""Duress, Necessity, Self-Defence and Provocation: Implications of Radical Change?" (2002) 7 Can Crim L Rev 147.

[291] See: Stephen G Coughlan, "Duress, Necessity, Self-Defence and Provocation: Implications of Radical Change?" (2002) 7 Can Crim L Rev 147; and Stanley Yeo, "Challenging Moral Involuntarinessas a Principle of Fundamental Justice," (2002) 28 Queen's L J 335.

[292] Berger, *supra* note 281 at 104- 107.

[293] *Ibid* at 124.

the court will continue to develop principles and doctrine that are fundamentally at odds with the liberal vision of law and order. [294]

The inadequacy of retributive folk psychology is also evidenced by cases in which the court does not apply it. In *Wu* and the more recent case of *Boudreault,* imprisonment of poor offenders for non-payment of fines was determined to be unconstitutional due to the offender's lack of real choice.[295] In *PHS Community Services Society*, the Attorney General's argued that the choice of Insite clinic clients to inject narcotics negated their claim that the closure of the safe injection site violated their section 7 rights.[296] The decision notes that the area the clinic was located was home to "some of the poorest and most vulnerable people in Canada with life "histories of physical and sexual abuse as children, family histories of drug abuse, early exposure to serious drug use, and mental illness."[297] Rejecting the government's choice argument, the court affirms the conclusion of the trial judge drawn from expert evidence: "that addiction is a disease in which the central feature is impaired control over the use of the addictive substance."[298]

PHS Community Health Services thus recognizes individual internal constraints on choice and how they are connected to development in oppressive social conditions. *Bedford* also demonstrates this recognition in assessing the constitutionality of

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[294] *Ibid* at 128.

[295] *R v Wu,* 2003 SCC 73; and *R v Boudreault,* 2018 SCC 58.

[296] *PHS Community Services Society v Canada (Attorney General),* 2011 SCC 44 at 106.

[297] *Ibid* at 4 and 7.

[298] *Ibid* 101.

criminal prohibitions preventing sex workers from accessing safety measures such as a body guard. The Attorney General again argued that it was not the law but the claimant's choices that put them at risk for harm.[299] Rejecting this argument again, the decision states:

> [W]hile some prostitutes may fit the description of persons who freely choose (or at one time chose) to engage in the risky economic activity of prostitution, many prostitutes have no meaningful choice but to do so. Ms. Bedford herself stated that she initially prostituted herself "to make enough money to at least feed myself"... street prostitutes, with some exceptions, are a particularly marginalized population… Whether because of financial desperation, drug addictions, mental illness, or compulsion from pimps, they often have little choice but to sell their bodies for money.[300]

In both *PHS Community Services Society* and *Bedford* the court rejected arguments claiming that the causal connection between state action and harm was broken by free will choices based on finding a lack of capacity to make alternative law-abiding choices to protect themselves.[301] In doing so the court appears to be equating a "free choice" as synonymous with self determination that functions in service to ones interests and well being. They view the behaviour of the claimants holistically and recognize that while their decisions may be motivated to obtain a fix or money, these

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[299] *Bedford v Canada (Attorney General),* 2013 SCC 72.

[300] *Ibid* at 86.

[301] *Ibid* at 79; and *supra* note 296. Terry Skolnick in "Beyond Boudreault: Challenging Choice, Culpability, Punishment," (2019) 50 CR-ART 283, characterize these decisions as progressive in the manner they recognize constraints on choice.

Others disagree and view the continual emphasize on choice in rights analysis continues to individualize collective and systemic social problems. See: Margot Young, "Context, Choice, and Rights: PHS Community Services v Canada (Attorney General)" (2011) 44 UBC L Rev 221; Margot Young, "Social Justice and the Charter: Comparison and Choice" 50 Osgoode Hall L J 669; and Sheila McIntyre, "The Equality Jurisprudence of the McLachlin Court: Back to the 70s" (2010) 50:2 Sup Ct L Rev 129 at 177.

are self defeating, risky choices that would not be made if they had the capacity or opportunity to make better choices.

In addition to being out of step with criminal law jurisprudence, the reasoning in *PHS Community Services* and *Bedford* also conflicts with the earlier decision of *HL* which dealt with the assessment of the pecuniary damages of a residential school survivor.[302] In that case the court awarded damages for lost earnings based on finding the claimant's sexual assault in a residential school caused his alcoholism, which in turn prevented him from sustaining employment.[303] However, the Court refused to award damages for time spent in prison because:

> [T]he chain of causation linking HL's sexual abuse to his loss of income while incarcerated was interrupted by his intervening criminal conduct. During these periods, his lack of gainful employment was caused by his imprisonment, not by his alcoholism; and his imprisonment resulted from his criminal conduct, not from his abuse by Mr Starr nor from the alcoholism which it was found to have induced… [304]

As Kent Roach points out, the decision is inconsistent in the manner the causal chain between the sexual assault is said to be broken by the claimants 'choice' to commit a crime, but not with respect to his drinking or other consequences attributed to his alcoholism such as unemployment.[305] The court recognizes the manner the trauma of the sexual assault and consequential alcoholism incapacitated the claimant from maintaining employment but not from behaving in accordance with the law. No reasons,

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[302] *HL v Canada,* 2005 SCC 25. See for criticism: Kent Roach, "Blaming the Victim: Canadian Law, Causation, and Residential Schools" (2014) 64 U Toronto L J 566.

[303] *Ibid.*

[304] *Ibid* at 142.

[305] Roach, *supra* note 302.

apart from citing the assumptions of retributive folk psychology, are provided to explain the distinction.

These decisions demonstrate that retributive folk psychology does not provide a description of human behaviour and choice that is sufficient to apply in different cases and contexts. Cases like *Ruzic* and *HL* demonstrate that when retributive folk psychology is applied to determine difficult cases, it does not explain but rather veils reasons for the distinctions that drive the decisions. In contrast, cases like *Bedford* and *PHS* account for context and demonstrate a willingness to incorporate contemporary understandings of both internal and external causal constraints on choice and behaviour in legal reasoning. *PHS Community Services* in particular acknowledges both the connections between adverse developmental variables such as childhood abuse, the development of addiction, and how it constrains behavioural choices.[306] The decision therefor demonstrates an understanding of behaviour that is consistent with neuroscience.

ii) *The Black Box of Suffering*[307]

Inconsistency and lack of objectivity in the doctrine is not just an abstract legal problem, but one that causes unjust suffering. As Sylvestre points out, the injustice of the liberal individualistic model of choice described in retributive folk psychology has the greatest impact on marginalized and vulnerable people who have the most constraints on their capacity for choice.[308] Decades of social science research has

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[306] *PHS Community Services Society, supra* note 296 at 7 states: "The residents of the DTES who are intravenous drug users have diverse origins and personal histories, yet familiar themes emerge. Many have histories of physical and sexual abuse as children, family histories of drug abuse, early exposure to serious drug use, and mental illness."

[307] I borrow the term 'black box' from Lisa Kerr, "How Prison is a Black Box" (2019) 69:1 UTLJ 85.

[308] Sylvestre, *supra* note 274 at 792.

consistently evidenced that the people who are most often punished, are those who have suffered the most disadvantage in their lives. A recently published meta-analysis indicates that over sixty-five percent of all inmates have suffered childhood abuse.[309] Family violence, sexual abuse, parental addiction, and poverty are also common reported experiences of Canadian inmates.[310] Seventy percent of federal inmates have less than a highschool education.[311] Prior involvement in youth corrections and the foster care system is also common amongst adult prisoners.[312]

Most prisoners also suffer from a diagnosed mental disorder.[313] Seventy-six percent of prisoners suffer from substance abuse disorder, while 86% of female and 60% male prisoners have been diagnosed with either antisocial personality disorder (ASPD) or borderline personality disorder (BPD). As discussed in chapter three, both ASPD and BPD are associated with criminal conduct and involve behavioural symptoms such as poor impulse control, emotional reactivity, violence, conflict with

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[309] See: Claire Bodkin et al, "History of Childhood Abuse in Populations Incarcerated in Canada: A Systematic Review and Meta-Analysis" (2019) 109:3 Am J Pub Health E1; and Fiona Kouyoumdjian,et al, "Health Status of Prisoners in Canada" (2016) 62:3 Can Fam Physician 215.

[310] *Ibid.* See also: Donna E Chubaty, *Victimization, Fear, and Coping in Prison*, Doctoral Thesis, (2001) University of Manitoba, online: Correctional Service Canada, <https://www.csc-scc.gc.ca/ publications/forum/e141/141c_e.pdf>.

[311] Canada, Correctional Service Canada, *Evaluation Report: Offender Education Programs and Services,* (Ottawa: Correctional Service Canada, 2015), online: Correctional Services Canada, <https://www.csc-scc.gc.ca/publications/005007-2014-eng.shtml>, at vii.

[312] Canada, Correctional Services Canada, *Research in Brief: Youth Histories of Federal Indigenous and Non-Indigenous Offenders,* (Ottawa: Correctional Services Canada, 2017), online: Correctional Services Canada, <https://www.csc-scc.gc.ca/005/008/092/rib-17-12-eng.pdf>.

[313] Canada, Correctional Service Canada, *National Prevalence of Mental Disorders Among Incoming Federally-Sentenced Men,* (Ottawa: Correctional Services Canada, 2017), online: Correctional Service Canada, <https://www.csc-scc.gc.ca/research/005008-0357-eng.shtml>; and Canada, Correctional Service Canada, *National Prevalence of Mental Disorders Among Incoming Federally Sentenced Women,* (Ottawa: Correctional Services Canada, 2018), online: Correctional Service Canada, <https://www.csc-scc.gc.ca/research/r-420-en.shtml>.

authority figures, and self harm.[314] Development of these disorders are associated with adverse childhood experiences and circumstances.[315] These statistics are consistent with what neuroscience tells us: that adverse developmental conditions and experience cause neurological impairments which are linked to criminal conduct.[316] The same variables long linked with criminal behaviour in social science research have also been linked with neurological differences or impairments and common mental disorders diagnosed in offenders.[317]

Prison imposes more trauma and disadvantage on offenders. Evidence of inhumane conditions and practices within Canadian prisons fills the reports of the Correctional Investigator. [318] Dehumanizing conditions, concrete black bars, and barbed wire are

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[314] Penny, *supra* note 120. See also: Randy A Sansone et al, "Criminal Behaviour and Borderline Personality: Correlations Among Four Measures," (2016) 13:7 Innov Clin Neurosci 14; and Kelly E Moore et al, "Borderline Personality Disorder Symptoms and Criminal Justice System Involvement: The Roles of Emotion-Driven Difficulties Controlling Impulsive Behaviours and Physical Aggression," (2017) 76 Comprehensive Psychiatry 26.

[315] Caruso, *supra* note 168. See also: Matt DeLisi et al, "The Etiology of Antisocial Personality Disorder: The Differential Roles of Adverse Childhood Experiences and Childhood Psychopathology" (2019) 92 Comprehensive Psychiatry 1; and Hila Turniansky et al, "A History of Prolonged Childhood Sexual Abuse is Associated With More Severe Clinical Presentation of Borderline Personality Disorder in Adolescent female inpatients – A naturalistic study" (2019) 98:1 Child Abuse Neglect 104222.

[316] Sapolsky, *supra* note 97.

[317] *Ibid;* Caruso, *supra* note 168; and Penny, *supra* note 120.

[318] Canada, Office of the Correctional Investigator, *2017-2018 Annual Report,* (Ottawa: Correctional Investigator Canada, 2018), online: Office of the Correctional Investigator, <https://www.oci-bec.gc.ca /cnt/rpt/pdf/annrpt/annrpt20172018-eng.pdf>; Canada, Office of the Correctional Investigator, *2016-2017 Annual Report* (Ottawa: Correctional Investigator Canada, 2017), online: Office of the Correctional Investigator, https://www.oci-bec.gc.ca/cnt/rpt/annrpt/annrpt20162017-eng.aspx**;** and Canada, Office of the Correctional Investigator, *2015-2016 Annual Report* (Ottawa: Correctional Investigator Canada, 2016), online: Office of the Correctional Investigator, <https://www.oci-bec.gc.ca/cnt/rpt/annrpt/annrpt20152016-eng.aspx>.

ubiquitous in federal institutions and violence is a problem.[319] Access to education is limited.[320] A toxic workplace culture, staff misconduct, excessive force and mistreatment of offenders routinely occurs in some institutions.[321] Substandard nutrition and unsafe food handling has been reported.[322] There is a mental health crisis in prison, but there is little access to medical and psychiatric treatment inside.[323] Staff operating routinely respond to the behavioural mental health symptoms of prisoners with force.[324] Annual reports from the Correctional Investigator have repeatedly noted problems such as excessive use of force, avoidable deaths, in-accessible and problematic medical care, inadequate access to rehabilitative opportunities, and overreliance on segregation.[325]

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[319] Office of the Correctional Investigator (2017-2018)*, ibid* at 2- 11; and Canada, Office of the Correctional Investigator, *2018-2019 Annual Report* (Ottawa: Correctional Investigator Canada, 2019), online: Office of the Correctional Investigator, <https://www.oci-bec.gc.ca/cnt/rpt/pdf/annrpt/annrpt20182019-eng.pdf> at 35-40.

[320] Correctional Service Canada, *supra* note 311.

[321] Office of the Correctional Investigator, *supra* 319 at 33-51.

[322] *Ibid* at 52.

[323] The prevalence of mental disorders and how prison conditions compound the problematic effects the lack of treatment and symptoms in turn have on prison conditions are documented by the Correctional Investigator. *Ibid* at 6-21; and *Supra* note 318. The mainstream media has also reported the mental health crisis in prison. See for example: Evan Solomon, “The Mental Health Crisis in Canadian Prisons” Macleans Magazine, March 3, 2017, online: Macleans, <https://www.macleans.ca/news/canada/the-mental-health-crisis-in-canadian-prisons/>.

[324] Office of the Correctional Investigator, *supra* 319 at 10.

[325] The most recent report also notes that new fashioned “therapeutic units” intended to replace segregation units are substantially no different. *Ibid* at 9. See also *ibid* at 6 and 47; and Officer of the Correctional Investigator*, supra* note 318.

Suicide is a leading cause of prisoner deaths.[326] Thirty-seven percent of all prisoner suicides occur while in segregation also known as solitary confinement.[327] There were calls for reform of the use of segregation over thirty years ago following Marlene Moore's suicide.[328] Still, the practice continued along with the suicides.[329] After the details of Adam Capey's four years in segregation came to light, the Ontario Human Rights Commissioner ordered an end to the practice of segregation.[330] The Ontario Superior Court found that the segregation had a profound impact on Capay's psychological integrity and violated his *Charter* rights.[331] In response, the

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[326] Canada, Office of the Correctional Investigator, *Inmate Suicide: A report by the Office of the Canadian Correctional Investigato*r, (Ottawa: Correctional Investigator Canada, September, 2014), online: Office of the Correctional Investigator, <https://www.oci-bec.gc.ca/cnt/rpt/pdf/oth-aut/oth- aut20140910-eng.pdf>.

[327] Office of the Correctional Investigator, *supra* note 318 at 28.

[328] See: Anne Kershaw, "Death Behind Bars," Macleans (May 20,1991), online: Macleans Archive, <https://archive.macleans.ca/article/1991/5/20/death-behind-bars>.

[329] Office of the Correctional Investigator, *supra* note 326. See also: Patrick White, "Confined: The Death of Eddie Snowshoe," The Globe and Mail, December 5, 2014, online: The Globe and Mail, <https://www.theglobeandmail.com/news/national/confined-the-death-of-eddie-snowshoe/article21815548>; Paul Darrow, "Solitary Confinement: How Four People's Stories Have Changed Hearts, Minds, and Laws on the Issue, Globe and Mail, June 20, 2017, online: Globe and Mail, <https://www.theglobeandmail.com/news/national/solitary-confinement-canada-required-reading/article35391601>.

[330] *Ontario Human Rights Commission v Minister of Community Safety and Correctional Services*, 2018 HRTO 60.

[331] *R v Capay*, 2019 ONSC 535 at 16 and beginning at 279. Capay's was actually incarcerated and in segregation while waiting trial for stabbing another prisoner who died from the injuries shortly before he was scheduled to be released. It was found that his prolonged segregation had violated his section 7 and 15 rights and due to the psychological damage and impairment to his language and memory, Capay's section 9 right to a fair trial was violated as well. He was granted a stay of proceedings.

government introduced legislation that prohibits *disciplinary* segregation, but still allows for isolation in “structured intervention units” as a safety measure.[332]

Retribution theory and its justifications of blame and punishment based on retributive folk psychology take no account of the suffering that occurs in Canadian prisons. Punishment theory has come under scholarly criticism for the manner in which it is divorced from practical reality, ignores the subjective experience of punishment or suffering, and has lost its legitimacy due to mass incarceration rates and overrepresentation of minorities and mentally ill or disordered offenders in prisoner populations.[333] While retribution has been described as a moral theory of *reciprocal suffering,* applying its principles in practice does not involve consideration of the actual suffering a sentence will impose on an offender.[334] Lisa Kerr explains how the abstract nature of punishment theory enables it to ignore the suffering involved in a prison sentence :

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[332] Bill C-83, *An Act to Amend the Corrections and Conditional Release Act and another Act*, 42nd Parl,1st Sess,C27 (as passed by the House of Commons March 18, 2019); and *Corrections and Conditional Release Act, supra* note 32. Given the problems noted in Correctional Investigator reports and how therapeutic units are substantively the same as segregations, *supra* notes 318 and 319, the legislation and ending “disciplinary segregation” is unlikely to solve the problem. Capay’s prolonged segregation was not disciplinary but justified on safety concerns, *supra* note 331.

[333] See for example: Marc O Degirolami, “Against Theories of Punishment: The Thought of Sir James Fitzjames Stephens” (2012) 9 OHST JCL 699; Adam Kolber, “The Subjective Experience of Punishment,” (2009), 109 Colum L Rev 182; and David Gray, “Punishment as Suffering” (2010) 63 VNLR 1619.

[334] For Hegel, *supra* note 3 at 101, punishment when done right, must turn the criminals own will back on itself stating “crime, as the product of a negative will, carries with it its own negation or punishment.” Retribution is said to turn the crime back on itself and “criminal's own deed judges itself.”

According to Kant, a choice to commit a wrong against another carries with it consent to equivalent treatment stating that, “whatever undeserved evil you inflict upon another within the people, that you inflict upon yourself”. [Immanual Kant, *The Metaphysics of Morals*, M Gregor trans, New York: (Cambridge: Cambridge University Press, 1991) at 141. See also: Paul Campos, ‘The Paradox of Punishment’,(1992) Wisc L Rev 1931 at 1933.]

> The prison is largely a black box in the fields of punishment and sentencing theory. Functions are presumed, but the internal workings are unknown. Theorists attempt to justify inputs into the box, and they advance claims about whether its various putative functions might be legitimate. They limit their attention to the political conditions or moral claims that might justify the imposition or announcement of a state sanction, but not its administration. Theorists ask when the box can be used, on what grounds, and for how long, but its inner workings and methods remain unexamined and untheorized.[335]

This lack of account or concern for prison conditions and the subjective experience of prisoners is not just a problem within legal theory, but one which challenges the legitimacy of criminal justice within a constitutional democracy. As Kerr points out, everything that occurs in prison will be subjectively experienced by the prisoner as part of their punishment, including physical and sexual assault.[336] Suffering should therefore be treated as a proper concern for proportionality analysis, but in sentencing determinations, length is the only factor routinely considered when prison is ordered.[337] Theorists and judges justify punishment on the basis of metaphysical moral theories and abstract logic while ignoring factors that are relevant to how a sentence will impact and be experienced by an offender.[338]

Kerr's analysis further demonstrates the lack of objectivity in retributive folk psychology and that principles derived from it function as a veil that forecloses

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[335] Kerr, *supra* note 307 at 86.

[336] *Ibid.*

[337] *Ibid.* See also: Lisa Kerr, "Sentencing Ashley Smith: How Prison Conditions Relate to the Aims of Punishment" (2017) 32:2 Can J L & Soc'y 18. *Ibid* at page 199 Kerr notes that the dictum in *R v Smith* [1987] 1 SCR 1045 is never applied. *Ibid* at para 57 states: "effect of the sentence is often a composite of many factors"; that it is "not limited to the quantum or duration of the sentence... but includes its nature and the conditions under which it is applied".

[338] See also: Benjamin L Berger, "Sentencing and the Salience of Pain and Hope," (2015) 17:11 Osgoode Legal Studies Research Paper, online: Osgoode Law School, <https://digitalcommons. osgoode. yorku.ca /cgi/viewcontent.cgi?article=1097&context=olsrps>.

inquiry and discourse into the legitimacy of the practices it purports to justify. Correctional practices are assumed just and not subjected to discourse in jurisprudence. The justificatory conclusions drawn from retributive folk psychology ward off examination of normative debate regarding the trauma and disadvantage offenders have suffered and how it is causally related to their criminal conduct as well as the additional indignities they will suffer as part of their punishment. They also mute discourse regarding legal norms that function in practice to impose suffering on vulnerable and marginalized people for disordered behaviour caused by factors outside of their control and whether they are truly just when measured against the overarching *Charter* value of human dignity.

iii) *Violating Values*

Canada's official position is that "it is committed to achieving reconciliation with Indigenous peoples" and has stated the following in a 2018 publication:

> The Government recognizes that Indigenous self-government and laws are critical to Canada's future, and that Indigenous perspectives and rights must be incorporated in all aspects of this relationship. In doing so, we will continue the process of decolonization and hasten the end of its legacy wherever it remains in our laws and policies.[339]

Presently, the legacy of colonial policies continues in criminal law.[340] Indigneous persons make up approximately 3% of the Canadian population, but represent 33%

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[339] Canada, Department of Justice, *Principles Respecting the Government of Canada's Relationship with Indigenous Peoples*, (Ottawa: Department of Justice, 2018) at 3, online: Department of Justice, <https://www.justice.gc.ca/eng/csj-sjc/principles.pdf>.

[340] See: Nancy McDonald, "Canada's Prisons are the New Residential Schools", Maclean's, February 18, 2016, online: Macleans, <https://www.macleans.ca/news/canada/canadas-prisons-are-the-new- residential-schools/>.

percent of Canada's prisoner population.[341] As the Correctional Investigator notes, it reported that efforts to remediate overrepresentation were not working in 2016 when indigenous persons represented twenty-five percentage tof the prison population.[342]

Overrepresentation has actually been a target of reform for over thirty years.[343] Bill C-41 introduced the requirement to consider alternatives to imprisonment "with particular attention to the circumstances of Aboriginal offenders" in subsection 718.2 (e) of the *Code.* Falling short of holding that the provision created a presumption in favour of alternatives, the Supreme Court in *Gladue* held that systemic and background factors must be considered when sentencing Indigenous offenders. These include, "low incomes, high unemployment, lack of opportunities and options, lack or irrelevance of education, substance abuse, loneliness, and community fragmentation".[344] If systemic and background factors have played a significant role in their life, the sentencing judge must then consider the availability of appropriate alternatives such as restorative justice processes.[345] In *Wells,* it was held that pre-

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[341] Canada, Office of the Correctional Investigator, News Release, (Ottawa: Office of the Correctional Investigator, January 21, 2020), online: Office of the Correctional Investigator, <https://www.oci-bec. gc.ca/ cnt/comm/press/press20200121-eng.aspx>.

[342] *Ibid.*

[343] Daubney Report, *supra* note 34 at 211; and Sentencing Commission, *supra* note 41 at 364.

[344] *R v Gladue*, [1999] 1 SCR 688 at para 67, [1999] SCJ No 19 (QL).

[345] *Ibid* at para 68.

sentencing reports detailing background and systemic factors must be considered in all cases involving indigenous offenders, even those involving serious crimes.[346]

Numerous problems have been noted regarding the application of *Gladue* which might partially explain its lack of real impact on incarceration rates.[347] However, resolving noted problems of systemic bias, barriers to access, and disparities in the application of *Gladue* would not remove judicial discretion to order incarceration.[348] Kent Roach notes that courts are reluctant to order non-custodial sentences or reduce prison sentences in serious cases, even when systemic factors are identified.[349] In the exceptional serious cases where Indigenous offenders received community sentences, the offenders came from traditional backgrounds and were able to demonstrate community support.[350]

The maintenance of retributive folk psychology should also be considered a major factor contributing to overrepresentation and ongoing oppression of Indigenous

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[346] *Ibid*. See also *R v Wells*, 2000 SCC 10 at paras 4, 53, and 55. Some have taken this to mean that preparation of Gladue reports should be made available to every Indigenous offender. See for examples: Alexandra Hebert, "Change in Paradigm or Change in Paradox? Gladue Report Practices and Access to Justice" (2017) 43 Queen's L J 149.

[347] For example, continuing systemic bias, disparities in access and divergence of its application across provincial jurisdictions, and systemic bias. See: James TD Scott, "Reforming Saskatchewan's Biased Sentencing Regime," (2017) 65 CLQ 91; David Milward and Debra Parkes, "Gladue: Beyond Myth and Towards Implementation in Manitoba" (2011) 35 Man LJ 84; Alexandra Hebert, "Change in Paradigm or Change in Paradox? Gladue Report Practices and Access to Justice" (2017) 43 Queen's LJ 149; and Tim Quigley Gladue Reports: Some Issues and Proposals, (2016) 31:7 CR 405; and James TD Scott, "Reforming Saskatchewan's Biased Sentencing Regime" (2017) 65 Crim LQ 91.

[348] *Ipeelee,* s*upra* note 71.

[349] Kent Roach, "One Step Forward, Two Steps Back: Gladue at Ten and in the Courts of Appeal" (2009) 54 Crim LQ 470.

[350] *Ibid.*

persons in the manner it justifies the infliction of additional trauma through punishment. The case of *Ipeelee* involved two Indigenous repeat sex offenders who had violated the terms of their long-term supervision orders.[351] The histories of Mr. Ipeelee and Mr. Ladue exemplify the causal link between the governments colonial policies, adverse childhood experiences in traumatized communities, the development of addictions and mental disorders, and how prisons exasperate rather than rehabilitate their behavioural symptoms. Both offenders were sexually abused, had substance abuse disorders, and had been diagnosed with Antisocial Personality Disorder.[352] Mr. Ladue was sexually abused in residential school and began using narcotics while in federal prison.[353] Applying *Gladue*, the court held that these factors reduced their moral culpability and reduced their prison sentences but maintained that the offenders still acted with moral voluntariness and were therefore still blameworthy:

> Many Aboriginal offenders find themselves in situations of social and economic deprivation with a lack of opportunities and limited options for positive development. While this rarely - if ever - attains a level where one could properly say that their actions were not *voluntary* and therefore not deserving of criminal sanction, the reality is that their constrained circumstances may diminish their moral culpability.[354]

Because of the assumptions of retributive folk psychology, the court does not have to identify or explain at what point or in what way the offenders in *Ipeelee* could have transcended the conditioning of their oppressed lived experience and harness rationality to override the limitations of their capacity developed in response to the

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[351] *Ipeelee,* s*upra* note 71.

[352] *Ibid* at paras 2,10, 25, and 31.

[353] *Ibid* at para 96.

[354] *Ibid* at para 73.

trauma and social disadvantages imposed on them by government policies. It is simply assumed that they could have and should have.

Neuroscience explains that Mr. Ipeelee's and Mr. Gladue's capacities have not only been shaped by the trauma they experienced in their lives but are also a product of genetic inheritance. Their parents were alcoholics as well. The ongoing punishment of indigenous persons in prisons cannot even be described as an effect of colonization, it is a consequence of presently operative legal norms that will impact future Indigenous generations. Retributive folk psychology and the punishment practices it justifies are therefore a glaringly obvious example of "operating practices and processes" that continue to oppress Indigenous people of Canada.[355] As Malini Vijaykumar explains:

> The history of systemic discrimination against Indigenous peoples in Canada begins with the first experiences of colonialism and genocide, extends through the outlawing of cultural practices such as the Potlatch and Sundance and the corresponding cultural genocide perpetrated through residential schools and policies such as the Sixties Scoop, and continues in present-day Canada in various interrelated forms. One of its present-day manifestations lies in the Canadian criminal justice system's treatment of Indigenous peoples.[356]

Another example of how retributive folk psychology conflicts with Canadian values is how other marginalized and vulnerable people are disproportionately punished and imprisoned. Justice Abella, citing Habermas, states in the case of *Loyola High School v Quebec*:

> These shared values - equality, human rights and democracy - are values the state always has a legitimate interest in promoting and protecting. They enhance the conditions for integration and points

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[355] Canada, *supra* note 339.

[356] Malini Vijaykumar, "A Crisis of Conscience: Miscarriages of Justice and Indigenous Defendants in Canada," (2018) 51 UBC L Rev 161 (QL) at 7.

> of civic solidarity by helping connect us despite our differences:... This is what makes pluralism work.[357]

As Justice Dickson explains in *Big M Drug Mart Ltd,* human dignity, not folk psychology, is the foundation basis of the constitutional protection of liberty and autonomy*:*

> "What unites enunciated freedoms… is the notion of the centrality of individual conscience and the inappropriateness of governmental intervention to compel or to constrain its manifestation.... It is easy to see the relationship between respect for individual conscience and the valuation of human dignity that motivates such unremitting protection."[358]

Legal protection of dignity thus requires more than the freedom to choose. It requires the law to respect "identity, self-worth and emotional well-being"[359] and "physical and psychological integrity".[360] However, as the reports of the Correctional Investigator have noted, the human right to dignity is routinely and systemically violated within Canadian prisons in multiple ways.[361]

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[357] *Supra* note 216 at para 47.

[358] *R v Big M Drug Mart Ltd,* [1985] 1 SCR 295 at para 121, [1985] SCJ No 17 (QL).

[359] *Reference Re Public Service Employee Relations Act,* [1987] 1 SCR 313, at 368, 38 DLR (4th) 161.

[360] *Andrews v Law Society of British Columbia*, [1989] 1 SCR 143 at 53, 56 DLR (4th) 1.

[361] Office of the Correctional Investigator, *supra* notes 319 at 9 and 318.

Charter values must not only inform the interpretation of rights and freedoms,[362] but also the interpretation of statutes and every exercise of statutory discretion.[363] However systematic violation of human rights and undignified suffering continues in Canadian prisons as a function of established policies and practices under the *Corrections and Conditional Release Act*.[364] In her presentation to the Senate standing committee Chief Commissioner of the Canada Human Rights Commission Marie-Claude Landry notes:

> [C]onditions that exist outside of prison, in society at large, continue to have an acute impact within prison walls. We are talking about: Systemic racism, discrimination and biases, historical abuse, profound poverty and food insecurity, insufficient access to health care, and inadequate supports in mental health services […] too little is being done for the vulnerable groups that are most affected by our collective failure in addressing those issues…. [365]

Retributive folk psychology leads us to the conclusion that those who commit a crime deserve to suffer punishment, no matter how vulnerable and marginalized they are in society, or how much government policy has impacted their developed behavioural capacity. Legal norms characterizing crime as an individual moral failure conflict both in principle and practice with the acknowledgment of inequality and disadvantage in society. They justify the systemic violation of dignity through punishment practices that impose trauma and suffering on indigenous persons and other marginalized groups. Accordingly, the maintenance of retributive folk psychology in criminal law

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[362] *R v Oakes,* [1986] 1 SCR 103 at 136, [1986] SCJ No 7.

[363] *Law Society of British Columbia, supra* note 11 at 41.

[364] *Supra* note 32.

[365] Marie-Claude Landry, Speaking Notes: Our correctional system: *CHRC States That We Must Do Better, Speaking Notes, Presentation to the Senate Standing Committee on Human Rights On the Human Rights of Prisoners in Canada*, Wednesday, (Ottawa, CHRC, 2017), online: Canadian Human Rights Commission, <https://www.chrc-ccdp.gc.ca/eng/content/our-correctional-system-chrc-states-we-must-do-better>.

norms frustrates the realization of *Charter* values such as dignity and equality as well as Canada's commitment to human rights and reconciliation with Indigenous people.

Neuroscience on the other hand is inconsistent with understanding crime as an individual moral failure. It establishes that our rationality does not function independently from our unconscious limbic system, or enable so-called "moral control" that overrides our developed capacity for behaviour.[366] It provides a description that helps us understand how disadvantage impacts capacity for choice and behaviour, and that many actors and institutions play a causal role in criminal behaviour. Neuroscience demonstrates offenders are not individually responsible for their conduct because their behavioural capacity is shaped by factors outside their control. It is therefore incompatible with the conclusion that imposing suffering or punishing offenders is a just way to respond to crime. Accordingly, if criminal law was to adopt an understanding of human behaviour consistent with neuroscience, it would necessitate the abolishment of punishment and wide sweeping reforms to sentencing practices. In adopting norms and practices that better respect the dignity of offenders, the criminal justice system would be brought into harmony with fundamental values overarching the legal system.

iv) *Systemic Failure*

As discussed in chapter two, Bill C-41 and the sentencing reform processes that preceded it were aimed at ameliorating long standing problems of over incarceration, high recidivism, and indigenous overrepresentation. The amendments failed to achieve any progress towards these goals. As discussed, Indigenous over-representation has grown worse. Incarceration rates have also not decreased, and

[366] Sapolsky, *supra* notes 97 at 109- 112; and *Bouchard- Lebrun, supra* note 19.

remain high compared to most western European countries.[367] Despite a reduction in the crime rate since the enactment of Bill C-41, the prison population has increased.[368]

The maintenance of retributive folk psychology and its justifications of punishment practices function to perpetuate the problems targeted by the reforms. It also frustrates the overarching purpose of criminal sentencing. Section 718 states that "The fundamental purpose of sentencing is to protect society", maintain respect for the law and a "just, peaceful and safe society."[369] However punishment practices do not serve this purpose and function to cause more crime.

Deterrence theory presumes that people will choose not to commit crime to avoid punishment.[370] Neuroscience explains that adverse developmental conditions and experiences impair the capacity to make behavioural choices that are in an individual's best interests, or consistent with their consciously held intentions.[371] The

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[367] See: Cheryl M Webster & Anthony N Doob, "Missed Opportunities: A Postmortem on Canada's Experience with the Conditional Sentence", (2019) 82 Law and Contemporary Problems, 163; Andrew A Reid & Julian V Roberts, "Revisiting the Conditional Sentence of Imprisonment after 20 Years: Is Community Custody Now an Endangered Species?" 24 Can Crim L Rev 1; Canada, Canadian Centre for Justice Statistics, *Police-Reported Crime Statistics in Canada, 2018*, (Ottawa: Statistics Canada, 2018), online: Statistics Canada, <https:// www150.statcan.gc.ca/n1/pub/85-002-x/2019001/article/ 00013-eng.htm>; and Canada, Public Works and Government Services, *Corrections and Conditional Release Statistical Overview*, (Ottawa: Public Works and Government Services Canada, 2018), online: Public Safety Canada, <https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/ccrso-2018/index-en.aspx>.

[368] Webster & Doob at 164; and Canadian Centre for Justice Statistics, *Ibid.*

[369] *Supra* note 29.

[370] See for example: Irving Piliavin et al, "Crime, Deterrence, and Rational Choice" (1986) 51:1 Am Soc Rev 101.

[371] Caruso, *supra* note 168. See also Sarah Gregory et al, "Punishment and Psychopathy: A Case-control Functional MRI Investigation of Reinforcement Learning in Violent Antisocial Personality Disordered Men," (2015) 2:2 The Lancet Psychiatry 153.

high prevalence of determinant variables such as childhood poverty and abuse amongst prisoners is wholly consistent with the high prevalence impulse control disorders such as ASPD and BPD in the prison population.[372] As Caruso points out, punishment or negative reinforcement does not work for individuals suffering from common disorders in offenders such as ASPD and BPD and can exacerbate symptoms.[373] As discussed, offenders with these disorders are not provided with access to treatment and encounter conditions within prisons that intensify the behavioural symptoms of their disorders.

Research on deterrent effects is consistent with these conclusions. Certainty of sanction demonstrates a general deterrent effect across the population, but harsher punishment does not increase this effect.[374] Research also indicates that some people, such as those with histories and traits common in the prison population, are not deterred by punishment. When the general deterrent effect is broken down, effects vary widely depending on characteristics such as social bonding, impulsivity, socioeconomic status and position in a social network.[375] Furthermore, prison has a criminogenic rather than deterrent effect.[376] Offenders who have served harsher

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[372] Canada, *supra* note 313.

[373] Caruso, *supra* note 168. See also Sarah Gregory et al, “Punishment and Psychopathy: A Case-control Functional MRI Investigation of Reinforcement Learning in Violent Antisocial Personality Disordered Men” (2015) 2:2 The Lancet Psychiatry 153.

[374] Daniel S Nagin,"Deterrence in the Twenty-First Century" 2013) 42 Crime & J: A Review of Research 35.

[375] Alex R Piquero et al, “Elaborating the Individual Difference Component in Deterrence Theory” (2011) 7 Ann Rev L & Soc Sci 335.

[376] See: Daniel S Nagin et al, “Imprisonment and Reoffending,” (2009) 38:1 Crime and Justice 115.

sentences compared to controls have higher rates of recidivism.[377] Even when variables such as the type of offence are controlled for, community sanctions have been demonstrated to produce lower rates of recidivism than imprisonment.[378]

v) *Better Performing Alternatives*

The negative effects of retributive punishment cannot be defended as unavoidable. Perhaps the most successful feature of Bill C-45's sentencing reforms was the authorization of "alternative measures" such as restorative justice.[379] This reform enabled the development and integration of alternative sentencing processes within the Canadian criminal justice system.[380] These alternative sentencing processes,

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[377] P Gendreau et al, *The Effects of Prison Sentences on Recidivism: A Report to the Corrections Research and Development and Aboriginal Policy Branch*, (Ontario: Public Works & Government Services Canada, 1999) online: Public Safety Canada: <https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/ffcts-prsn-sntncs-rcdvsm/index-en.aspx>; Paula Smith et al, *The Effects of Prison Sentences and Intermediate Sanctions on Recidivism: General Effects and Individual Differences*, (Ottawa:Public Works and Government Services Canada, 2002), online: Public Safety Canada, <https:/ /www.publicsafety.gc.ca/cnt/rsrcs/pblctns/ffcts-prsn-sntncs/ffcts-prsn-sntncs-eng.pdf>; Francis T Cullen et al, "Prisons Do Not Reduce Recidivism: The High Cost of Ignoring Science," (2011) 91:3 Prison J 56; and Paula Smith et al, "The Effects of Prison Sentences and Intermediate Sanctions on Recidivism: General Effects and Individual Differences" (Ottawa: Public Works and Government Services Canada, 2012), online: Public Safety Canada, <https:// www.publicsafety.gc.ca/cnt/rsrcs/pblctns/ffcts-prsn- sntncs/ffcts-prsn-sntncs-eng.pdf>.

[378] *Ibid.*

[379] *Criminal Code, supra* note 29 at 717.

[380] Alternative measures have a small presence within Criminal Justice system. See: Canada, Correctional Services Canada, Federal-Provincial-Territorial Working Group on Restorative Justice, *Restorative Justice in the Canadian Criminal Justice Sector*, (Ottawa: Correctional Services Canada, April 27, 2016), online: Corrections Services Canada, <https://www.csc-scc.gc.ca/restorative-justice/003005-4012-eng.shtml> at 11- 13.

Access is also limited by section 717 (1) (e) and 717 (2) (a) of the *Code, supra* note 29, and numerous systemic barriers. See: Meghan Stephens, "Lessons from the Front Lines in Canada's Restorative Justice Experiment: The Experience of Sentencing Judges" (2007) 33 Queens LJ 19.

Still, the addition of s 717 has been characterized by Kent Roach as a significant first step towards functional integration of restorative justice models into the statutory sentencing scheme and providing legislative protection of a relationship between the traditional and restorative models of sentencing. See: "Changing Punishment at the Turn of the Century: Restorative Justice on the Rise" (2000) 42 Can J Crim 249 at 353.

which do not seek to blame and punish offenders for moral blame, produce better outcomes than retributive sentencing.

Restorative justice pursues the overarching goal of “restoration” in sentencing, which will be discussed further in the next chapter. All available data indicates that restorative justice participants have lower rates of recidivism as well as greater victim satisfaction and restitution compliance than those who are sentenced in traditional retributive sentencing processes.[381]

Similarly, Drug Courts, Mental Health Courts, First Nation courts, and Domestic Violence Courts, forgo moral blame and punishment and pragmatically seek to resolve the underlying issues giving rise to the criminal conduct.[382] They have been described as functioning within a “therapeutic justice” model.[383] Most are predicated on offering sentence reduction or potentially a stay of proceedings if the programming is successfully completed, and, accordingly, many individuals charged with serious offences are ineligible.[384] While these programs are relatively new in Canada, other jurisdictions with similar programs have demonstrated reduced

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[381] Jeff Latimer, "The Effects of Restorative Justice Programming: A Review of the Empirical” (Ottawa:Department of Justice Canada, January, 2000), online: Department of Justice Canada, <https:// www.justice.gc.ca/eng/rp-pr/csj-sjc/jsp-sjp/rr00_16/rr00_16.pdf>; and Jeff Latimer, Craig Dowden and Danielle Muise, “The Effectiveness of Restorative Justice Practices: A Meta-Analysis,"(2005) 85:2 Prison J 127; and Don Clairmont, *The Nova Scotia Restorative Justice Initiative: Final Evaluation Report,* (Halifax: Atlantic Institute of Criminology, Dalhousie University, 2005, at 171-179.

[382] See for example: British Columbia, Ministry of Justice, *Specialized Courts Strategy,* (Victoria: British Columbia Ministry of Justice, March 2016), online: Ministry of Justice, <https:// www2.gov.bc.ca/ assets/gov/law-crime-and-justice/about-bc-justice-system/justice-reform-initiatives/specialized-courts-strategy.pdf>.

[383] David Orr, “A Criminal or Therapeutic Justice System? Examining Specialized Treatment Courts” (2017) 64 Crim L Q 180.

[384] *Ibid.*

recidivism rates.[385] While the quality of these studies vary and different programs diverge in design, quality and outcomes,[386] evaluative data on Canadian drug and mental health courts also demonstrates lower, and in some cases negligible, rates of recidivism.[387]

Alternatives to traditional prisons that have been created in response to Indigenous overrepresentation offer another comparator demonstrating that non-retributive practices, that impose less suffering and offer capacity building opportunities, work better. Pursuant to the Aboriginal Justice Strategy (AJS), Indigenous community based justice programs, custodial "Pathways Healing Units", and "Aboriginal Healing

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[385] See for example: DE McNiel & RL Binder, "Effectiveness of a Mental Health Court in Reducing Criminal Recidivism and Violence", (2007) 164:9 Am J of Psychiatry 1395; B Ray, "Long-term Recidivism of Mental Health Court Defendants",37 Int'l J Law & Psychiatry, 448-; EM Lowder et al "Recidivism Following Mental Health Court Exit: Between and within-group comparisons",(2016) 40:2 Law and Human Behaviour 118; and Steve Aos et al, *Evidence-Based Adult Corrections Programs: What Works and What Does Not*, (Olympia: Washington State Institute for Public Policy, 2006), online: Washington State Institute for Public Policy, <http://www.wsipp.wa.gov/ReportFile/924/Wsipp_ Evidence-Based-Adult-Corrections-Programs-What-Works-and-What-Does-Not_Preliminary-Report.pdf>.

[386] See: Canada, Public Safety, *Research Summary Volume 17 Number 6: "What Works" in Drug Treatment Courts*, (Ottawa: Public Safety, 2012), online: Public Safety Canada, <https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/wtwrks-crts/index-en.aspx>.

[387] Canada Department of Justice, Evaluation Division Office of Strategic Planning and Performance Management, *National Anti-Drug Strategy Evaluation, Final Report*, (Ottawa: Department of Justice, May 2012), online: Department of Justice, <https://www.justice.gc.ca/eng/rp-pr/cp-pm/eval/rep-rap/ 12/nas-sna/annd.html>, at 12; and Joshua Watts & Michael Weinrath, "The Winnipeg Mental Health Court: Preliminary Findings on Program Implementation and Criminal Justice Outcomes" (2017) 36:1 Can J of Comm Mental Health, 67; and RS Swaminath et al, "Experiments in Change: Pretrial Diversion of Offenders with Mental Illness" (2002) 47 Can J of Psychiatry 450.

Lodges" have been created.[388] Evaluative data indicates that AJS program participants are significantly less likely to reoffend than non-participant controls.[389] Custodial programs providing elder support resources and programming, "Pathways Healing Units" within institutes, as well as separate medium security institutions called "Aboriginal Healing Lodges", also appear to produce better outcomes. Participants in all of these programs also have significantly lower rates of recidivism than those who are punished in the traditional system.[390]

These alternative practices do not treat crime as an individual moral failure, but indicative of either a social problem, or symptomatic of deeper underlying internal constraints that the individual requires assistance to address. They are therefore consistent with neuroscience which also identifies the social environment, and

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[388] The AJS cannot be described as an overall success. The growth of its programming over 25 years and has been slow and access is poor and uneven across jurisdictions. See: Canada, Department of Justice, *Evaluation of the Aboriginal Justice Strategy*, (Ottawa: Evaluation Division Corporate ServicesBranch, 2016), online: Department of Justice, <https://www.justice.gc.ca/eng/rp-pr/cp-pm /eval/rep-rap/2016/ajs-sja/index.html>, at appendix C.

Deficiencies in its programs have been noted as well. Problems include lack of sufficient funding as well as autonomy or self governance and failure to properly account for colonialism and integrate significant cultural principles, such as interconnectedness, which recognize that harm never arises or exists within one individual and calls for fulsome considerations and response to multiple variables. See for example: Jane McMillan, "Still Seeking Justice: The Marshall Inquiry Narratives", 47 UBC L Rev 927; Chris Cuneen, "Reparations and Restorative Justice: Responding to the Gross Violation of Human Rights" in Heather Strang & John Braithwaite eds, *Restorative Justice and Civil Society,* (Cambridge: Cambridge University Press, 2001); and Naomi Giff, *The Aboriginal Justice Strategy: Trends in Program Organization and Activity,* (Ottawa: Aboriginal Justice Directorate, Department of Justice Canada, 2000), online: <http://www.justice.gov.yk.ca/fr/pdf/02-1_History.pdf>.

[389] *Ibid,* Evaluation of the Aboriginal Justice Strategy at appendix C.

[390] Canada, Public Safety,*Research Summary: A Meta-analysis of the Effectiveness of Culturally-Relevant Treatment for Indigenous Offenders*, (Ottawa: Public Safety Canada, 2017) online: Public Safety Canada, <https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2017-s016/index-en.aspx>; Canada, Correctional Services, *Final Report - Effective Corrections Initiative - Aboriginal Reintegration*, (Ottawa: Correctional Services Canada, June, 2004, online: Correctional Services Canada, <https:// www.csc-scc.gc.ca/text/pa/ev-eci-ar-394-2-32/ECIAboriginalReintegration-eng.shtml>; and Shelley Trevethan et al, *An Examination of Healing Lodges for Federal Offenders in Canada*, (Ottawa: Research Branch Correctional Service Canada, November, 2002), online: Correctional Services Canada, <https:// www.csc-scc.gc.ca/research/r130-eng.shtml> at 33.

neurological capacity developed in response to it, as the underlying causes of criminal conduct.

vi) *Retributive Folk Psychology is Wrong*

Pragmatic review of how retributive folk psychology functions in practice leads to the conclusion that it is wrong. Not because it conflicts with neuroscience per se, but because it consistently produces negative consequences in several regards. The 'good' that retribution theory claims to achieve through the moral alchemy of punishment exists only in theoretical abstractions and cannot be observed when the consequences of its practices are examined. Adherence to retributive folk psychology and the normative veil provided by its metaphysical principles also prevent the law from acknowledging contextual factors relevant to the law and evolving in a way that is responsive to contemporary understanding and resolves longstanding problems. Rather, retributive norms function to perpetuate these problems. As Beecher-Monas and Garcia-Rill state:

> [L]aw is replete with discussion about volition, intent, and rationality. But by defining these terms without any information about how the brain actually works,... and instead relying on paradigms of human behaviour that bear little resemblance to reality, the courts have created one of the highest rates of imprisonment on earth.[391]

Furthermore, retributive folk psychology conflicts with how a legal system is intended to function in liberal democratic societies. As Sylvestre and Berger point out, the legal doctrine and principles derived from retributive folk psychology are overly abstract, idiomatic, lack objectivity and are applied in a way that forecloses consideration of relevant causal factors and veils the basis upon which decisions are

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[391] Erica Beecher-Monas & Edgar Garcia-Rill, "Actus Reus, Mens Rea, and Brain Science: What Do Volition and Intent Really Mean?" (2017) 106 Kentucky L J 265. Although this comment is directed at the American courts, as discussed Canada's incarceration rate is higher than most western democracies.

made.[392] Just as neuroscience would predict, prison populations are largely constituted by those who suffer adverse developmental conditions that are linked to impulse control mental disorders. Indigenous persons who are the inheritors of the intergenerational trauma perpetrated on them by the government are grossly overrepresented in prison. In prison, offenders are robbed of dignity as institutional conditions and practices impose more trauma and suffering on them. As Kerr's critique highlights, proportionality assessments do not inquire into the actual suffering and consequences that will result from a sentence.[393] The veil of justification provided by retributive folk psychology enables criminal justice practices to function outside the discourse of the law in a way that conflicts with Canadian values such as dignity and equality as well as its commitment to human rights and reconciliation with Indigenous people.

The law should seek to evolve its norms guided in part by neuroscience, not just because of its empirical validity, but because the understanding of human behaviour it offers can support the development of better criminal justice practices. Alternative sentencing practices that operate to address underlying causes of behaviour rather than punish moral blame produce better results than retributive practices. Custodial institutions that seek to heal rather than impose suffering also produce better outcomes. Neuroscience offers an empirical explanation of why these programs work. Offenders in these programs do not experience the same amount of trauma and suffering and are provided with more opportunities that support the development of a more functional behavioural capacity. Accordingly, they are more likely to be made more capable of complying with the law as a consequence of their sentence.

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[392] Sylvestre, *supra* note 274; and Berger, *supra* note 282.

[393] Kerr, *supra* note 307.

Of course, not all offenders share the common characteristics or life histories that are highly prevalent in Canadian prisons. Some do appear to choose crime in a conscious, rational way. For example, white collar criminals are motivated by tangible gain or profit and can pursue these goals in calculated and skillful manner. However, neuroscience demonstrates that all behaviour is a function of capacity, and rationality does not override capacity. Rather, the intentions we form and the reasoning involved in forming it, is a function of capacity that is conditioned in response to the social environment. White collar criminals are often already wealthy. Thus, their risk to obtain more or their lack of concern for the suffering and deprivation their crimes impose on others can be seen as pathological.[394] Gambling addiction is also common among convicted white collar criminals.[395] These offenders are not sympathetic, but our feelings about it do not make the general observations of neuroscience any less relevant to understanding their criminal behaviour.

The sorts of criminal justice responses that may be appropriately responsive to different crimes and offenders will vary. Sanctions in response to violations of the law can still be thought necessary to deter those who can be deterred and maintain the behavioural guiding function of criminal law. However, these concerns do not justify punishment practices that impose unnecessary suffering and deprivation on offenders. A sanction is not the same thing as punishment, and measures taken to

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[394] See for example: Laurie L Ragatz et al, “The Psychological Profile of White-collar Offenders: Demographics, Criminal Thinking, Psychopathic Traits, and Psychopathology” (2012), 39:7 Crim J & Behaviour 978; and Eugene Soltes, “The Psychology of White-Collar Criminals” The Atlantic, December 14, 2016, online: The Atlantic, <https://www.theatlantic.com/business/archive/2016/12/pyschology- white-collar-criminal/503408/>.

[395] See: Jay Albanese, “White Collar Crimes and Casino Gambling: Looking for Empirical Links to Forgery, Embezzlement, and Fraud” (2008) 49:5: Crime L and Social Change 333.

maintain order are not justified by retributive norms.[396] Similarly, the necessity of incapacitation to maintain public safety may also arise in exceptional cases, but conditions of confinement can and should still be compatible with a respect for human dignity and the avoidance of unnecessary suffering.[397]

[396] See for example in the Sentencing Commission report, *supra* note 36. While a sanction may still be perceived as punishment by those who are subject to it, it is distinct in its purpose and intent. The Sentencing Commission states that when a sentence is determined, an coercive obligation is created. It may be solely on the offender in the case of fines, but correctional authorities may also have an obligation to ensure its carried out. *Ibid* at page 115 states: "Sentences also have,in varying degrees, punitive implications. However, the use of the words "legal sanctions" (instead of punishment) is designed to assert that the notion of obligation has precedence over the notion of punishment. ...To be coerced into something is always unpleasant...However, whereas the execution of all sentences is obligatory in law, not all sentences impose such a severe measure of deprivation that they can be properly called punishment."

[397] Scandinavian prisons resembling college dorms in which staff function akin to social workers could serve as a model. See for example: Doran Larson, "Why Scandinavian Prisons are Superior" The Atlantic (September 24, 2013), online: The Atlantic, <https://www.theatlantic.com/international/archive/2013/09/why-scandinavian-prisons-are-superior/279949/>; and Erwin James, "The Norwegian Prison Where Inmates are Treated Like People" The Guardian (February 25, 2013), online: The Guardian, <https://www.theguardian.com/society/2013/feb/25/norwegian-prison-inmates-treated -like-people>.

CHAPTER VI

NEUROSCIENCE & NORMATIVE THEORY

When folk psychology and the metaphysical justifications of retributive moral theory are discarded, we must then ask how can we rethink criminal justice? This chapter explores that question. It also responds to the argument that retributive folk psychology is necessary to protect autonomy and justify individual rights.[398] Alternative legal and political theories that are compatible with neuroscience will be discussed to demonstrate that we can understand criminal justice and concepts like responsibility and autonomy in a way that informs the construction of individual rights that would respect dignity and autonomy more than retributive norms.

The review of alternative theories in this chapter is far from exhaustive. Theorists have been criticizing and rethinking personhood for decades.[399] Furthermore, they map on to but do not justify rights that protect the dignity and autonomy of offenders. In western cultures, the law has developed to acknowledge and protect human rights in a manner that does not need justification. Canadian and international law already protect self determination and dignity without justification denied from any universal facet of human nature. As Rorty suggests, it might be better to "set aside Kant's question "[w]hat is man?'" and in substitute ask "[w]hat sort of world can we prepare for our great grandchildren?".[400] In the pragmatist spirit, the theories discussed here

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[398] See for example: Morse, *supra* note 143; and Lemos, *supra* note 155.

[399] See for example:Charles Taylor, supra note 176 at 187; and Christine Brooke-Rose, Thomas Heller, David E Wellbery & Morton Sosna eds, *Reconstructing Individualism: Autonomy, Individuality, and the Self in Western Thought,* (Stanford: Stanford University Press, 1986).

[400] Richard Rorty, *supra* note 238 at 175.

are put forward as “suggestions about what we should try” with respect to our thinking about criminal justice.

i) *Shared Responsibility*

Morse claims that neuro-reformers describe a society in which “no one is responsible”.[401] Another way to look at it is: everyone is responsible, not just for ourselves, but also for each other. Sapulsky’s holistic synthesis of neuroscience describes how criminal conduct is the result of neurological development in the social environment. The choices of others impact our behavioural capacity. Our actions, in turn, impact the capacity of others. The state and its actors through social policy and its institutions shape the social environment and with it the neurological capacity of us all. This can be obvious and profoundly oppressive as it is for Indigenous persons in Canada. It can also be more subtle or difficult to notice. We take for granted the received political economy and established health and education systems, but as pragmatists point out, these are not a given. The choices and conduct of the government and its actors have a hand in shaping the social environment that impacts the development of all of its citizens in ways too myriad and complex to even account for. Neuroscience demonstrates criminal conduct is ultimately caused by many peoples choices. The most that can be said is that the offender is the proximate cause of the crime.

Sylvestre argues that criminal law should acknowledge shared responsibility for crime and characterize crime as a social conflict.[402] She identifies four problematic principles that lack empirical validity in the traditional liberal understanding of choice in Canadian criminal law:

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[401] Morse (2008), *supra* note 129 at 19.

[402] Sylvestre, *supra* note 274 at 812.

> First, individualism: there is a distinction and separation between society and the individuals which make up society, who have divergent and opposing interests. Second, rationality: humans are rational beings who value reason at the expense of their emotions or intuitions; they have all the information and skills required to take the necessary measures to achieve their goals. Third, free will: human beings live in a universe without constraints,and they are free to make choices. Lastly, formal equality: human beings are equal, have the same opportunities and must be held responsible for their actions…[403]

She says that these assumptions should be set aside and that the normative concepts of law should recognize that human beings are "profoundly unequal in terms of power and opportunities," and [a]lthough rational and capable of calculation and strategy..[they are] also impulsive and emotional and do not always have the information, intellectual capabilities and skills required to make their choices."[404] Sylvestre puts forward the model of choice in Pierre Bourdieu's empirically validated practice theory as a foundation for her arguments regarding both a shift towards the recognition of shared responsibility and reforms to criminal legal theory, doctrine, and practices.[405]

Practice theory accounts for three theoretical variables: *habitus*, the *capital*, and the *field*.[406] The *field* is the constructed and socially patterned space or context in which choices are made and the *capital* accounts for the social assets deployable by an

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[403] Sylvestre, *supra* note 42 at 5.

[404] *Ibid* at 3.

[405] *Ibid* at 3; and *Supra* note 274 at 802 citing Pierre Bourdieu, trans Richard Nice, *The Logic of Practice*, (Stanford: Stanford University Press, 1990); *Practical Reason: On the Theory of Action* (Stanford: Stanford University Press, 1998); and trans Richard Nice, *Distinction*: *ASocial Critique of theJudgement of Taste*, (Cambridge, Mass: Harvard University Press, 1984).

[406] *Ibid* at 800.

individual such as wealth, access to resources and social networks, knowledge, and reputation.[407] Sylvestre describes the *habitus* as "internalized second nature" consisting of "predispositions that result from social conditioning" developed through one's "personal history and conditionings associated with objective socio-economic conditions of existence."[408] Early experiences are "crucial in constructing the habitus" for it functions to avoid change, preserve itself and selects for information that reinforces it while filtering out or avoiding information and experiences that challenge it.[409] This is said to occur through non-exclusive mental processes in both the conscious and unconscious minds of individuals.[410]

Sylvestre emphasizes that while the *habitus* functions in a manner that attempts to reinforce itself, it is not fixed or predictable and thus transcends the constructed dichotomy between determinism and free will.[411] Practice theory, is therefore consistent with the apparent dichotomy between quantum indeterminacy and neuroscience.[412] There are also several parallels between the way neuroscience and

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[407] *Ibid* at 800.

[408] *Ibid* at 801.

[409] *Ibid* at 801.

[410] *Ibid* at at 802.

[411] Sylvestre states: "The habitus boasts an infinite capacity to generate thoughts, actions, perceptions, and expressions, all within historically and socially situated limits or structures. It provides both a conditioned and a conditional freedom (a universe of possibles"), which is as remote from creation of unpredictable novelty as it is from simple mechanical reproduction of the original conditioning. In that sense, choice and constraint are not two sides of one coin, nor are they two opposite notions with which human beings struggle and between which they are asked to choose. Instead, they are two necessary components of a continuing relationship and interaction that we need to grasp in order to have a complete understanding of the complexity of individuals and their environment." *Ibid* at 802

[412] Searle, *supra* note 92; and Heisenberg, *supra* note 90.

practice theory describes behavioural choices. The *habitus* is described in a way that corresponds to neurological capacity, and the *field* is like the social environment. Like the *habitus,* neurological capacity limits the *capital* and social environments or *fields* we have access to and the possible choices we are capable of making.

To harmonize with an empirical understanding of choice and recognition of shared responsibility, Sylvestre advocates for a minimalist criminal justice system and the creation of alternative responses to incidents of social conflict which are currently dealt with in the criminal justice system.[413] Custodial detention should be almost eliminated and only used when "necessary to detain an individual in order to protect the victims and the public from a real and imminent threat" and "primarily as a safety measure rather than an actual punishment imposed to inflict suffering per se".[414] The goal of criminal justice sanctions and sentencing should be "preventing conflicts and "helping to make communities safer" by transforming them.[415] Criminal processes should therefore operate from the normative perspective that:

> [E]ach crime, conceived of as a conflict, must present an opportunity for us, as as society, to reflect on the proportion of responsibility that we should have to bear collectively for the crime committed and on ways to prevent these conflicts and problematic situations collectively.[416]

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[413] Sylvestre, *supra* note 42. At page 25 she recommends decriminalization and diversion to conflict resolution of offences against public order and against the administration of justice (illegal assembly, breach of undertaking, obstruction and offences related to peace officers), offences contrary to public morals and concerning disorderly houses (vagrancy, nuisance, disturbing the peace, gaming and betting, prostitution), offences related to drugs, offences against the person (assault) and property-related offences (theft, fraud, mischief).

[414] *Ibid* at 21.

[415] *Ibid* at 26

[416] *Ibid.*

To enable a shift towards the recognition of shared responsibility and a transformative approach to criminal justice, Sylvestre also recommends amendments to the criminal code that would direct liability assessments to seek a fulsome understanding of a crime in its social context and identify the state's share of responsibility. Liability assessments would seek to determine degrees of shared or contributory responsibility in a manner akin to tort law and allow for multiple verdict options.[417] She emphasizes that responsibility, not blame, should be the focus of these assessments and that "punishment and sanctions should not only refrain from being 'cruel and unusual' within the meaning of the Canadian Charter, but should also respect the rights and dignity of individuals targeted by measures restricting their freedom."[418]

Despite these qualifiers, this suggestion from Sylvestre is still problematic. She has said that "criminal law theory should recognize multiple degrees of responsibility ... which in turn could allow for different kinds of verdicts: imputable, responsible, and (in exceptional cases) blameworthy."[419] Although arguing that practice theory is an appropriate foundation because it has been empirically validated, these distinctions cannot be founded empirically or based on the pure concepts of Bourdieu's model of choice. Sylvestre's concerns with the liberal retributive understanding of choice are in its failure to recognize the constraints on choice that can be traced to social disadvantage. Economic disadvantage and inequality can be observed, discussed, and understood, but not all forms of developmental disadvantage causing antisocial, unlawful behaviour can be. Sylvestre's recommendation still assumes that some exceptional criminals are individually responsible such that they cross an undefined

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[417] *Ibid* at 24

[418] *Ibid* at 22

[419] Sylvestre, *supra* note 274 at 813.

threshold that renders them blameworthy. She thus recommends that liability assessment purport to do what Sapolsky says neuroscience can't do: identify particular causal connections between experiences in the social environment and particular behavioural incidents within individuals.

Attempting to apportion shared responsibility and distinguish between those who are individually blameworthy and those who are not, would also result in the same sorts of problems Sylvestre and Berger identify in current liability and defence doctrines.[420] Because science does not provide an account for the myriad of causal factors in individual behaviour, assessments and an adjudicator's willingness or ability to identify causal relationships indicative of shared responsibility will necessarily be limited by their knowledge, understanding, and moral intuitions. The distinctions made between crimes for which responsibility is shared and those blamed on individuals would therefor remain veiled behind the norm of shared responsibility. Like the doctrine of mens rea and moral involuntariness, shared responsibility would be reduced to representation and function as a simulacra that obscures the basis upon which judgements are made, in a manner incompatible with the institution of law in a liberal democracy. Like the doctrine of mens rea and moral involuntariness, shared responsibility would be reduced to representation and function as a simulacra that obscures the basis upon which judgements are made, in a manner incompatible with the institution of law in a liberal democracy.

Sylvestre says that transforming liability determinations into individualized assessments is necessary to disrupt the individualized character of crime, but her model still preserves this characterization for "exceptional" cases.[421] Eliminating an

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[420] *Ibid*; and Berger, *supra* note 281.

[421] Sylvestre, *supra* note 42 at 19.

individualized understanding of crime and incorporating an empirical understanding of behaviour into criminal law necessitates discarding the notion that moral blame can be determined through the application of objective legal norms at trial. Liability assessments should instead focus solely on determining what the offender did or did not do, and what thoughts or intentions they had in relation to the conduct to determine whether the elements of an offence are established. Or in other words, the question asked at trial should be whether the accused's conduct and thought processes were the proximate cause of the crime. Assessment of conduct without moral judgement, would rid criminal legal doctrine of the incoherence and confusion discussed in chapter five and all metaphysical assumptions about the nature of choice. In this way, shared responsibility could function as an overarching norm that serves to inform how criminal justice should be practiced, similar to how the presumption of innocence has informed criminal procedure rules.

The essential elements of codified offences, absent retributive notions of blame, still have a functional purpose in distinguishing between different offences in a manner relevant to determining proportional responses from the criminal justice system.[422] The mental elements defining criminal offences can be thought of solely as distinctions which define and stratify the seriousness of crimes according to their anti-social or harmful character, instead of degrees of 'moral blameworthiness' on the part of offenders. Assessing the presence of mens rea elements, such as intention or wilful blindness, would continue to function as they do now, but absent all moral judgements. Instead of purporting to determine blameworthiness, liability assessments would be understood as an objective examination of conduct and

[422] Greene & Cohen, *supra* note 140 at 1783. Also see for example the contrast between A von Hirsch's, *supra* note 57, description of proportionality as an ordinal principle applied based on objective factors rather than a cardinal principle concerned with moral blame, *supra* note *M(CA), supra* note 43. Taking moral blame out of the assessment would enable proportionality to be assessed based on the seriousness of the offence just as von Hirsch recommends.

circumstances of the crime from which inferential conclusions are drawn about what the offender was thinking. After the question of whether an offender committed a crime is resolved, individualized processes that proceed on the recognition of shared responsibility could determine the appropriate response based on the seriousness of the crime, its full social context, and internal constraints on choice in the offender.

ii) *Relational Autonomy*

As discussed in chapter three, those critical of neuro-reformer arguments have also emphasized the importance of retributive folk psychology by pointing out how the traditional Kantian concept of autonomy has provided the normative foundation for individual rights. Even if retributive folk psychology is abolished, the Canadian criminal justice system must still respect the autonomy interest protected by section 7. However, accepting that rationality does not override our capacity would not eliminate this protection, it simply necessitates redefining it in the criminal law context.[423] Jennifer Nedelsky's relational theory offers an alternative normative understanding of human nature and the law that informs a concept of autonomy which can serve as a foundation for the construction of individual rights.[424]

Rejecting the traditional liberal description of individuals as isolated, autonomous, rational decision makers, Nedelsky sees people are mutually enabling and both autonomous and dependent. To better construct rights that structure legal relations between individuals in a manner that recognizes this facet of experience, the content

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[423] Mental illness does not vitiate section 7 or a persons fundamental right to dignity and autonomy. See: *Starson v Swayze*, 2003 SCC 32 at 75, "[t]he right to refuse unwanted medical treatment is fundamental to a person's dignity and autonomy," and that "this right is equally important in the context of treatment for mental illness".

[424] Jennifer Nedelsky, *Law's Relations: A Relational Theory of Self, Autonomy, and Law*, (Oxford: Oxford University Press, 2011). See also Young, s*upra* note 310, who voices similar criticisms of the injustice retributive normativity, and advocates a total departure from the emphasis on individual choice in criminal law towards a relational understanding of criminal conduct.

of rights must be understood in the contextual dynamics of relationships.[425] Relational theory abandons traditional liberal individualism, but still holds fundamental concern for many of the values that are often claimed to be protected and served by its concepts. Jennifer Llewellyn explains:

> From a relational starting point, these values [equal concern, respect, and dignity] are not rooted in our *rational* nature as autonomous agents, as they are for liberals, but rather in our *relational* nature. They detail what we require from one another, and in relation to one another, for our well being. Indeed, ... once revised from a relational point of view, the very notions of equality, autonomy, identity, and judgment require more than individual rationality, and indeed destabilize rationality as the basis for treatment of and by others.[426]

Nedelsky argues that shifting legal presumptions about ourselves and civic interactions away from the folk psychology of rational individualism into a relational perspective, would better serve values of equality, dignity, mutual concern and respect.[427] To replace the folk psychology of the free choosing rational individual, relational theory puts forwards a concept of "self" that is formed in and through relationships with others, and individually determined through the exercise of agency

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[425] As Nedelsky identifies, relational analysis can already be identified in jurisprudence, *ibid* at 115. She puts forward the case of *Lavallee, supra* note 227, as an example of a judicially applied relational analysis that contextualizes the case with the relationship between the victim and accused, its psychodynamics and broader social setting. Similar to *Ruzic, supra* note 17, *Lavallee* dealt with defence doctrine and demonstrates a recognition and understanding of the emotional pressures on the accused and how it impacted their perception and conduct.

Judicial application of a relational analysis has also been identified in a variety of areas of case law. See for example: L Den Berge, "The Relational Turn in Dutch Administrative Law" (2017)13:1 Utrecht L Rev 99; Sharon Thompson, "Feminist Relational Contract Theory: A New Model for Family Property Agreements" (2018) 45:5 J L & Society 617.

[426] Jennifer J Llewellyn, "Restorative Justice: Thinking Relationally About Justice" in Jocelyn Downie & Jennifer J Llewellyn eds, *Being Relational: Reflections on Relational Theory and Health Law,* (Vancouver: UBC Press, 2012), at 94.

[427] Nedelsky, *supra* note 413 at 9.

and choice.[428] The way theorists have described the relational self is wholly consistent with both neuroscience and a recognition of shared responsibility in criminal law. It takes account of the manner our social environment shapes our neurological capacity, through “multiple relationships with other individuals and institutions - some of which can promote flourishing and some of which can oppress”.[429] It also recognizes, rather than ignore, the internal "forces that limit the set of options and thereby interfere with choice."[430] A relational concept of autonomy accounts for the manner in which a persons capacity to identify and make particular choices, can be “oppressively constructed through socialization in such a way that the person does not accurately perceive herself or her options.”[431]

Relational analysis supports construction of novel conceptions and definition of legal rights by providing a more accurate or comprehensive account of human nature than traditional liberal norms. Bruce Archibald explains:

> Relational rights theories in the public law context have emerged in some measure from the common sense empirical proposition that all of us are literally the product of relationships, and live in and through the totality of our relations with others. This important insight is often lost in the rhetoric of neo/liberal political theory which would have us believe that we are all simply individual rights-bearers exercising ir/rational choices in the various arenas to which our daily life takes us. But we exercise our personal

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[428] *Ibid.*

[429] Jocelyn Downie & Jennifer Llewellyn, “Relational Theory and Health Law and Policy” (2008) Health L J (Special Ed) 193, online: Social Science Research Network, <https://ssrn.com/abstract=2101762>, at 197.

[430] *Ibid* at 203 citing Jocelyn Downie & Susan Sherwin, Feminist Exploration "A Feminist Exploration of Issues around Assisted Death" (1996) 15 St. Louis U Pub L Rev 303.

[431] *bid* at 203.

> autonomy in the context of relationships which enhance, limit, condition and structure the choices we have available to us.[432]

A relational description of self thus encompasses contemporary understandings of behaviour and how our capacity to make choices is oppressed or supported through socialization. It therefore provides a better foundation for constructing rights and corresponding practices that better correspond to our experiences serve the values underlying the *Charter*.[433] With respect to relational autonomy, Downie & Llewellyn put forward the following definition:

> Autonomy is the capacity for defining, questioning, revising, pursuing one's interests and goals that is exercised, protected, and corroded within relationships and social structures which together shape the individual and determine others' responses to her.[434]

Defining autonomy in these terms, is consistent with what neuroscience demonstrates: that our capacity for making choices is shaped by the choices of others. Unlike traditional liberal autonomy, a relational understanding does not assume that rational thought can override the impact others have had on our capacity for self determination. This acknowledgement within relational theory, gives rise to the conclusion that criminal justice practices will have an impact on the autonomy of an individual long after a process or sentence ends. It provides a basis for recognizing that interference with psychological integrity not only engages the security of person interest, but through the lasting impact the interference can have on autonomy, liberty and the right to self determine is also engaged.

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[432] Bruce Archibald, “The Significance of the Systemic Relative Autonomy of Labour Law”, (2017) 40 Dal L J 24.

[433] See for example: Alan Norrie, *Punishment, Responsibility, and Justice: A Relational Critique,* (Oxford: Oxford University Press, 2000). Norrie also ties individualized blame, and subjective fault with doctrinal problems in criminal law.

[434] *Ibid* at 198.

A relational concept of autonomy also provides a framework for understanding how power imbalances within relationships impact self determination. Pointing to the inherent power imbalance in the doctor-patient relationship, Downie and Llewellyn explain how a relational understanding of autonomy necessitates placing legal duties on the doctor to enable patients to make meaningful, informed choices about treatment.[435] The patient is dependent on the doctor to provide information she needed to understand the consequences of choosing different options with respect to her self determined best interests and therefor provide meaningful consent to treatment. Accordingly the doctor has a legal duty to communicate this information to the patient. The law of informed consent cannot be derived from liberal individualistic concept of autonomy, but does accord with a relational understanding of it.[436]

There is an enormous power imbalance within the relationship between the government and the individual.[437] Criminal law recognizes this in the procedural protections provided by the Charter before and during trial.[438] However, once found blameworthy things change. The liberal individualistic concept of autonomy that is operative in legal norms does not recognize how experiences impact our capacity to make choices in the future in ways that can't be overridden by rationality. As neuroscience demonstrates stress and trauma has a negative impact on neurological capacity. As they are now, criminal justice practices are likely to have an oppressive impact on the autonomy of offenders long after a sentence has ended.

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[435] *Ibid.*

[436] *Ibid.*

[437] See for example: *R v Grant*, 2009 SCC 32 at 32.

[438] *Ibid.* See also for example: *R v Singh,* 2007 SCC 48.

However, as discussed in chapter five, there is no meaningful consideration in sentencing determinations with respect the suffering and consequential impact it will cause.[439] The law normatively ignores the interference state punishment will have on offender's capacity for future self-determination.

In contrast, adopting a relational understanding of autonomy, that is compatible with neuroscience, supports the construction of constitutional rights that protect an individual's future capacity to self determine in a way that recognizes its inherent vulnerability. It also reveals the invalidity retributivist claim that punishment respects the choices of offender. Because of the deficiencies of its normative concepts, retribution fails to adequately protect choices in its failure to even take into account of how punishment will impact autonomy and self determination beyond the duration of a sentence.[440] A relational concept of autonomy can therefor provide more protection and respect for choices than traditional Kantian concepts.

iii) *Dignity*

Morse's concern that neuroscience describes humans as automatons, and provides no basis for individual rights, also has no merit. *Charter* jurisprudence has established that constitutional rights and freedoms not only respect for choices, but other foundational shared values.[441] Underlying the protection of liberty in section 7 of the *Charter,* is a concern and respect for human dignity.[442] Human dignity, as a

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[439] Kerr, *supra* note 307.

[440] See for example: Morse, *supra* note 129.

[441] *Loyola, supra* note at 47; *Law Society of British Columbia, supra* note 11; and *R v Zundel*, [1992] 2 SCR 731 at para 148, [1992] SCJ No 70 (QL).

[442] *Big M Drug Mart, supra* note 358.

concept in constitutional law, is not restricted to Kantian philosophy which derives inherent human worth from our rationality.[443] International human rights instruments state that, “rights derive from the inherent dignity of the human person.”[444] Thus, dignity provides both the underlying reason for the existence of *Charter* rights, and operates as an aid to interpret their content and application.[445]

Moving away from retributive folk psychology would bring our criminal justice system in harmony with the recognition that our right to dignity flows from our humanity, not our rationality. Despite repeated concerns noted by the Correctional Investigator regarding the routine indignities imposed on prisoners, the general conditions and practices of contemporary correctional institutions have not been subjected to constitutional scrutiny.[446] The undignified suffering perpetrated by punishment

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[443] See: Izhak Englard, "Human Dignity: From Antiquity to Modern Israel's Constitutional Framework" (2000) 21 Cardozo L Rev 1903. Englard states at 1922: “[The] constitutional notion of dignity comprises additional elements that are of a completely different metaphysical and ideological origin. A number of social values, considered to result from the notion of dignity, actually derive from religion or from utilitarian or communitarian ideologies that are hardly compatible with Kantian morality. Thus, it is doubtful whether, in a Kantian sense, one can speak of the dignity of the dead, or of that of the human body as such. Moreover, the idea that dignity implies the sanctity...of human life is hardly a Kantian view.”

See also: Samuel Moyn, “The Secret History of Constitutional Dignity”, (2014)17 Yale Hum Rts & Dev LJ 39.

[444] *International Covenant on Civil and Political Rights*, 19 December 1966, 999 UNTS 171, Can TS 1976 No 47 (entered into force 23 March 1976) [*ICCPR*] art 18.

[445] *R v Keegstra*, [1990] 3 SCR 697 at paras 65- 80 and 181, [1990] SCJ No 131 (QL); *Law Society of British Columbia, supra* note 11; and *Big M Drug Mart, supra* note 358.

The human rights movement and development of international legal norms is said to have grown in reactions to the atrocities of the Holocaust and suffering of World War II. See: Jürgen Habermas, “The Concept of Human Dignity and the Realistic Utopia of Human Rights” (2010) 41 Metaphilosophy 464 at 465–67.

[446] Office of the Correctional Investigator, *supra* notes 318 and 319.

practices remain veiled by retributive principles and norms.[447] Prisoners do have residual section 7 rights and violations have been found, but these are individual exceptions.[448] Punishment is currently considered lawful, so long as it does not reach the threshold of cruel and unusual punishment.[449] However, if retributive folk psychology was discarded, the systemic violation of human dignity in Canada's prisons would be subject to greater *Charter* scrutiny.

The concern voiced by Lemos, that rejecting the "belief in moral responsibility" leaves no explanation for why criminal justice processes should only engage those who have committed a crime, can also be dismissed.[450] Respect for human dignity and relational autonomy, provide an adequate normative basis upon which section 7 could be re-interpreted to preserve a presumption of non-criminality. A neuroscientific understanding of human behaviour negates neither. These concepts still support the traditional Kantian understanding that the right to self determination can be justifiably limited to the extent it interferes with the rights of others. Recognition of the vulnerability of our behavioural capacity within relational interactions, still necessitates the construction and maintenance of legal norms and rules to govern relationships, maintain a social order, and enable the pursuit of self determination with dignity.

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[447] Kerr, *supra* note 307.

[448] *Capay, supra* note 331. *Charter* rights of prisoners have primarily been litigated in the context of procedural rights regarding administrative decisions such as transfers. See for discussion: Debra Parkes, "A Prisoners' Charter?: Reflections on Prisoner Litigation Under the Canadian Charter of Rights and Freedoms", (2007) 40 UBC L Rev 629.

[449] *R v Smith,* [1987] 1 SCR 1045, 40 DLR (4th) 435.

[450] Lemos, *supra* note 155.

Dignity is a broad and open concept in Canadian constitutional law. Jurisprudence describes several facets of constitutional dignity.[451] The decision in *Law* states that dignity requires "personal autonomy and self-determination", "physical and psychological integrity and empowerment" and feelings of "self-respect and self-worth".[452] Justice Dickson connected it to "identity, self-worth and emotional well-being".[453] Examples of indignities acknowledged in cases have included "subordination, servile submission or humiliation" and "state interference with an individual's physical or psychological integrity, including any state action that causes physical or serious psychological suffering".[454] These authoritative statements suggest that constitutional protection of dignity is ultimately concerned with preventing unnecessary emotional suffering and cruelty.

Rorty says the concern for dignity that has emerged in constitutional and international human rights law is indicative of progress towards the root goal of the liberal project: the reduction of human suffering, humiliation, and cruelty.[455] This shift in legal norms reflects a growing sense of human solidarity in western culture that does away with the need for Kantian justifications. As Rorty describes it, solidarity is an in-group feeling that does not extend to outsiders. It extends to those we feel are

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[451] *Law v Canada (Minister of Employment and Immigration)*, [1999] 1 SCR 497, [1999] SCJ No 12 (QL).

[452] *Ibid* at 53. This has been criticized

[453] *Reference Re Public Service Employee Relations Act (Alta),* [1987] SCJ No 10 at 91, 1987 CanLII 88 (QL); and *Big M Drug Mart, supra* note 358.

[454] *R v Butler*, [1992] 1 SCR 452 at 479, 89 DLR (4th) 449; and *Carter supra* note 234 at 64.

[455] Rorty, *supra* note 230.

like us, those who are similar in terms of tribe, religion, race, customs and the like.[456] We feel more revulsion in response to pain, suffering, indignity and humiliation in those we feel more solidarity with.[457] Neuroscience unfortunately confirms this in-group bias.[458] The implicit bias in the sympathy we feel towards others also explains why we have tolerated the cruelty and suffering of punishment practices, despite Canada's explicit commitment to human rights. As Sylvestre argues, we can't relate to and are often revolted by the actions of offenders, who mostly consist of poor people who live differently. Offenders and their behaviour are thus perceived as monstrous.[459]

Recognizing this internalized unconscious bias should make us very suspicious of retributive moral intuitions that give rise to belief that committing a crime renders one deserving of undignified suffering. Canadian legal norms should be interpreted to protect the dignity of all humans, including those who act in ways that we deem seriously wrong. If human judgement of lawmakers and judges could be relied upon to avoid human cruelty, human rights norms that constrain cruelty and suffering would not have developed. These norms should function in a way that guides one to reject justifications that purport to render infliction of undignified suffering under the law, and set aside moral intuitions that affirm them.

Neuroscience not only provides empirical support to normative concepts that would necessitate a greater protection of human dignity under the law, it promotes the sort

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[456] *Ibid* at 27.

[457] *Ibid* at 189-198.

[458] Sapolsky, *supra* note 97.

[459] Sylvestre, *supra* note 274.

of solidarity which is necessary to ensure it both politically and within the practice of law. A neuroscientific understanding of behaviour gives rise to the conclusion that offenders are also victims of their own impaired behavioural capacity. This recognition may lead to a growing concern for the suffering and cruelty perpetrated by punishment practices. Jennifer Chandler explains:

> The prevailing beliefs about the causes of a person's behaviour or condition affect feelings of social solidarity and willingness to help and protect the person. In essence, we are more likely to accept and protect people with disfavoured attributes and behaviours if those characteristics are perceived to be outside their causal control. As explained below, biological explanations of a behavioural problem increase the perception that it falls outside a person's control. In this way, biological psychiatry may affect fundamental concepts in the area of human rights…[460]

In sum, if the law were to integrate a neuroscientific understanding of behaviour into its norms, the law would have no justification for the intentional infliction of suffering and require that criminal justice practices respect for the offenders right to dignity in its responses to crime. A balance would have to be sought between legitimate objects of criminal justice, such as maintaining the general deterrent effect of prohibitions backed by consequential sanctions and the necessity to avoid inflicting unnecessary suffering, and the necessary recognition that non-punitive interventions that seek to supports rather than oppress the autonomy of offenders are also necessary to prevent crime, maintain order and protect public safety.

iv) *Restoration*

As discussed in this chapter, adopting normative legal concepts that are consistent with neuroscience necessitates a shift in the aims of criminal justice away from from determining and punishing individual moral blame. Recognition of the state's responsibility also negates the conclusion that the burden of any criminal justice

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[460] Chandler, *supra* note at 18.

measure deployed in response to a crime should be borne by the offender alone. If crime is understood as a lack of capacity to make choices in compliance with the law, the obvious conclusion is that the criminal justice system must respond to crime with measures intended to support its positive development.

Echoing Dewey, Martha Nussbaum and Amartya Sen explain that the development of human capabilities makes the realization of constitutional rights possible.[461] Protecting individual choice is not enough to ensure substantive freedom of citizens. Liberal democracies must provide the means through which it can be achieved.[462] The proper objective of policy in liberal democracies, should be supporting the development of capabilities by creating and maintaining real opportunities for citizens to develop capabilities that enable the pursuit of fulfilment through self determination.[463] As discussed in chapter five, alternative sentencing interventions, which seek to address underlying causes and build capacity in offenders, also result in lower recidivism rates. Accordingly, normative legal concepts that harmonize with neuroscience support an understanding of *Charter* rights that places duties on the state to provide capacity building opportunities when imposing sanctions and other

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[461] Amartya Sen, *Development as Freedom*, (New York: Knopf,1999), at 3-11; and Martha Nussbaum, *Creating Capabilities*:*The Human Development Approach* (Cambridge, Massachusetts: Belknap Press, 2011), at 18–20.

[462] Dewey, *supra* note 226 and 228.

[463] Ibid. See also: For an example of discussion of the capabilities approach in legal theory see: Brian Langille ed, *The Capability Approach to Labour Law,* (Oxford: Oxford University Press, 2019).

criminal justice measures on offenders.[464] If the state is understood as sharing responsibility for shaping the capacity of an individual who commits a crime, it should also take responsibility by attempting to build their capacity to avoid crime in the future. Restorative justice theory offers concepts that can assist in redefining criminal justice norms in a manner that encompasses these concerns and harmonizes with other normative concepts discussed in this chapter.

Restorative justice emerged as a seemingly new concept of justice in the late 70s.[465] However, some of its advocates claim it was a prominent, or even the dominant model of criminal justice across cultures throughout most of history.[466] To support this claim, Daniel Van Ness and Karen Heetderks Strong point to an "ancient pattern" in Western law where offenders and their families "make amends to victims and their families - not simply to compensate those injured but also to restore community peace".[467] It has even been suggested that our innate intuitive sense of justice is

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[464] This sort of positive obligation with respect to general social policy has so far been rejected in jurisprudence. See: *Gosselin v Quebec (Attorney General)*, 2002 SCC 84. However positive state duties is already normative within criminal justice processes. For example, facilitating the right to counsel: *R v Sinclair,* 2010 SCC 35. Accordingly, the recognition of the state's shared responsibility for crime could be a basis upon which new positive obligations could be recognized in the context of criminal justice.

[465] Jennifer J Llewellyn & Robert Howse, *Restorative Justice - A conceptual Framework*, (Ottawa: Law Commission of Canada, October 1999), at 4 credits Albert Eglash,"Creative Restitution - A Broader Meaning for an Old Term" (1977) 48:6 J of Crim L and Criminol 617, with originating the contemporary conceptual roots of restorative justice.

[466] GM Weitecamp, "The History of Restorative Justice" in G Bazemore & L Walgrave eds, *Restorative Juvenile Justice: Repairing the Harm,* (New York: Criminal Justice Press, 1999), at 82. See also: John Braithwaite 1997 "Restorative Justice: Assessing an Immodest Theory and a Pessimistic Theory" (1999) 25 Crime & J 448.

[467] Daniel Van Ness & Karen Heetderks Strong, *Restoring Justice,* (Cincinnatti: Anderson Publishing, 1997), at 8.

restorative in nature.[468] As Llewellyn & House explain, we feel "*something* must be done" after a crime, but that something is not necessarily punishment.[469]

Relational theory is also harmonious with restorative justice theory. Unlike retribution, restorative justice does not narrowly focus on the individual offender and their conduct, but is "grounded in a commitment to understanding the fact of relationship and connection as central to the work of justice".[470] A restorative approach, therefore, rejects an individualistic concept of crime, proceeds from the understanding that crime is a social problem, and accordingly seeks to accounts for social context and individual internal constraints developed within it when determining responsive measures.

Adopting a restorative approach to criminal justice is also not necessarily incompatible with compelled processes, despite the primary manner it has so far been integrated into the Canadian criminal justice system. Restorative justice has often been defined in a manner synonymous with its associated practices and procedures.[471] Tony Marshall describes it as a process whereby all the parties with a stake in a particular offence "come together to resolve collectively how to deal with the aftermath of the offence and its implications for the future".[472] This description is

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[468] *Ibid* at 81.

[469] Llewellyn & House, *supra* note 447 at 19.

[470] Llewellyn, *supra* note 425 at 89.

[471] See: Zehr, Howard, "Justice paradigm shift? Values and Vision in the Reform Process," (1995) 12:3 Mediation Q 207, at 211-212.

[472] Tony Marshall, *Restorative Justice: An Overview,* (London: UK Home Office,Research Development and Statistics Directorate, 1999) at 5.

consistent with how restorative justice functions in the Canadian criminal justice system as a consensual mediation based alternative sentencing process.[473]

A consensual process that begins with the offender accepting responsibility likely has advantages in some cases, but this prerequisite is problematic in others. Some offenders, particularly those with disorders such as ASPD and BPD, may have difficulty with shame-based denial and a limited capacity to feel remorse.[474] Furthermore, concepts developed in restorative justice theory are not necessarily inconsistent with compelled processes to determine whether a crime has been committed. The concept of 'restoration' offers a broad goal that could be applied to guide processes that determine the appropriate response to a crime after a trial.[475] The word restore implies a return to some prior state similar to restitution, but it actually carries a different conceptual and functional meaning in restorative justice theory.[476] As Llewellyn and Howse explain:

> Restorative justice, contrary to restitution, is not a slave to rectifying a wrong by restoring the status quo ante. Instead, restorative justice aims to restore the relationships between the parties involved to an ideal state of social equality. It stands juxtaposed to the backward focus of restitution as it attempts to

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[473] *Criminal Code, supra* note 30 at s 717.

[474] Caruso, s*upra* note 168.

Shame and guilt are different emotions. Shame functions to prevent remorse and accountability. See: June P Tangney et al, "Assessing Jail Inmates' Proneness to Shame and Guilt: Feeling Bad About the Behaviour or the Self?" (2011) 38:7 Crim J & Behaviour 710; and June P Tangney et al, "Moral Emotions and Moral Behaviour" (2007) 58 Annu Rev Psychol 345.

[475] It is estimated that less than 10% of accused plead not guilty. See: Sylvestre, *supra* note 42 at 10. If punishment is no longer the default response to crime it is reasonable to conclude that trials may become even more exceptional.

[476] See for example: Jonathan Burnside and Nicola Baker, eds. *Relational Justice: Repairing the Breach* (Winchester, UK: Waterside Press,1994).

> address a wrong by transforming the relationship between those involved such that the same situation could not arise again.[477]

Restorative justice, unlike traditional retributive and utilitarian punishment theories, does not exclusively look backwards or forwards. In processes that seek restoration as its goal, it is necessary to understand the crime in its social and relational context to determine what measures would serves the goal of restoration in particular cases. Restorative justice is thus pragmatic in the manner it examines real world effects and experiences to determine what practice measures will function in service of realizing ideal social relations that respect dignity and equality.

What is determined best to achieve restoration will vary from case to case. As Llewellyn and House explain, imposing a sentence that requires an offender to pay restitution may or may not be restorative, depending on whether or not it can be reasonably seen as restoring an ideal state of relations.[478] A restitution order in some cases may not actually meaningfully address unquantifiable harm experienced by victims or could impose a burden on offenders that actually interferes with their capacity to abstain from criminal conduct in the future.

The goal of restoration is compatible with the contemporary alternative criminal justice practices discussed in chapter five, such as mental health courts and Indigenous healing lodges. Mental health and drug courts function on the basis that the underlying cause of the crime is not individual moral failure, but lack of capacity that the offender alone cannot through rationality override. Neuroscience and practice theory both indicate, that just as the criminal conduct has its genesis in

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[477] Llewellyn & House, *supra* note 447 at 26.

[478] *Ibid.*

relational interactions with others, development of a more functional behavioural capacity must also come through experiences in the social environment. Consistent with restoration and other alternative normative concepts discussed in this chapter, these alternative processes implicitly acknowledge that supportive involvement of others is necessary to build an offenders capacity to avoid crime.

Unlike punishment, mental health or drug treatment provide offenders with supportive social relationships and environments focused on helping them develop a more functional behavioural capacity. Accomplishing this which will not only better enable offenders to avoid crime, but have positive interactions in their communities and social relationships. In this way these criminal justice practice can be said to function to in line with the goal of restoration. Similarly, enabling Indigenous offenders to access healing modalities developed within their own cultures and elder support also functions to transform capacities and the communities of offenders. Understood this way, restorative justice as a model is broad enough to encompass diverse criminal justice practices within its normative framework.

It is important to note that a respect for dignity and autonomy would guard against overly intrusive measures such as imposing psychiatric treatments on offenders. It would also be incompatible with a relational and restorative approach to criminal justice which values equality within relationships. Within the doctor-patient relationship, despite having more medical knowledge, the doctor is still prohibited from choosing for the patient unless the patient lacks the capacity to understand their options and foreseeable consequences.[479] Forced treatment, even if done with the intention of helping someone, impacts the physical and psychological integrity of an individual and therefor interferes with dignity and autonomy in ways that can have

[479] *Starson,* supra note 412; and Downie & Llewellyn, *supra* note 428.

serious ongoing consequences. As Sapolsky acknowledges, neuroscience has not developed to the point where we can reliably predict in individuals how particular experiences or interventions will impact their behavioural capacity.[480] It is well established that stress and trauma has a negative impact, but the same surety cannot be assumed regarding what will have a positive impact. These considerations militate against the imposition of restorative measures that encroach into the physical or psychological integrity of offenders, in ways that are inconsistent with ideal social conditions that respect dignity and autonomy. However, whether or not an offender chooses to access treatments may alter what the criminal justice system deems necessary fro restoration. Broader purposes of criminal law, such as maintaining public safety or maintaining predictable social order, can also be understood as important features of ideal social conditions and therefor properly relevant to restoration. Determining an appropriate response to crime thus will necessarily involve a contextual analysis that takes account of, and seeks to balance, various relevant factors and concerns relevant to the goal of restoration.

Furthermore, restorative justice assessments should not focus narrowly on the offender in determining the appropriate response to a crime.[481] Restoring ideal social relations must take into consideration both the harm done to society and the victim and how social conditions gave rise to the crime. A determination may identify how state policy was materially responsible for a crime and therefor require that it rather than the offender, pay restitution to the victim or otherwise takes responsibility for addressing harm in ways that do not involve the offender's participation. Furthermore, the sort of reconciliation between victims and offenders commonly

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[480] Sapolsky, *supra* note 96 at 601-605.

[481] Llewellyn & House, *supra* note 447.

associated with restorative justice may be appropriate, but is not necessarily so. This will depend on the particular context of each case.[482] The goal of restoration seeks an ideal state of social relationships "in which each person's rights to equal dignity, concern and respect are satisfied".[483] It therefore extends beyond the relationship between the victim and offender. Llewellyn and House explain:

> ….while there is extensive literature about "healing" and so forth, the end result to which the analysis is directed may be some form of inner peace or acceptance that is not the same as the restoration of relational equality in society. We have at a minimum to re-assess and re-interpret evidence about "healing" or overcoming of victimization (or guilt and shame in the case of wrongdoers) with an eye to the restorative ideal itself. [484]

Like any goal, restoration is aspirational and certainty it will be achieved is not possible. It must be sought in a manner that harmoniously balances a respect for the dignity and autonomy of offenders with the broader purposes of criminal justice intended to serve the public interest. Nonetheless restoration offers a broad concept that could replace retribution as the fundamental purpose of criminal justice that is consistent with neuroscience.

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[482] Llewellyn & House, *supra* note 447 at 110.

[483] Llewellyn & House, *supra* note at 1.

[484] *Supra* note Llewellyn & House at 110.

CHAPTER VII

CONCLUDING REMARKS & RECOMMENDATIONS FOR FUTURE WORK

> [S]he has radical and continuing doubts about the final vocabulary she currently uses because she has been impressed by other vocabularies, vocabularies taken as final by people or books she has encountered […] she realizes that arguments phrased in her present vocabulary can neither underwrite nor dissolve these doubts; […] insofar as she philosophizes about her situation, she does not think that her vocabulary is closer to reality than others, that it is in touch with a power, not herself.
>
> - Richard Rorty[485]

This thesis has attempted to demonstrate that neuroscience, when assessed pragmatically, has obvious relevance to criminal law theory and norms. As discussed, retributive folk psychology assumes that rational thought processes function to override impulses and control behaviour. This assumption directly conflicts with what neuroscience has established concerning the enmeshment of the dlPFC and the limbic system. Any law or policy that purports to guide human behaviour, will fail to achieve its goals if constructed upon a faulty understanding of it. This is evidenced in chapter five which reviews the problematic effects and poor outcomes of punishment practices which derives justification from retributive folk psychology.

Pragmatic analysis enables inquiry into the relevance of neuroscience to law beyond the philosophical and metaphysical debates surrounding concepts of free will. Regardless of the manner in which the libertarian concept of free will has been ingrained in our law, when we set those unanswerable and irrelevant metaphysical questions aside, a door opens for further inquiry and discourse. We are free to

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[485] *Supra* note 230 at 73.

consider what has been established in neuroscience, and how that information might inform the progressive development of legal norms and criminal justice practices.

Chapter six seeks to exemplify how a neuroscientific understanding of behaviour is wholly compatible with the constructions of legal norms, and corresponding individual rights that respect and protect dignity and autonomy. As discussed, these norms are also better suited to support doctrine and practices that function pragmatically to achieve the institutional purposes of criminal justice within a liberal democratic society. As an institution, law is not as free as philosophy: it must remain open to discursive re-definition of its concepts, but still needs explicit, objective norms to fulfill its purpose and function in a liberal democracy.[486] Striking this balance is necessary for the law to provide stability and progressively evolve.[487]

Undoubtedly there are other ways to think about criminal justice without individual blame and punishment, which are also compatible with both neuroscience and jurisprudential statements discussed herein. The concepts and norms put forward in chapter six should not be thought of as true in any absolute sense. The relational 'self' is a metaphysical concept. So is autonomy for that matter. In the future we will observe more about ourselves and our world. Our needs, desires, goals and values will evolve. Our activities will change as will the way we socially organize. Neuroscientific knowledge will also grow along with our technological capacity to observe. Like retributive folk psychology, concepts such as the 'self' and relational autonomy may someday seem out of step with contemporary understandings, or otherwise deficient to support functional practices that serve our values.

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[486] Habermas, *supra* note 242 and 243.

[487] *Ibid.*

This does not mean that neuroscience, or theoretical concepts compatible with it, cannot be helpful now. As Rorty says, asking “which description tells us what the situation really is”, does not help us as much as asking “which description of the human situation are most useful for which human purposes”.[488] Accordingly, those who advocate for neuro-reform of criminal law, should avoid framing the relevance of neuroscience in terms of the free will debate. Instead they should focus on what has been established with respect to enmeshment of rational thought and unconscious emotional processes, and how experiences in the social environment shapes and constrains behavioural capacity in ways that cannot be overridden by rationality. This knowledge has practical implications for understanding crime and how criminal justice can most effectively respond to it. In contrast, hinging the relevance of neuroscience to the philosophical question of free will obscures its practical relevance, and prevents inquiry from moving past abstract issues.

This thesis also emphasizes the importance of understanding legal norms as contingent means and rules for action, rather than a truthful description of reality as it really is, independent from the human perspective. As discussed in chapters three and four, neuroscience alone cannot provide answers to normative questions in law, nor should it be looked to as providing law with absolute, fixed foundations. Integrating neuroscience into legal understanding requires a reconstruction of existing legal concepts such as responsibility and autonomy. When translated into normative concepts in law, neuroscience offers a useful description of human behaviour, that can support the pragmatic development of criminal justice norms and practices that better fulfill its purposes in harmony with *Charter* values.

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[488] Rorty, Richard, "Dewey and Posner on Pragmatism and Moral Progress," (2007) 74:3U Chicago L Rev 915 at 916.

Theoretical concepts such as shared responsibility, relational autonomy, and restoration are normative, rather than empirical. To ensure their pragmatic function, they cannot devolve into hollow principles that foreclose inquiry into relevant causal factors, as retributive folk does now. Furthermore, to remain useful, the meaning of legal norms cannot not be subsumed into institutional practices, as is the case now with proportionality.[489] Legal norms must be given objective meaning capable of legitimization through discourse, but the validity of normative concepts in law must be continually demonstrated by their function in practice.[490]

This thesis also argues against the common claim that retributive norms are necessary to maintain protection of individual rights. Using Rorty's language, the recognition of the inherent worth and dignity of all human beings enshrined in the *Charter*, needs no additional justification based on any "transcultural facts" about human nature.[491] For Rorty, the search for something about human nature to justify individual rights, is like the search for absolute truth. It is beside the point. It is a distraction that prevents us from talking about how to create a better world. As he explains: "To abjure the notion of the 'truly human' is to abjure the attempt to divinize the self as a replacement for a divinized world".[492]

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[489] Kerr *supra* note 407. As discussed, proportionality of prison sentences is assumed based on length, without fulsome inquiry into the undignified suffering that occurs as a function of prison design, policy, and procedures.

[490] See discussion chapter four.

[491] Rorty, *supra* note 230 at 116.

[492] *Ibid* at 35.

Giving up on timeless, absolute foundations does not leave the law floating in a relativistic sea of subjectivity. Chapter six exemplifies how legal and individual rights can still be conceived in a contained manner by anchoring the inquiry to values that overarch the legal system. Perhaps more than any other discipline, legal theorists and judges must grapple with the tension between rationality and ignorance. They must overcome 'cartesian anxiety' and abandon any pretence that our concepts in law describe humans or the world as they really are from some omniscient vantage point. In this obscurity, they must still arrive at conclusions about what is right.[493] If jurists remain conscious of the limits of localized human perspective and still rise to the challenge, they become what Rorty calls "ironists".[494]

As the quote at the start of the chapter explains, legal ironists recognize the contingency of their beliefs and maintain doubt about the principles they adopt. They remain cognizant of the locality of the human perspective, and still persevere knowing: justice cannot be discovered, but we can create a sense of it in the ideas we form in response to experience. Legal ironists do not stand on their principles and concepts, they hold them up for so long as they continue to serve the purposes and fundamental values the law is bound to serve.

If jurists can become ironists, the discourse of law benefits for, "[w]hat takes the place of the urge to represent reality accurately is the urge ….to be full participating members of a free community of inquiry".[495] It also maintains focus on the overarching task of the entire liberal project, the same goal animating Kant in his

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[493] Bernstein, *supra* note 211.

[494] Rorty, *supra* note 230.

[495] Rorty, *supra* note 250 at 119.

philosophical efforts: imagining and creating a social order in which human beings flourish.[496] Neuroscience now offers us more knowledge about what supports and what oppresses human flourishing. It therefore should be taken up by legal theorists and law reform advocates, not simply as empirical proof of their concepts, but as informing their definitions as well. This reconstruction, would serve to build a translatory bridge between the disparate epistemic cultures of science and law, and enable the law to evolve as Holmes would have it: in responsive harmony with social experience and the progress of science.[497]

Chapter six also demonstrates how neuroscience harmonizes with already existing progressive normative theory that emphasizes a concern for human dignity and equality. Neuroscience, therefore, offers a discursive tool to progressive theorists and social justice advocates which not only offers empirical support for analysis and argument, but also furthers their cause through the promotion of human solidarity. If we take seriously what neuroscience tells us about the enmeshment of rational thought and unconscious emotional responses of the limbic system, and take note of the historical evolution of ideas about justice and its practices across cultures, the conclusion emerges that theories of justice are contingent representations that evolve with moral intuitions. Or in simpler terms, our feelings about what is right and wrong change in response to social experience, and so goes the law. Accordingly, an argument about what is just is unlikely to convince anyone who has not had the sort of experiences necessary to share at least some of the author's moral intuitions.[498]

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[496] See discussion in Thomas Hill Jr, "Kantian Ethics and Utopian Thinking" (2019) 8:11 Disputio 505.

[497] See: Habermas, *supra* note 182; Jasanoff, *supra* note 174; and Holmes, *supra* note 210 -212.

[498] As Posner argues, theories of morality are not convincing, while theories about the content of moral obligations can be, *supra* note 246.

According to Rorty, the emphasis on rationality in Kantian liberalism provided a basis of commonality for the development of norms that enabled a secular pluralistic society that protected freedom of belief and the right to self determine.[499] As is demonstrated in Sylvester's writings, we can now observe the inadequacy of Kantian concepts and the oppression under the law they justify.[500] Still, the law continues to affirm the indignities routinely perpetrated against prisoners that have been well documented repeatedly in yearly reports of the Correctional Investigator.[501] The fact that the cruelty and suffering of retributive criminal justice practices is tolerated, suggests that Canadian solidarity has not yet extended to include criminal offenders.

"There is no neutral or non-circular way to defend" Rorty's "liberal claim that cruelty is the worst thing we can do".[502] Sensitization to the suffering of others, like any shift in *habitus,* must come through experience.[503] It was not the decades of critical theory and academic writing describing it, nor mountains of statistics indicating its existence, that provoked the recent cultural consolidation towards the recognition of systemic racism in American police departments.[504] A shift in collective moral intuitions occurred in response to a video showing a white police officer kneeling on

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[499] Rorty, *supra* note 230.

[500] Sylvestre, *supra* notes 42, 73, 270 and 274.

[501] Office of the Correctional Investigator, *supra* notes 318 and 319.

[502] Rorty, *supra* note 230 at 197.

[503] Bourdieu, *supra* note 405.

[504] See: Justin Worland, "America's Long Overdue Awakening to Systemic Racism", Time (June 11, 2020), online: Time, <https://time.com/5851855/systemic-racism-america/>.

a black mans neck for 8 minutes, choking him to death as distressed bystanders pleaded with him to stop. This recent example of moral evolution is consistent with Rorty's view, that solidarity grows not through rational argumentation, but when people come to realize that traditional tribal divisions "are unimportant when compared to similarities with respect to pain and humiliation."[505] Its growth is evidenced when we come to feel repulsed in response to the cruel treatment and suffering of others "wildly different from ourselves."[506]

Weaving neuroscience into our narrative understanding of crime may help encourage the sense of solidarity necessary to enable the abolishment of retributive criminal justice. It provides a basis for understanding conduct and choices we consider seriously wrong as stemming not from individual moral failure but a manifestation of human vulnerability to the social conditions and experiences we develop within. Mapping neuroscience on to existing moral intuitions can help construct new narrative descriptions of crime that serve to sensitize others to the suffering of offenders. For example, the infliction of deprivation and cruelty towards children is universally revolting, but punishing adult survivors is not. Weaving neuroscience into the life story of an offender enables an alternative narrative to emerge in which the of neglect or abuse does not end with childhood, but compounds itself overtime. This lens makes possible the observation that offenders themselves are also victims of the crimes they commit.[507]

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[505] Rorty, *supra* note 230 at 192.

[506] *Ibid.*

[507] *PHS Community Services, supra* note 305, serves an example of progress in law away from retributive norms about choice towards an acknowledgments of impairments or constraints on choices, developed in response childhood stress and trauma in persons who still have unimpaired rationality. The decision relied on expert testimony and acknowledges the indignities suffered in the lives of Insite clients both as adults and in disadvantaged circumstances in childhood connected to the development of addiction.

To draw maximum support from neuroscience, scholars and advocates should attempt to both translate it into normative legal concepts and talk about it in a way that encourages the growth of solidarity and political consensus necessary for progress in the law to occur. As Greene and Cohen argue, neuroscience will inevitably influence the development of criminal law away from retributive folk psychology as it seeps into public consciousness and transforms our moral intuitions about crime.[508] However, concern for the suffering of criminal offenders is much more likely to grow if the relevance of neuroscience is not hinged upon its implications for free will. Metaphysical questions about free will are meaningless in our experience and not at all useful in confronting human challenges. Talking about neuroscience in metaphysical abstract terms intellectualizes the issue and is thus unlikely to strike a chord within moral intuitions.

In *Behave,* Sapulsky invokes the free will debate in his arguments for criminal justice reform, but the shift to rational argument that occurs in this chapter stands in contrast to the compelling, rich narrative synthesis that precedes it. The greatest achievement of *Behave* is the manner Sapolsky makes neuroscientific descriptions of behaviour seem both relevant and relatable by weaving it into familiar stories of our lives. This is accomplished in a way that changes the meaning of these narratives and challenges us to change the way we judge and respond to the behaviour of other people. Accordingly, this thesis recommends that progressive theorists and advocates for abolishment of retributive criminal justice draw on neuroscience to construct new narratives that make neuroscience relevant in the context of lived experience, to promote a more sympathetic understanding of offenders and their inclusion in a Canadian sense of solidarity.

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[508] Greene and Cohen, *supra* note 140.

Enabling one to acknowledge the cause and effect relationship between experiences in the social environment and behaviour, without the filter of abstract concepts like free will, helps enable us to recognize that offenders are not monsters, but are, as Nietsche would say, “all too human”.[509] If we inherited their genes and lived the same lives we would find ourselves behaving the same way. These conclusions need not, and perhaps should not, rid us of the outrage we may feel in response to crime, nor do they necessitate the conclusion that those feelings are meaningless. However, they do demand that we refrain from channelling them through our criminal justice system, in ways that impose the burden of responsibility for crime solely on offenders.

The arousal of strong emotions amongst the public in response to a crime can also still be taken as good reason to provoke a serious response from the justice system. The criminal justice system can still denounce a crime without denouncing the offender. The necessity to account for and seek a balance among various relevant factors and objectives in determining appropriate criminal justice practices and measures has been mentioned at various points, but left largely unexplored in this thesis. Fleshing out the parameters and considerations of balanced assessments based on legal norms reconstructed to harmonize with neuroscience, along with envisioning the sorts of policies, practices and institutions that accord with them, is an area ripe for future work.

In conclusion, this thesis serves as both a starting point and invitation to look beyond concepts of free will to integrate neuroscientific knowledge into the normative language of law. The reconstruction and development of legal norms that are

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[509] Friedrich Nietzsche, *Human, All Too Human Parts I and II,* (Mineola, NY: Dover, 2006).

compatible with neuroscience is a necessary first step in enabling the law to develop in harmony with contemporary knowledge and understandings of human behaviour. When neuroscience has been translated into concepts in law and legal theory, it can then be used a discursive tool to hasten progressive reform of criminal justice practices and ultimately reduce the cruelty, suffering and social problems they currently perpetuate.

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