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Enactivism and Correctional Science: An Analysis of Forensic Treatment of Agency in a

Neoliberal Climate

By

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Abstract

In correctional practice, as primarily informed and driven by the Risk-Need-Responsivity (RNR) practice framework of Bonta and Andrews (2017), theoretical explanations of agency bear significance in their representation and consequent treatment of 'criminal' agents. Due to a state of 'theoretical illiteracy' however, this domain remains largely divorced from the insights offered by current affective science (Ward, 2019). The purpose of this paper is to outline key principles offered within an 'enactive' paradigm; a contemporary strand of cognitive science that depicts cognition as embodied, embedded and enactive, ultimately submitting a relational cognitive-affective agency, constituted of habits of bodies and minds (Maise & Hanna, 2019; Ward, Silverman & Villalobos, 2017). Enactivism offers various elements that contrast with traditional internal 'cognitivist models' of agency, which inform mainstream correctional practice; these include the active, affective and social nature of cognition, which as is illustrated, lends emphasis to the impact of prevalent ideologies, through institutions, upon agents (Maise & Hanna, 2019). In this project I outline current correctional treatment of agency, as it stands in contrast to insights offered by enactive accounts, and as embedded in a broader neoliberal context. Therefore I provide some critical examination of the relationship between psychological theory and neoliberal ideology, specifically focusing on principles of individualism and self-governance it is purported to cultivate. In conclusion I maintain that the RNR provides a thin representation of agency that is driven by an internal and limited perspective of functioning that precludes aspects essential to the personhood of agents including its active, affective and phenomenological nature. As embedded in a neoliberal context, I argue that this significantly limits rehabilitative practice, and reifies an abstraction of mindedness from material and social contexts. A pluralistic approach to rehabilitation is therefore necessary, including the

enactive and related perspectives expounded in this piece, in order to provide explanation and therefore practice beyond entrenched normative assumptions of agency and human function.

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Chapter One: Introduction and Outline

Correctional science ultimately aims to explain the causes of crime and thereby inform the applied discipline of correctional psychology (Heilbrun, 2020; Ward, 2020). Forensic rehabilitation is accordingly shaped and guided by the dominant theoretical explanations within this field, thus the nature and extent of the representation of human agency it provides has a considerable impact on practice. Currently it is primarily characterised by what has been described as a risk paradigm, an approach governed by the prominent Risk-Need-Responsivity (RNR) practice framework, theoretically based on the General Cognitive and Social Learning perspective of Bonta and Andrews (2017). As is to be outlined in later chapters, the development of the RNR was significant in that it provided a practice framework grounded in empirically verified principles (risk, need and responsivity) in an era where substantial doubt was being cast on the efficacy of rehabilitation (Sarre, 2001). However, critics have since noted fundamental theoretical flaws within this framework, concerning the nature of its explanatory tools, its exclusive focus on criminal outcomes and dependence on crime-based categories, which leaves considerations of agency a mostly excluded aspect (Carter, Ward & Hughes, 2020; Dent, Nielsen & Ward, 2020; Strauss-Hughes; Ward, 2020). These limitations underly the modest efficacy reported of current practice, including its relatively weak effect sizes in terms of reducing criminal behaviours, as well as substantial issues with motivation and non-completion of individuals who have offended (Day, 2021; Klepfisz, Daffern & Day, 2016; Lipsey & Cullen, 2007). As such, the field of correctional science has been described as being in a state of stagnancy or theoretical illiteracy, which is in part attributed to its divorce from broader scientific perspectives of human function (Ward, 2020).

The purpose of this thesis is in part to outline perspectives on human agency offered by contemporary cognitive affective science such as those entailed by enactivism, a

theoretical position within this field, in order to examine how these may compare and the implications they bring to its peripheral treatment in correctional practice (Dent et al., 2020; Ward 2019). With this objective chapter two will briefly outline traditionally dominant perspectives of mind and agency that as will be highlighted, are characteristically individualistic and internal. Against these an overview of enactive principles will be provided that present *mindedness* as a dynamic, affective and active process concerning brains and bodies, in social and material environments (Ward et al., 2017). In chapter three I will provide further analysis of embedded and relational accounts of cognition on this basis, including notions of a scaffolded and culturally entangled agency that highlight the foundationally social nature of human function. Chapter four will elaborate on the nature of human acculturation on this basis, in terms of affective-framing patterns or habits of body and mind. As will be demonstrated, proponents of this perspective maintain that agents are shaped in accordance with the prevailing cultural ideologies of their context, through the institutions in which they develop and participate across their lives and furthermore, that modern society is saturated in a toxic ideology referred to as 'Neoliberalism'. Neoliberalism will be outlined in more detail, but is claimed to occupy a hegemonic status of global political and economic common sense, a capitalist perspective characterised by its view on the self, agency, and society (Maiese & Hanna, 2019). This notably includes a fundamental individualism and emphasis on personal agency coupled with axiomatic beliefs in selfgovernance; socio-structural determinants of human function and inequality are characteristically disregarded in 'neoliberal' explanations (Beattie, 2019; Cosgrove & Karter, 2018; Winston, 2018). Chapter five thus briefly delineates core features of the relationship between psychological science and neoliberalism, so as to locate forensic psychology in light of the ideological influence described by the critical literature. In chapter six I provide an overview of recent and current correctional theory and rehabilitative practice, focusing on its

peripheral treatment of agency and consequent limitations in comparison to enactivism and related perspectives of human function outlined in chapters two, three, and four. I furthermore situate forensic practice in a neoliberal context and argue that as implemented on the basis of a non-agential practice framework in a state of theoretical illiteracy, it currently reifies prevalent normative assumptions of human functioning. By providing explanations and therefore responses to crime solely in terms of individualistic cognitive deficiencies, as abstracted from affect, culture and context, correctional science reifies crime as an exclusively individual issue and individual's responsibility. I conclude that theoretical frameworks, such as those provided by enactivism and related perspectives thus constitute an essential alternative resource for forensic practitioners with which to foster explanation and redirect agents on the basis of good science, beyond ideological assumptions. Individuals are accordingly embodied, embedded, and thoroughly shaped by their material and social contexts (Maiese & Hanna, 2019; Reid & Mgbombelo, 2015). This is to be further detailed in chapter seven which summarises the conclusions of this thesis.

Chapter Two: Conceptions of Agency and Enactivism

In his discussion of human nature, Bandura (2006) states, "to be an agent is to influences one's function and life circumstances" (p. 164). This seems apparent in day to day experience, which is usually described using a folk psychological or common-sense psychological framework (Baker, 1999). Folk psychology is essentially a vocabulary with which human behaviour is accounted for in terms of beliefs, desires, hopes, motivations, and intentions, that reinforce the concept of a self-determined being (Baker, 1999). For example, stating that 'Andrew went to the store because he was hungry' or 'Sofia is always punctual because she fears being late', thus roughly positioning behaviour as the outcome of intentional action driven by mental states (Baker, 1999). At face value, this seems consistent with the experience of the action it seeks to explain. However, on closer examination folk psychology begs further questions: what is Andrew? His mind? His brain? Where does this leave his body? Such complications are by no means recent and are broadly subsumed by the perennial 'mind-body problem' (Shannon, 2008).

This problem concerns the relationship between mental and physical properties as famously associated with the assertions of Descartes (1641/2003) in modern philosophy of mind, "I am only a thinking and unextended thing, and ... I possess a distinct idea of body, inasmuch it is only an extended and unthinking thing, it is certain that this I... is entirely and absolutely distinct from my body, and can exist without it." (p. 112). Known as interactive substance dualism, the position he describes entails a fundamental distinction between the mental and material, reflective of the increasingly mechanised worldview of the 17th century (Bolton & Gillett, 2019). The mind accordingly is deemed immaterial and divorced from the body, paving the way for future attempts to explain mind-body interaction on this basis. Predominant among these is physicalism: the metaphysical theory that asserts that all that exists is material (Bolton & Gillett, 2019). In its strongest form, it is called 'physicalist

reductionism', the claim that all phenomena can be explained by reduction to the laws of physics, with significant consequence for recent perspectives of causation across scientific disciplines, such as physics, chemistry, biology, psychology and social sciences (Bolton & Gillett, 2019). Though for the most part dismissed in mainstream Western philosophy of mind, the legacy of Cartesian dualism endures through an ongoing commitment to its characteristic assumptions (Maise & Hanna, 2019):

- The mental remains necessarily non-physical.
- The physical is necessarily non-mental.
- No substance can be necessarily both mental and physical.

As Bolton and Gillett (2019, p. 27) assert "physicalism and dualism are twins". In other words, these doctrines emerged together from a decidedly material worldview, but nonetheless contradict each other with the support of a scientific methodology on one hand, and the phenomenological experience of consciousness on the other (p.27). Both however, are based on a fundamental division between mind and body, which manifest in dominant conceptions of the mindedness of humans, "mind and body, internal and external, and subject and world" (De Haan, 2020, p. 70). Traditional cognitive approaches have accordingly approached psychological phenomena and processes as internal and brainbound (Ward, Silverman & Villalobos, 2017). For example, cognitivism, a prevalent theoretical framework of the mid-twentieth century, operationalises the mind as an information processing system, interpreting mental representations that correspond to external reality; cognition thus becomes represented in isolation from the external environment, which is relegated to sensory input (De Haan, 2020).

Historically, cognitive science has thus broadly reified a computational and representational conception of the mind as software supervening on neural hardware, passively receiving stimuli from the outer world independent of the realising neuronal

system, bodily systems, and the external environment (De Haan, 2020; Ward et al., 2017); this view has been otherwise dubbed a 'mediational' or 'sandwich' model of the mind, in which mediating representations are 'sandwiched' by the world and mind (De Haan, 2020). Consequently, a particularly 'Cartesian anxiety' arises; does the mind mirror reality, or are we lost in the contents of our consciousness? What does this mean for the social world, how might we apprehend other minds similarly hidden away? In the individualism of these 'sandwich' approaches, the strategy or principle of methodological solipsism is necessarily assumed, which posits that psychological explanations of behaviour ought to be concerned only with what occurs inside one's head (Tuomela, 1989). Such a perspective was in concert with the rise of neuroscience in the mid-twentieth century, which utilises an array of technologies such as electroencephalography (EEG), positron emission tomography (PET), and functional magnetic resonance imaging (fMRI) to conduct various investigations: these include the assessment of molecular, biochemical, or cellular aspects of neural functioning as well as the examination of the structure and function of the brain, central nervous system, and macroscopic neural processing (Silva, 2009; Ward, Wilshire & Jackson, 2018). Within this field, cognitive neuroscience explores the relationship between the brain and mental properties, abilities, and processes such as memory, consciousness, and decision making (Patterson & Pardo, 2013).

The complementary nature of cognitive and neurological science is transparent; if cognition is indeed a solely internal procedure operating on sensory inputs, the brain would seem the suitable target of inquiry given its intimate relationship with mental experience (De Haan, 2020). Unsurprisingly then, the brain has become the physical analogue of the mind: eliminative materialism constitutes the strongest form of this view, which proposes that the mind simply is the brain (Alces, 2018; Pardo & Patterson, 2013). For 'eliminativists', a discussion of human agency is one of neurobiology, which seeks to replace the vocabulary of

folk psychology; belief, desire, and intentionality become antiquated theoretical notions that fail to accurately capture and explain our mental lives (Alces, 2018; Pardo & Patterson, 2013). This is contrary however, to the experience most of us have ourselves as goal-oriented agents who exert direct control of behaviour. Benjamin Libet (1985) highlighted the issue with his famous investigations of conscious voluntary control using electroencephalograph (EEG) measures, which demonstrated that conscious decisions to commit to certain behaviours (flicking a wrist) are preceded by a readiness potentiation (RP: a distinct pattern of electrical activity in the brain). Results such as these have been interpreted as corroboration of neurobiological determinism; though our mental lives may consist of apparent decision-making events, the outcomes are already set in place by physical processes in our brains (Harris, 2012).

In the context of psychiatry the same trends apply; the Research Domain Criteria (rDoC) exemplifies as much, constituting a research classification system based on the characterisation of mental illness as disorders of brain circuits (Insel & Cuthbert, 2010). This and similar models, in conjunction with the significant advancement of brain imaging techniques over recent decades, have resulted in an influx of neurophysiological data associated with mental disorders (De Haan, 2020). Broadly speaking, this has served to illuminate the increasingly complex nature of the brain and its relationship with the sociocultural environment (De Haan, 2020). For forensic psychologists the targets of explanation are no less challenging, potentially involving mental illness, but otherwise entailing complex illegal behaviours (e.g., violent or sexual offending). These require psychological levels of explanation as part of illustrating the aetiology of a criminal act. In the case of violent behaviours, an aetiological model might for example use terms such as 'rage' and 'frustration' as useful means of conceptualising the processes and events leading up to a given crime (Ward et al., 2018). Alternatively, compositional explanations pertain to the

components of a phenomenon itself. These could include the incorporation of neurobiological processes underlying a given behavior, which would be said to constitute the phenomena, not cause it as such (Ward et al., 2018). Neuroscience can thus supplement existing frameworks as part of a wider theoretical approach known as 'integrative pluralism', by (Ward et al., 2018):

- Providing new methods for understanding of the psychological aspects of crime. The
 growth of brain imaging techniques has generated a unique and complementary level
 of explanation in a field that heavily relies on self-report measures.
- Providing constitutional elements of wider psychological-aetiological models.
 Understanding the physiology associated with relevant events such as frustration or rage, for example, may highlight new means of intervention.
- Enabling the revision and refinement of existing psychological models. For example,
 the notions of 'desire' and 'wanting' in addiction literature have been revealed to
 consist of distinctive brain mechanisms. Such findings bear on how we might
 conceptualise these notions, without replacing the need for their explanation in
 psychological terms.

The overarching objective of this approach is to incorporate multiple informational accounts while sustaining their explanatory uniqueness (Ward et al., 2018; Ward, 2014). It thereby resists a neuro-reductive impulse by including the role of other bodily systems beyond the brain, as well as the influence of the wider social environment.

Historically the demand for explanatory integration of this sort has precedent. Engel's (1977) iconic criticism of the biomedical model in psychiatric practice similarly emphasises the significance of psychological and social factors in understanding and treating mental illness. His response, the biopsychosocial model (BPS), has since served as an overarching framework for psychiatric practice, involving an explanatory network of biological,

psychological and social factors. Its development was a significant milestone given the hegemonic status of reductive explanation in modern philosophy and science (Borrell-Carrió, Suchman & Epstein, 2004). Bolton and Gillett (2019) summarise this in their review of BPS, "the history since the beginnings of modern science in the seventeenth century consists of assumptions and arguments that psychological and social causation are impossible or even incomprehensible, that there is no distinctive biological causation either, over and above physics and chemistry" (p. 22). To connect the biological, psychological, and social aspects, the BPS model initially relied on General Systems Theory (GST), an alternative to reductive and mechanistic scientific perspectives (Bolton & Gillett, 2019). Instead of limiting explanation to the level of elements that might comprise a given phenomenon, GST examines the laws of the 'system' or complex of interacting elements (von Bertanaffly, 1968). For Engel, the biological, psychological, and social, constituted distinctive systems interacting within higher-order systems that require unique methods, explanations, and research questions respectively (the study of individuals' cells versus their familial factors would call for incomparable research projects for example). Systems theory has since evolved with the development of Complex Systems Theory, Dynamical Systems Theory, and Network theory, which provide additional theoretical tools and means of modelling complex psychosocial processes (Bolton & Gillett, 2019). Notably, though prevalent, the BPS model has been criticised for maintaining a nebulous principle of inter-level inclusivity, while providing little in the way of specific guidance for diagnosis or treatment (Smith, 2021).

To summarise, though evolving, there is a history of consolidated individualism and internalism within mainstream psychological approaches that coalesce with collective understanding of human agency and responsibility. In contrast, as is to be expounded in this thesis, 'Enactivism', describes a progressive position of cognitive science that shifts agentic conceptions beyond brains and traditionally 'cognitive' processes to embodied cognitive-

affective dynamic systems, as embedded in material and social environments (Reid & Mgbombelo, 2015; Ward et al., 2017). In the following sections of this chapter I aim to outline key aspects of this perspective in accordance with the broader goal of investigating key implications for current correctional representation and treatment of agency.

Enactivism

The term 'enactivism' does not delineate a sole account of mind or cognition but a variety of distinctive perspectives that share core theoretical assumptions (Reid & Mgbombelo, 2015; Ward et al., 2017). The first systematic analysis of enactivism was outlined in 'The Embodied Mind: Cognitive Science and Human Experience (TEM)' by Varela, Thompson, and Rosch (1991) in an effort to shift cognitive science away from representational accounts of mind (typical of the dominant 'cognitivist' paradigm of the 1980's) (Colombetti, 2014; Reid & Mgbombelo, 2015; Ward et al., 2017). In this piece it is argued that the operationalisation of minds as brain-bounded problem-solving machines is a limited means of explaining the nature of agency (Valera et al., 1991). Cognitivists at the time were additionally struggling to account for specific elements of cognition, including context sensitivity and domain general intelligence, while alternative theoretical trends were developing that would shape the development of an 'enactive' mind (Ward et al., 2017). Connectionist models, dynamical systems theory, ecological psychology, and situated robotics all emphasised the significance of interactional environmental factors in explanations of cognition (Barrett, 2018; Ward et al., 2017). Synthesising these emerging strands, enactive theorists propose that minds are best conceived as embodied and embedded (Di Paulo & Thompson, 2014; Ward et al., 2017). Embodied in this context refers to the notion that consciousness as we know it, necessarily depends on our neurobiological embodiment; cognition requires our possession of bodies with their particular sensorimotor capacities, which are themselves embedded in a wider socio-cultural environment (Barrett,

2018). In this respect, cognition is inseparable from the body or environment and constitutes a type of action entwined with perception (Colombetti & Krueger, 2015; Krueger, 2019). By adopting this view, enactive theorists aimed to reconcile cognitive science with subjective experience, drawing additionally on principles of phenomenology and evolutionary biology (Ward et al., 2017).

Much of the foundation of enactivism can be attributed to the earlier work of Maturana and Varela (1980) who aimed to account for the agency of organisms with their theory of autopoiesis (Colombetti, 2014). Autopoietic systems are characterised by the capacity to maintain and distinguish themselves from the environment. A cell for example is a network of constitutive biological processes that enable its continual regeneration (Colombetti, 2014; Di Paulo & Thompson, 2014). In order to survive, biological entities need to process energy one way or another. My cat needs to eat, breathe, and excrete or she will die; she does this by actively engaging with her environment. Historically, the survival of cats as a species across millennia has been tethered to their capacity to implement an adaptive response to a variety of environmental conditions, enabling their sustenance and reproductive capacity. The pervasive illustrative exemplar in this case, is the bacterium, striving towards its glucose and away from harmful toxins. From an enactive view, this bacterium constitutes an autonomous self-regulating system by differentiating between the viable and sugary, or non-viable toxic conditions (Colombetti, 2014; Di Paulo & Thompson, 2014). Such distinction necessarily requires an evaluation of sorts and in this sense, the environment becomes 'meaningful' to the bacterium; toxic areas are to be avoided while sources of food should be celebrated. This type of evaluation is called 'sense-making', which describes the capacity to assess and engage with surroundings as motivated by precarious embodied experience, which for enactivists, is the benchmark of cognition (Di Paulo & Thompson, 2014). The mind is thus no longer something internal and detached but rather a type of

interaction with the environment (De Haan, 2020; Gallagher. 2017; Krueger, 2019; Maiese, 2015). In order to capture cognitive phenomena, enactivists therefore focus on the organism and environment as a complex dynamical system entailing a variety of tangled interacting processes (De Haan, 2020).

If cognition is sense-making, and sense-making is the ability to distinguish between better or worse survivability conditions, a necessary connection emerges between cognition and life. Life and mind are therefore putatively continuous in enactive accounts. This notion is dubbed the life-mind continuity thesis, which emphasises that life is minded and mind is not fundamentally distinct from matter in the sense that Cartesian dualism regards (Maiese, 2017). An enactive framework thus trades dualism for a 'neo-Aristotelian hylomorphic' account of mind, body, perception, and action (Maiese, 2017). Hylomorphism originates with Aristotle's theory of nature, literally translating to 'matter' and 'form', which within this view constitute the primary substances in the world (Beni, 2019). A hylomorphic ontology postulates that the world consists of individual objects that are constantly changing; a plant grows and withers and a young man becomes old and wrinkled (De Haan, 2017). Different kinds of things are naturally conferred with a variety of abilities, but all living things share a metabolism (chemical processes that enable the conversion of food to energy and maintenance of the organism). Such objects are themselves compounds of form and matter, which make them what they are (Simpson, 2001). A candle for example is made of matter (wax), which becomes a candle only if moulded to the form of a candle. In this way, the form of things provides actuality upon potentiality (Beni, 2019). Contemporarily, this is called a structural or organisation realist approach, as deemed by its commitment to the significance and irreducibility of the organisation of things when approaching ontology, explanation, and identity (Beni, 2019; De Haan, 2017). By this account, the essential cognitive, developmental, metabolic, reproductive, and perceptive abilities of humans are enabled by

the specific organisation of our constituent matter, as is the case for all life (De Haan, 2020). Hylomorphism thus embodies the mind and sidesteps the issue of its physical connection. Instead, the mind and body respectively become the form and matter of living things. They are inextricable, with minds being the first principle of the natural living body, enabling the service of biological needs through a needful adaptive relationship with the environment (De Haan, 2017). 'Mindedness' thus becomes an emergent constellation of phenomena, depending not only on constituent parts but the specific configuration of those parts, which depend on the service of the mind. Sense-making is therefore strongly connected to the living body; specific bodies confer particular needs according to their structures and thereby determine what is adaptive for a given organism (Reid & Mgbombelo, 2015). To return to the example of the bacterium, due to its organisation its metabolism works in a specific way that demands the location of highly sugary environments (Colombetti, 2014; Di Paulo & Thompson, 2014). For such a system striving to maintain itself, the world is constantly perceived from a concerned perspective, "the organism's 'concern,' its 'natural purpose,' is to keep on going, to continue living, to affirm and reaffirm itself in the face of imminent notbeing" (Thompson, 2007, p.153). Our bacterium is not itself experiencing 'concern' as we might but is rather driven to meet the needs of its biological body and is consequently not indifferent to survival (Di Paolo & Thompson, 2014). Its world therefore is not perceived as a 'neutral' physiochemical environment, but an *Umwelt*, a reality valanced in relation to the needs of the perceiver (Barrett, 2018). Cognition for the enactivist is thus not neutral or detached but rather, intrinsically affective (Colombetti, 2014).

Affective here need not mean highly emotional states like anger or fear but is used in the sense that something strongly 'affects' and appears meaningful and salient for organisms inherently concerned with their survival (De Haan, 2020). Surrounding environments are worlds of particular significance for living creatures. An earthworm may seem less appealing

to most than a cappuccino, but for the sparrow it is infinitely more delectable. Note that the claim is not that we need to make such comparisons explicitly. Appetitive elements of our surroundings do not become so as a consequence of consciously evaluating all the benefits and possibilities they offer. Sense-making is submitted as a *felt* experience, a preconscious bodily-affective evaluation that depends neither solely on the organism nor the environment, but both in tandem (Maise & Hanna, 2019). What is present in the environment will have specific properties that interact with the short and long-term needs of an organism as determined by its biology, all of which underly the consequent valence of the object for the organism (De Haan, 2020). It thus challenges the distinction between emotion and cognition, which traditional cognitive science has maintained; anger, for example, has tended to be modelled in terms of neurological processes and representational operations that 'cause' the felt experience of anger, which itself distorts an otherwise typically 'rational' cognitive system (Maiese, 2015). An enactive account reframes these conceptions and the boundaries they entail; anger becomes an evolved response of dynamic patterns of processes that cascade throughout the body and prime organisms for hostile situations (Nielsen, 2020). It does not therefore deviate from a 'clearer rationality' but operates consistently with the valanced experience of living creatures, who actively orient themselves in the world to survive (Colombetti, 2014, Maiese, 2017). Perception is part of this action, itself a means of exploration dependent on organismic movement. To perceive we need to move our heads, our eyes, our muscles, and our limbs: we squint to perceive a distant face and feel the smooth handles of our mugs with our fingers (Maiese, 2017). Our senses allow us to explore the boundaries of the things in the world using our bodies configured as they are and in doing so cultivate particular sensorimotor patterns; a term derived from the sensorimotor theory of perceptual consciousness, which aims to explain the nature of phenomenal experience (e.g., the feeling of textural 'roughness') (Bishop & Martin, 2014). Representational accounts have

historically faced an explanatory gap when attending to phenomenology, otherwise called the hard problem of consciousness. For example, how might the association between states of the visual cortex and the experience of 'redness' in consciousness be explained? The link is immediately obscured by the clashing vocabularies used to describe neurological and subjective aspects of experience, resulting in apparent absurdity (Bishop & Martin, 2014). Sensorimotor theory (ST) alternatively incorporates sensorimotor patterns that shape our engagement with the environment to explain subjectivity (Bishop & Martin, 2014; Buhrmann & Di Paolo, 2017). Because experience itself always implies some form of bodilyenvironmental engagement, ST accounts for phenomenological experiences with the application of particular sensorimotor capacities (Buhrmann & Di Paolo, 2017). To illustrate, the feeling of a soft sponge has been traditionally described solely in terms of brain-bound processes while ST would recruit the 'softness' of the sponge, referring to the way it is being squeezed and thereby incorporating bodily engagement as a vital explanatory aspect of sensory experience. By continually acting within the world, living organisms become naturally attuned to their sensorimotor regularities, which are necessarily shaped by the nature of their bodies. My laptop offers me a range of action possibilities (e.g., typing, speaking) highly distinct from those offered to my cat (e.g., sitting, destroying). Perception in this sense is action-oriented in that in objects we perceive affordances: possibilities of action afforded by a given object (Rietveld, & Kiverstein, 2014; Ward et al., 2017). Such affordances are motivated by current concerns: if an organism is hungry, it will likely attend to affordances that involve eating. The demands and shapes of our bodies thus motivate and physically delineate respective possibilities of action, placing organisms of distinctive bodies in distinctive *Umwelt* (Colombetti, 2017). For humans of course, sense-making is not exclusively or even emphatically focused on biological necessity. De Haan (2020) distinguishes between basic and evaluative sense-making in this respect. Basic sense-making

is based on biological survival and fully immersed in the present moment, predominantly underlying the agency of most non-human animals. *Evaluative* sense-making depends on the capacity to transcend the present, as the consciousness of humans normally does.

Consequently, we inhabit a socio-cultural world of values such as courtesy, dignity, and friendship (De Haan, 2020). Sense-making is thus not necessarily based on mere survival, but rather living a 'good life' in accordance with a particular socio-cultural context when applicable.

To conclude this overview, since the publication of 'The Embodied Mind' three distinct branches of enactive theorising have been identified (Rolla, 2018; Ward et al., 2017):

- Autopoietic enactivism as we have mainly outlined, focuses on the project of grounding cognition in embodied organisms, positing a necessary relationship between consciousness and the biodynamics of living beings (Maiese, 2018).
- Sensorimotor enactivism usually aims to account for perceptual and intentional
 aspects of experience and largely downplays the emphasis on life-mind continuity,
 and coupling of organism and environment (O'Regan & Noë 2001).
- Radical enactivism is characterised by its goal of improving and unifying antirepresentationalist approaches to cognition consistent with sensorimotor and autopoietic enactivism (Hutto, 2011; Nolla, 2018).

Though the term 'enactivism' does then refer to diverse accounts or projects, these apply in the context of a shared conception of cognition as emergent from our "engaged, bodily lives" (Ward et al., 2017, p. 74). It is an alternative to the popular conception of mind as linear, representational, or purely neurological and posits *mindedness* as dependent on the brain, body and world. Enactive explanations of agency thus emphasise the environmental and social attunement required of living beings; how these aspects are more precisely managed on the basis of enactivism, is detailed in chapter three.

Chapter Three: Enactive and Extended Minds

For the purposes of clarifying the above ideas, I will here outline the criteria with which enactivists tend to define agents, so this may be understood as a working conception in the remainder of this thesis. In their view, agency necessarily consists of three core criteria: individuality, interactional asymmetry, and normativity (Barandiaran, Di Paolo & Rohde, 2009): individuality requires that an agent can be distinguished from its surroundings for without such distinction, it would be impossible to describe 'agentive relations' with a specific environment (Barandiaran et al., 2009). Demarcation in this respect can appear arbitrary to an outsider; consider for example a 'workplace system', which is made up of components like pens, paper, desks, tables, and computers. In this case, what constitutes this system depends on what is collectively agreed as such; there is nothing in the world pulling together these parts to form the identity of a 'workplace system' and without such agreement, there would be no basis to distinguish it from the rest of the office. Other systems, for example our solar system, is bound by gravitational forces but nonetheless requires external criteria and observers for the attribution of its identity (Barandiaran et al., 2009). Living creatures however, do not face this issue and appear self-evident in their unification and distinction. What we call agents then, define their own identities and environments in which they act. Interactional asymmetry elaborates this notion of action. Though agents are coupled to their environments in exchanges of matter and energy, they generate or cause action themselves as opposed to being passively driven by external forces (Barandiaran et al., 2009). Their interactions are in other words, asymmetrical, "an agent is a system that repeatedly modulates its structural coupling with the environment" (Barandiaran et al., 2009, p. 4). Such modulation and individuation however, lacks the normative or goal-driven nature of truly agentic activity: an epileptic person in the middle of a seizure may exhibit a variety of muscular movements, but none of these would likely be considered an exercise of agency.

Agents necessarily have norms that motivate their behaviour and 'make sense' to the agent, be they biological, cultural, or psychological. The *normativity condition* thus requires that agents regulate their interactions to produce normative successful outcomes, which are consequently far from arbitrary or chaotic (Barandiaran et al., 2009).

Extended and Scaffolded Cognition

As previously mentioned, enactive versions of agency pay much attention to the embedded nature of living systems, on which various related accounts of the relationship between the environment and human life depend (Ward et al., 2017). The Hypothesis of Extended Cognition (HEC) shares some of its ancestry with enactivism, drawing on a similar synthesis of sources that highlight the dynamic interaction of brains, bodies, and environments (Ward et al., 2017). Typically associated with the genesis of this framework are theorists Clark and Chalmers (1998), who propose that cognition is better conceived as constitutively extending beyond the body. Famously illustrating this is their example 'Otto', a fictional individual hypothesized to be suffering from memory failures who uses his notebook to compensate and retain information externally: addresses, numbers, locations, and so on. It is claimed that in this case, the notebook functionally contains Otto's beliefs and as such, ought to be considered as an instance of cognitive extension (Clark & Chalmers, 1998); that is, part of his memory system. This position depends in part on the 'parity principle', according to which an extended cognitive process can be deemed as such by functional equivalence to 'internal' processes (Walter, 2010) In other words, this view maintains that if there are parts of the world that functionally contribute to a process that would be called cognitive if it were contained in our heads, then those parts are themselves constitutionally cognitive. In response, some assert that enactivism necessarily retains cognition within the boundaries of living systems (Wheeler, 2010). Others emphasise its relational nature, repudiating the notion of any strict location (Colombetti, 2017). In their defence of the HEC,

proponents allude to examples of aquatic insects that can breathe underwater by retaining air bubbles, or otherwise deemed "constitutive parts of the new form of life" (Colombetti, 2017, p. 450). The idea is that these instances exemplify an extension of life in which organisms utilise mediating structures as part of their autonomous organisation. On this basis, some claim that enactivism is quite consistent with cognitive extension (Colombetti, 2017). Continuing with our aquatic example, its underwater organisation (which tends to include air bubbles) generates a distinctive *Umwelt* composed of different affordances (Colombetti, 2017). The insect thus extends its sense-making underwater by incorporating the air bubbles within its organisation, enacting a different world than that of its 'land system' (Colombetti, 2017). Because cognition is inherently affective by this account, these and analogous cases putatively demonstrate 'extended affectivity'. The way the underwater environment is perceived by the aquatic insect differs greatly from its non-aquatic relatives for which this world is dangerous, threatening, and offers a comparatively limited array of affordances. Thus, mediating structures allegedly extend affectivity by extending living systems into new forms of life in which these structures are constitutive of new cognitive-affective sensemaking (Colombetti, 2017).

In the case of human cognition, HEC competes with various frameworks that aim to explain its evolution across deep time, including The Extended Phenotype (TEP), Distributed Cognition, and Niche Construction (Dawkins, 1982; Sterelny, 2018). Archeology has corroborated the human dependence on technology for millions of years, promoting the capacity to socialise, teach, and learn, in order to transmit the accompanying knowledge required to use it (Sterelny, 2018). A key example is the controlled use of fire, which has provided warmth, protection, and light since its genesis (Sterelny, 2018). Depending on this, our species extended the collective day and all it entails (eating, learning, and socialising) because of its influence on circadian rhythms and time budgets (most diurnal animals sleep

during the night to conserve energy and avoid predators) (Sterelny, 2018). TEP however, explains this type of technological relationship exclusively in terms of phenotypes (extended phenotypes are genetically determined ontogenetic features of organisms). It is thus a necessarily individualistic explanation that has borne criticism for its failure to incorporate the role of the material and cultural environment in shaping and amplifying the cognitive processes of humans (Sterelny, 2018). To return to the example of Otto, his notebook undoubtedly appears to function as his memory, but resources such as these are specialised: they are highly trustworthy, highly accessible, and customised. Thus, the ways in which human cognition is amplified is not best captured by these instances. They may not even be the most significant cases of cognitive support considering the language Otto uses, the alphabet and vocabulary, or any of the symbolic systems that enable specific cognitive tasks (e.g., numerical systems). These are among the most transformative creations of culture: languages, databases, taxonomies, notation systems that affect the way we fundamentally categorise and think about the world (Maiese & Hanna, 2019; Sterelny, 2018; Zawidski, 2018). They are sustained through their utility and passed on across generations, bearing continual modification alongside the material tools that enable their transmission (Sterelny, 2018). Cognition and culture are therefore demonstrably and profoundly entwined, an aspect overlooked in primarily individualistic frameworks such as TEP and HEC.

Niche Construction however, focuses on the collective and transgenerational effects of environmental modification, emphasising the active role of the agent in explaining the "adaptive fit" between agent and environment (Laland & Sterelny, 2006; Scott-Phillips, Laland, Shuker, Dickin & West, 2013; Sterelny, 2010). Classic examples of niche construction tend to be environmental modifications that are directly physical interventions; trees discouraging competition by altering soil with leaf litter or animals building nests, burrows, or damns to protect themselves (Sterelny, 2018). Agents adapt to their environments

and adapt their environments to themselves, reshaping the developmental environment for future generations and thereby engaging in 'downwards niche construction' (Sterelny, 2018). This concerns not only the physical, but informational character of a species' surroundings: ants laying scent trails between food sources and the nest and hawks selecting roosts that maximise territorial views are often cited examples of this phenomenon. Humans are considered 'extreme' niche constructionists (Sterelny, 2018). The modern city environment tends to contain ever growing masses of life immersed in human constructions. Unlike HEM theorists however, Niche Constructionists submit that these environments ought to be seen as scaffolding cognition, as opposed to extending it. Many of us grow in contexts rich with cognitive technology, where in highly structured learning environments we acquire and internalise useful systems with the assistance of material cognitive 'scaffolds' that extend into adolescence and early adulthood. These enable the acquisition of novel tools within rather than between lifetimes. Niche constructionists thus avoid the embedded versus extended debate, relying on the weaker claim that environments simply play an essential role in supporting and shaping cognitive processes, consequently sidestepping the many objections to HEM (Sterelny, 2018). Instances such as Otto and his notebook by this account become special cases of niche construction, occupying only a fraction of a wider phenomenon. Similarly expanding beyond individualistic explanation, the 'Distributed Cognition' hypothesis emphasises the demographic features of communities in its explanation of cognitive technology (Sterelny, 2018). Behavioural modernity in humans is accordingly explained by the growth of populations ('modernity' in the sense intended, is reflected in discovered instances of hunting, food processing technologies, jewellery, and burial of dead for example), which increased the probability of innovation as skill specialisation became less constrained. In his analysis of theory seeking to explain the interaction of material culture and cognition, Kim Sterelny (2018) asserts the importance of

both aspects, claiming that a richer material culture scaffolds transmission to the next generation, but only if agents have time and support and are otherwise primed to use the information available.

In sum, these ideas though only here briefly detailed, reflect a cluster of related theoretical perspectives of cognitive-environmental functioning that illustrate agency as relational and dependent on the acquisition of cognitive tools that scaffold both the development and application of our cognitive processes. The notion of a scaffolded mind thus provides a useful and parsimonious means of characterising the cognitive-environmental relationship and appears to capture much of the insight offered by the perspectives outlined in this section, such as the culturally entangled and materially dependent nature of cognition, while avoiding their related schisms.

The Body-Social Problem

The 'interactive turn' refers to the increasing appreciation for the social nature of cognition, an integral element in considerations of agency and human identity (Kyselo, 2014; Maise, 2018). The so called 'body-social' problem refers to one of its core issues, the matter of conceptualising the social; proponents of embodied cognition tend to equate the self with the whole living body. In these, the social plays a deeply influential, but non-constitutive role, providing the context in which organisms are embedded (Kyselo, 2014). Alternatively, the "social as constitutive" position attributes primacy to the social as the means of individuating the self (Kyselo, 2014, p.4). Our 'selves' in this respect would be considered essentially social in that they could not exist without social interaction, "these dependencies — of mind on body and world and of the body on mind and world are not mere causal relations but are rather constitutive. That is: mind and body, experiential and physiological processes, could not exist without interactions with the world" (De Haan, 2020, p. 126).

Representationalists account for this sociality with 'mindreading' or 'theory of mind'

abilities, by which co-operation is enabled by the representation of the mental states of surrounding human agents (Zawidski, 2018). These explanations emphasise the cognitive capacities and mechanisms required to process the propositional attitudes of others (such as their beliefs and desires). Shaun Gallagher (2001), renowned philosopher of mind, cognition, and developmental psychology, summarises mainstream theory of mind in two approaches; so-called 'theory theory' and 'simulation theory'. Theory theory depends on the idea of an implicit neural representation of human behaviour, such that understanding the minds of others becomes an exercise in theoretical reasoning (Apperly, 2008; Gallagher, 2001). In contrast, simulation theory posits an ability to simulate and thereby appreciate personally, the experience of the subject in question (Shanton & Goldman, 2010). For enactivists and related embodied perspectives, these notions typify a classical cognitivist neurocentric perspective of mind and are thereby restricted, focusing only on a minimal set of socially relevant cognitive processes. Naturally, embodiment itself is a foundational and yet excluded aspect in these accounts, which for its proponents includes distinct prenoetic effects (prenoetic refers to the extent to which our consciousness and all the cognitive processes it entails, memory, thinking, imagination and so on, are shaped in virtue of their embodiment) (Gallagher, 2005).

In contrast, 'participatory sense-making' offers an enactive account of how individual and social domains relate, which emphasises embodied and emergent features of social phenomena (Kyselo, 2014). Purportedly, when two or more individuals engage an interactional autonomy emerges, a process that exhibits novel properties irreducible to the participating agents, and arguably provides a means of accounting for the social aspect of human engagement (Di Paolo & Thompson, 2014; Kyselo, 2014; Maiese, 2018). These interactions become coherent systems, while participants engage as relational interactors (Kyselo, 2014). Our identities are not then passively received, but emerge through social interaction (Kyselo, 2014). This notion depends on the principle of coordination, a concept of

significance in mathematical biology, physical, and dynamical cognition (De Jaegher & Di Paolo, 2007). Examples of co-ordination between systems are common, including the synchronised oscillations of pendulum clocks that occur if placed close enough to each other, or the 'group flashing' synchrony of fireflies in Southeast Asia (De Jaegher & Di Paolo, 2007). Strands of social science have long acknowledged the importance of co-ordination in interaction studies, conversation analysis, and gesture analysis (De Jaegher & Di Paolo, 2007). Projects such as these illuminate a 'double influence' in patterns of social coordination, which impact the disposition of agents and their ongoing engagements. Utterances, changes in intonation or gestures for example, may all diminish or prolong the interaction, which itself impacts the types of co-ordination likely to occur (De Jaegher & Di Paolo, 2007). Interpersonal engagement becomes an embodied interaction (relying on facial expressions, postures, and gestures) in which individuals are attuned by way of imitation, mirroring, synchronisation, and anticipation (De Jaegher & Di Paolo, 2007). For instance, a mother matches her emotional expression to that of her child, or two lovers share a kiss. Because we are embodied, so too is our intersubjectivity, which is accordingly conceptualised as an *emergent* phenomenon:

Social interaction is the regulated coupling between at least two autonomous agents, where the regulation is aimed at aspects of the coupling itself so that it constitutes an emergent autonomous organization in the domain of relational dynamics, without destroying in the process the autonomy of the agents involved (though the latter's scope can be augmented or reduced). (Di Paolo & De Jaegher, 2007, p. 493)

A consequent problem however, is that if identities are conceived as relational in this way, individuality becomes lost in the wider 'interactive system'. Participants no longer adhere solely to their self-maintenance, but to group identity norms governing the wider interaction system (Maiese, 2018). De Jaegher and Di Paolo (2007) respond that

individuation persists during social interaction through individual embodiment, while others claim this relegates the social to the mere context in relation to identity. In connection with this, Kyselo (2014) recruits the notion of needful freedom, which originally referred to the dialectical tension underlying life: the dependence of organisms on the material world and a drive to self-emancipate from that same world. In terms of our selves, the claim is that the same 'needful' freedom' can be applied to the social realm: as a permanently restless organism maintains itself through the perpetual metabolic processing of physical matter, so too a human self is co-generated and co-maintained through perpetual social interactions throughout a lifetime: "the self in its most minimal sense, thus escapes the body. It is never fully separable from its social environment, but instead determined precisely in terms of the types of social interactions of which it is, at the same time, a part" (Kyselo, 2014, p.12). It is proposed that the stability of our human selves is maintained by constant negotiation between poles of distinction and participation; distinction refers to the experience of selfemancipation, while participation entails a sufficient sense of connectedness to others (Kyselo, 2014). Specific interactions can be positive or negative relative to this equilibrium, thus the social world becomes its own distinctive *Umwelt* relative to the goal of maintaining this boundary of the self. Imbalance in this context might allegedly lead to 'social death', either through extreme distinction (isolation) or participation (dissolution of self) (Maiese, 2018). Though a self-proclaimed enactive 'middle ground' approach to the body-social problem, this solution seems to extend the constitutional limits of our minds and create conceptual ambiguity for shared conceptions of agency itself. It is challenging to distinguish human identity if not biologically, or how to ascertain exactly how flexible social navigation (our ability to engage, participate, and disengage) can occur without autonomous enabling bodies, which are thereby presupposed if the social is to be given primacy (Maiese, 2018).

While there may be no clear 'solution' to the body-social problem as such, perspectives such as these emphasise the fundamental significance of the social domain in considerations of agency and offer a rich alternative to its standard explanation in individual and intellectual terms. In chapter four, I will outline the Mind-Shaping Thesis (MST) in order to demonstrate how principles of a scaffolded and profoundly social mind provide a basis for explaining the acculturation of enactive and embodied agents through the institutions with which they engage across their development and life. As is to be elaborated, in correctional contexts, these developments concern psychological theory and practice by offering a formulation of agency as driven by relational cognitive-affective systems, that are profoundly social. This perspective has significant implications for understanding and changing the trajectories of individual agents as is central to the function of rehabilitative practice.

Chapter Four: Acculturation by Habit

As discussed earlier there is a widely held perspective that claims social cognition and the adaptive success of our species can be primarily explained in terms of individual capacities to represent mental states: beliefs, desires and attitudes (Zawidski, 2018). In contrast, the 'mindshaping' hypothesis assumes that social cognition is emergent, moulded by embodied and socio-culturally embedded processes of shaping and tracking behavioural dispositions (Zawidski, 2018). Instead of characterising the social life of humans as dependent on neurally realised computational processes, it emphasises social structures in which specific roles are enacted. Agents are no longer conceived as 'scientific psychologists' who explain behaviour with inferences about invisible mental states, but rather enactments of students, teachers, lawyers, priests and so forth. By this account, we shape each other's minds by means of norm enforcement, active or explicit teaching, and imitation, in relation to culturally specific ideologies, "according to the mindshaping hypothesis, culturally specific ideologies to which members of human populations try to conform are the most adaptive way to solve the coordination problems that characterize distinctively human socio-ecology" (Zawidski, 2018, p. 3). Notably, these theoretical elements of mind-reading and mindshaping are not mutually exclusive, but the importance and prioritisation of these capacities differs in their explanation of sociality. It is essential to add that the MST entails our affective world as much as our cognitive; indeed proponents argue that the scaffolding of the mind can apply to both, according to the same dimensions of trust, individualisation, and degree to which a given 'scaffold' might be used collectively or by an individual (Colombetti & Krueger, 2015). Trust in this context refers to the extent to which a resource would be deemed trustworthy to the corresponding agent. In the case of cognition, Otto's notebook would be considered trustworthy because it is reliably true compared to a publicly accessible website for instance. For affective motivations, trustworthiness refers to the likelihood of

eliciting the desired effect such as feeling relaxed or euphoric (Colombetti & Krueger, 2015). In this sense, we have tools that we employ occasionally and those we find essential for the systematic realisation of certain affective states. Naturally, trustworthy resources are more likely to become individualised (adapted for regular purpose) because they are more likely to be used. An example of a highly individualised affective resource is the piano for a learned pianist: instrumental mastery requires years of practice that enables familiarity and adaptation to the given instrument in terms of its range, shape, and sound. Because musicians use their instruments as a means of expression, once a degree of competence is attained, instruments enable the exploration of personal affective states and become entrenched in the musicians' array of feelings as well as their motoric repertoire (Colombetti & Krueger, 2015). Incorporating an environmental-affective account in this regard is an essential element of any project that aims to capture daily human life and agency, as our fundamental dependence and entanglement is apparent. In times of stress, we gorge ourselves with junk food, entertain ourselves with sneezing panda videos or spend time in nature (to name a few examples). These methods concern both the material and social environment. This too, we shape to change our affect and similarly organise as "affective niches": not necessarily conscious habits of organism-environmental coupling motivated by the attainment of specific affective states (Colombetti & Krueger, 2015). Drawing then, on notions of a cognitively and affectively scaffolded mind, the MST highlights the role of cultural ideologies and insitutionalisation in accounting for the social ecology of our species, as will now be elaborated.

Shaping Habits (affective framing patterns)

Given the idea that our minded capacities are embodied, and co-dependent on the material and social world, it would reasonably follow that the institutions to which we belong thus exert a substantial influence upon our agency. Indeed, in their book '*The Mind-Body*

Politic' Maise and Hanna (2019) describe this relationship as "partial determining" and "literally shaping" in its impact, which is outlined as follows:

- Causal: social factors play a necessary and influential role in the creation of our mental and physical properties of ourselves.
- Partially determined or shaped by feedback loops: minds are shaped by the social
 world, which is equally shaped by minds. We may condone or condemn specific
 social practices and thereby change our constantly evolving sociocultural context in
 terms of norms and values.
- Irreducible normativity: biologically, norms emerge from the necessity to meet needs vital for survival. Faring well in the social world however, requires adherence to norms of specific sociocultural settings. These provide frameworks that cultivate and discourage specific values, stances, and behaviours that are internalised by constituent members. Shaping is thus *irreducibly* normative in that it cannot be adequately explained without reference to anything that is not itself a culturally sustained ideal or value.

Central to this perspective is the principle of 'affective framing', which emphasises the affective and embodied aspects of sense-making in humans (Maiese, 2017). It originates in cognitive science; part of the challenge for advocates of computational cognition is accounting for how human cognition can filter or 'frame' incoming information to focus attention on relevant features of the environment (Maiese, 2017; De Jaegher & Di Paolo, 2007). Enactivists however, have recruited the term to describe how human agents are understood to cultivate patterns of discriminating, filtering, and selecting information affectively through bodily engagement, bodily fluency, and bodily attunement (Maiese, 2017). The body accordingly becomes an affective "sounding board' that shapes our orientation to the world in a manner that is non-deliberative and built on a history of learning

(Maiese, 2017). We perceive and make sense of the world through our bodies in a spontaneous, non-intellectual, and pre-theoretical fashion that focuses our attention through holistic somatic sensations that eventually form our basic 'affective orientations', based on what we learn and come to care about (Maiese, 2017). While conceptual information informs 'higher level' thinking and our ability to organise our understanding of the world (categorise, classify, etc.), in this view it is underdetermining as a means of explaining the motivational and active nature of attentional processes (Maiese, 2017). For example, the Jastrow duckrabbit phenomenon describes a famous ambiguous figure that elicits distinctive visual interpretations from its observers who tend to perceive either a duck or a rabbit. The image reflects a 'perceptual multistability' and reinforces the notion that as Jastrow himself expressed, we see with the mind as well as the eye, a testament to the same active perception that characterises enactivism (Kihlstrom et al., 2018). Affective framing in sum thus entails a learned habitual attunement to the environment relative to an agent's needs and body, enabling an *emergent* sense-making process distributed across a network of brain and bodily processes (Maiese, 2017).

As mentioned, human sense-making exceeds biological survival and occurs in a complex socio-cultural context, which determines the criteria of successful adaption (De Haan, 2020). Over their development, children are taught to attend selectively to specific features of their environment, develop a concerned point of view and start to exhibit recurrent patterns of expression and response using their bodies (Maiese & Hanna, 2019). Bridging 'affective framing' and mind-shaping, is the cultivation of habits, otherwise conceived as 'affective framing patterns': dynamical networks of autonomous sensorimotor structures that are developed, employed, and sustained across continuous interaction with the environment (Maise & Hannah, 2019). These structures encompass bodily systems (nervous and physiological systems) and patterns of behaviour and attention (Maiese & Hannah, 2019).

Infants do not begin life with a pre-programmed array of motoric possibilities and capacities (Maiese & Hanna, 2019). Moving our bodies is something we must actively learn using our kinaesthesia; co-ordination dynamics of our movement that are *felt* (Maiese & Hanna, 2019). Naturally, kinaesthetic experiences allow us to recognise the differences in the sensations of various physical actions; reaching out with stretched fingers feels different to kicking or kneeling. These ground the ability to distinguish and employ these actions once mastered and provide the means by which we understand the action possibilities of our bodies. It is perhaps unsurprising that our conceptual understanding of the world is so profoundly shaped by experiencing consciousness as embodied human minds, "near and far, up and down, weak and strong, straight and curved, slow and fast, large and small, abrupt and attenuated. Experience actual, in-the-flesh kinaesthetic experience — is the spatio-temporalenergic ground on which fundamental human concepts — non-linguistic corporeal concepts originate" (Sheets-Johnstone, 2011, p.158). By attending to their movements, children learn to generate dynamic patterns that upon repetition become habitual or 'familiar dynamics': tying shoelaces, serving a tennis ball, or strumming the guitar, all bear a unique 'kinetic melody' with which we become so familiar that they escape our awareness (running on 'autopilot' is relatable to most) (Sheets-Johnstone, 2011). These are *habits* and within this account are an essential means of explaining the acculturation of embodied minds. As we develop, our recurrent patterns of behaviour (habits), response, and attention become sedimented and comprise our 'bodily-affective' style or temperament thereby shaping our sense-making (Maiese & Hanna, 2019). Consequently, it is with our habits that we come to sustain a specific style of being, entailing the way we hold ourselves, the tilts of our heads, our facial expressions and the way we communicate (Maise & Hanna, 2019). All such elements characterise our manner of engagement with the world and others in the world.

So-called 'habits of the body', or otherwise termed "sensorimotor co-ordinations" are explicitly cultivated in various social institutions (Maiese & Hanna, 2019): ballet academies, sports clubs, or performance troupes for example, all require highly specialised repertoires of co-ordination using their bodies and material tools. Such co-ordination operates in concert with 'habits of mind': schemas, means of categorising and engaging with the world, who and what to pay attention to (Maiese & Hanna, 2019). Scolding, punishment, expressions of approval, reward, are all means, be they explicit or implicit, of providing feedback. Humans are naturally, born into environments characterised by norms, which have themselves persisted through the expression of each generation to the next. Children are encouraged to be appropriate, to exhibit the 'right' behaviour and responses, and to pay attention to the 'right' facts, features, and considerations (Maise & Hanna, 2019). Such habits of body and mind thereby come to constitute our orientation and interpretation of the world, shaping perception, cognition and affect and all the various elements that comprise identity; desires, tastes, sense of humour or responsibility, and so on (Maiese & Hanna, 2019). Thus, it is argued that such habits or affective framing patterns, are shaped by collectively sustained norms of cultural ideologies, which are themselves shaped by us. This so-called "habitual body" is proposed as a theoretical means of capturing the array of engrained possibilities of perception and response that can be accessed instantly (Maiese & Hannah, 2019).

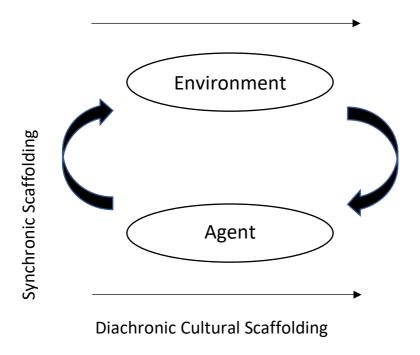


Figure 1. A Scaffolded Mind: illustrates an agent-environment relationship across the lifespan (diachronic scaffolding) and concurrently (synchronic scaffolding). Accordingly, agents are scaffolded over time with the acquisition of cultural and material tools (technologies, language, systems) against the backdrop of a normative framework that entrains affective framing patterns specific to a socio-cultural context. Synchronic scaffolding describes the concurrent scaffolding that constantly occurs whereby cognitive-affective states and processes are supported and realised through adaptive dynamic coupling with the environment. As the circularity reflects, agents actively shape their environments, which thereby constrain and shape action possibilities for the agents.

Affective framings enable spontaneous and flexible behaviour, by equipping individuals with possibilities of perception and engagement throughout various contexts. Collectively, they enable a routinisation and predictability of social interaction. By adopting the prevailing norms of a given context, agents reinforce their prevalence and adjust themselves to consist with the domain in question (Maiese & Hannah, 2019). They enact

these norms and can reliably expect the same of others, allowing a predictable and coordinated dance of culture; patterns of thinking, and behaving (while proscribing other 'dances'). A normative imprint manifests in the way people behave at work, move through a buzzing market, or sit silently in a library (Maiese, 2017). As agents seek to navigate the socio-cultural world and engage with the affordances offered, they must conform to prevailing practice. While natural affordances refer to action possibilities elicited from a given environment based on a form or body of a given agent, conventional or canonical affordances describe those determined by cultural expectation (Ramstead, Veissiere & Kirmaryer, 2016). Thus, while the landscape of possible affordances for any given agent may boast a wide range, the available conventional affordances will constitute just a fraction of these, as constrained in part by collectively shared expectations, the situation, and current motivation (Ramstead et al., 2016). Accordingly, to be a human agent is to be embodied, enactive, and of an essentially social nature, such that prevailing social institutions bear profoundly on one's sense-making and constitution (Maiese & Hanna, 2019). These are typically characterised by hierarchies, particular styles of discourse, organisational policies, standardised practice, interpersonal behavioural norms, and we are all subject to a variety of them: families, churches, schools, jobs, clubs, political systems, financial systems, and including of course legal systems and prisons (Maiese & Hanna, 2019). The rewards of conformity in such cases are diverse; in workplace settings, they are usually material and social for example. Failure to accommodate these expectations can result in exclusion, while those who oblige, remain. Subjects who participate under the jurisdiction of social institutions consequently come to develop habits of body and mind that are not their own, but with which they are nonetheless "socially saturated": their structure or form becomes reconfigured through the formation and alteration of habits, modulating affective framing

patterns, shifting patterns of attention, and altering sensory-motor organisations (Maiese and Hanna, 2019, p. 57).

By this account it is a fundamental error to imagine ourselves as brains in vats and skulls, distant and insulated in this respect. Because an enactive mind is relational, it is instead subject to an array of normative intersubjective forces that enhance or restrict its agency, which can be understood as changes in affective framing patterns (Gallagher, 2018; Maiese, 2017; Maiese & Hanna, 2019). Assertions such as these thereby contradict exclusively individualistic and essentialist notions of human functioning, indeed for many psychologists and researchers the pervasion of a subversive cultural influence is transparent, as voiced especially loudly in the critical psychology literature which echoes a central sentiment, "neoliberalism is bad for poor and working people, therefore we must oppose it" (Ferguson, 2009, p. 166).

Neoliberalism

'Neoliberalism' is a construct term used by various critics to describe the mainstream cultural ideology of modern society. It is described as a contemporary capitalist perspective that strongly emphasizes principles of liberty and self-government, depicting citizens as individuals in free competitive markets in which they are autonomous and responsible with a "widespread sense that not only is capitalism the only viable political and economic system, but also that it is impossible even to imagine a coherent alternative" (Fischer, 2009, p. 2). The term itself however subsumes a variety of referents across the literature, including (Ganti, 2014):

- Economic policies that emphasise the privatization of state enterprises, 'free market'
 policies (deregulation of the economy or liberalisation of industries).
- A prescriptive model of roles for labour, capital and the state that contrasts heavily with former models and causes substantial political, social and economic outcomes.

- A pervasive ideology that depends fundamentally on the notion of 'market exchange' being a core explanatory principle of human activity.
- A "mode of governance" that espouses a self-regulating market, consistent with principles of competition and self-interest.

Among its core criticisms is an alleged propensity to emphasise personal agency and individualism in the face of structural economic inequality; inequality is thus presented as an essential feature of human nature and "a person's success in life is determined more by his or her personal efforts than society" (Gezgin, 2019, p. 48). It is on this basis that Maiese and Hanna (2019) propose their *Collective Wisdom Thesis*: institutions that operate with resistance to standards and practices typical of contemporary neoliberal nation-states have the potential to fulfill authentic human needs positively, "every collectively wise social institution is constructive and enabling" (Maiese & Hanna, 2019, p.71). In conjunction, their Collective Sociopathy Thesis suggest that institutions that typify 'neoliberalism' engender bad habits that obstruct human flourishing and undermine, creativity, collaboration, autonomy, and sincere interpersonal connection; said institutions can be described as "destructive and deforming" (Maiese & Hanna, 2019, p.79). In tandem, these emphasise the inextricability of the dynamics and structures of social institutions and the dynamics and structures of the embodied minds within them, referred to as the enactive transformative principle. To change an institution is to fundamentally change the minds of those within its purview for better or worse (Maiese & Hanna, 2019). To conclude this section, I will revise the key implications addressed so far in this project:

Agency has traditionally been defined in terms of internal brain-bound processes as
passive information processing models. Enactive and related accounts of agency
however, are active and relational, and concern the brain, body, and environment. As
exemplified by the notion of a cognitive-affective scaffolded mind, we depend on the

environment and others to realise essential embodied processes and states (see figure one).

Relationality additionally means that our constitutions in terms of habits of bodies and
minds are fundamentally receptive to institutionally shaping forces, as determined by
culturally specific ideologies to enabling or disempowering ends. In connection with
this, I have acknowledged the charge that 'Neoliberalism', a worldwide ideology
based on free-market norms and principles, has attained a hegemonic status and is of
toxic influence to enactive embodied minds contained in exemplary institutions.

Given the wider objective of this thesis, this leaves several elements to consider; in principle the notion of a psychological science being embedded and thereby substantially impacted by ideological influence is problematic and naturally concerns current rehabilitative practice as imbued with forensic psychological theory. In the following chapter as part of the overarching objective of this paper, I will discuss key claims of the critical literature as it describes the relationship between psychological science and neoliberalism. This will allow for an illustration of theoretical and practical treatments of agency in correctional settings as embedded in a neoliberal context, against the insights of enactive principles outlined so far.

Chapter Five: Psychology and Neoliberalism

Science is in part characterised by its constant evolution and self-correction, which drives the development and transformation of theories and paradigms (Haig, 2014). The competition that inheres between the ideas of scientific communities, is insurance against theoretical stagnancy, hegemony and complacence, which otherwise compromise the integrity, veracity and therefore usefulness of a given theory (Ward & Heffernan, 2017). The scientific method is as celebrated as it is, is because it is considered the best means of producing reliable information, which it produces with use of 'objective methods': measures that regulate research designs and counteract motivated or fallacious interpretations of data (control groups, double blind procedures and so on); it can accordingly be considered a "selfcorrecting epistemic engine", that aims to accurately explain phenomena (Ward & Heffernan, 2017, p.42). In forensic settings correctional science aims to provide reliable explanations of the causes of crime and therefore more effective means of intervention and management. (Ward & Heffernan, 2017). Because it is devoted in principle to empirical scrutiny and reliability, science is usually seen as an 'objective' 'value free' tool. Values accordingly become subjective and ideological, contrary to the factual nature of 'good' research (Ward & Heffernan, 2017). Though it is a relationship therefore overlooked, the processes subsumed by 'science' (which are themselves borne to the same self-scrutiny) are determined and influenced by values of various types; in correctional research and practice, the targets of intervention (dynamic risk factors, protective factors or psychological issues/disorders) necessarily presuppose a valued state of affairs over another (Ward & Heffernan, 2017). This much is demanded of any field connected to health, which requires some practical stipulation of well-being (this would be impossible without a value system of some kind; for example, prudential values refer to those goods that affect an individual's wellbeing, such as leisure, community, food, water, spirituality and so on) (Ward, Mann, & Gannon, 2007). No thing or

outcome is valuable independently (Ward & Heffernan, 2017). Correctional institutions respond to particular harmful behaviours in accordance with collective morality, which separates 'good' and 'bad', or consequently, legal and illegal behaviour (Waller, 2011). Ethical values then determine the targets of our justice system, but with a range of additional values that characterise its operation, including for example the principle of punishment and redemption (Baron; 2019; Teague, 2016).

On this foundation, correctional research is pervasively normative; what correctional researchers seek to explain in the state of current practice is determined by norms that prescribe some behaviours while condemning others (Ward & Carter, 2019). That is to say, that which we call 'crime' depends more on our collective social and ethical values and their legal expression than it does naturally occurring phenomena in the world (Dent et al., 2020; McNeil, 2012; Ward & Carter, 2019). One of the consequences is that the extent to which explanations accord with the same frameworks, for example utilising legal offence categories such as 'sexual' or 'violent', they are bound to suffer. They lack specificity because they depend primarily on social norms and do not exist outside convention (Ward & Carter, 2019). Of additional note are epistemic values: these concern the assessment of methodology itself, that is, the means of gathering evidence and testing knowledge claims, including for example, prioritising internal consistency, external coherence, explanatory depth, explanatory adequacy, simplicity, fertility and so on (Ward & Heffernan, 2017). These criteria are the primary elements to be considered in relation to the design construction process, but are nonetheless impacted by social factors. This much is exemplified by the RCT debate, concerning the use of randomised control trials as the gold standard for research evaluating the efficacy of sex offender treatment (Ward & Heffernan, 2017). We will not here dissect the discussion in detail, suffice to say it exemplifies a collision of social values and the research process (in this case it is not the reliability conferred by RCTs that bears primary

weight, but the ethical implications of their utility. For example, the potential risks caused through the allocation of non-treatment conditions would be a strong ethical reason not to adhere to RCT standards). Thus the research process is itself embedded in a value system from which it cannot and should not be held distinct and yet, this remains largely misconceived (Ward & Heffernan, 2017). It is however, only with a transparent scrutiny of the values that coalesce in the correctional research and practice arena, that ideological commitments might be evaluated. A point of distinction for forensic psychologists particularly among scientists, is the nature of their subject matter. Unlike quarks or geodes or stars, people stare and speak back, and of course, theorists are members of that same humanity they aim to dissect. It follows that there is an underlying looping effect in psychology, which therefore shapes self-understanding as well as explaining criminal outcomes. It is for this reason that notions of 'reflexivity' are necessary: means of selfevaluation and scrutiny that lend scientific credibility to knowledge claims (Ward & Heffernan, 2017). In connection with this, I have acknowledged the proposition that 'neoliberalism' constitutes an overarching ideological force in which modern human culture is entrenched (Fisher, 2009; Maiese & Hanna, 2019). On this basis I argue that it is a necessary layer of evaluating the theoretical and practical treatments of agency of those incarcerated in our societies as part of judicial process. While it is beyond the scope of this project to provide an exhaustive inquiry, I will clarify the connection between these aspects by first briefly outlining key influences in psychological knowledge and practice generally.

A core feature targeted in the criticism of neoliberal thought, is the tradition of individualism of Western thought, as perpetuated by its epistemology (Adams, Estrada-Villalta, Sullivan & Markus, 2019; Kashima, 2019; Pickren, 2018). One of the ideological grandfathers of neoliberalism, Friedrich von Hayek, set the foundation for psychologists, arguing for a prioritisation of individual elements in the social sciences, as opposed to

'wholes' or 'entities' such as economic systems or ideologies (Bettache & Chiu, 2019). At the time of its onset, social psychology was alleged by many to be in a state of crisis due to a destabilising increase in positivist outlooks and approaches within its purview (Gjorgjioska & Tomicic, 2019). Positivism is the epistemological position that the objects of scientific inquiry can be apprehended 'objectively' and exist independently of the researchers who study them (Gjorgjioska & Tomicic, 2019). The goal of this approach is the production of generalisable knowledge, which is typically associated with empirical quantitative methodologies (e.g., involving statistical analysis, standardised tools, sampling measurement, and scales) (Gjorgjioska & Tomicic, 2019). This claim of 'objectivity' blatantly reifies a value-free axiology, as ostensibly ensured by the vigilance of 'objective' researchers. Interpretivism, a position at odds with objective truth, occupies the opposing pole, submitting instead that reality can only be observed through the rich imprecision of phenomenological experience (Gjorgjioska & Tomicic, 2019). Naturally, it is associated with qualitative methods of inquiry that aim to capture the diversity of experience and perspectives shared in social reality. These constitute the primary positions of the so-called critical epistemological debate of social psychology, which has persisted since the 19th century, arriving at the aforementioned 'crisis' in the late 1960's (Gjorgjioska & Tomicic, 2019). Specifically, this centered on an imbalance between these paradigms, with critics alluding to a theoretical stagnation caused by the overwhelming trend toward positivist experimental methodology. This shifted focus and favour away from humanistic action-oriented approaches and to the production of empirical laboratory-derived knowledge (Gjorgjioska & Tomicic, 2019).

According to the claims of the critical literature, such an objective individualism provides a scientific veneer to contemporary 'common sense', or neoliberal imaginary, "the tacit, primarily practical (non-theoretical) sense of how things are, what our society is about, how we should act and what defines and guides human relationships", which reflects and

services the underlying financial-industrial complex; liberty is centralised and deemed a matter of paramount importance in this view, which sanctifies principles of self-governance and free choice with the psychological axiom that freedom of interference from others is the foremost universal human desire (Bettache & Chiu, 2019; Pickren, 2018, p. 576). Individual freedom is consequently protected by preserving free competitive markets that are subject to minimal state intervention (Bettache & Chiu, 2019). In other words, neoliberalism entails a particular conception of person as "an autonomous and abstract being" (Kashima, 2019, p. 351). Autonomy in this case places the individual at the dynamic centre of consciousness, entailing all of its constituent phenomena (emotion, attention, judgement, and so on) organised into a coherent entity, while an abstract individualism sets her against other such entities as well as her social and material context (Adams, Estrada-Villalta, Sullivan & Markus, 2019; Pickren, 2018). Under institutional influence, these premises are internalised, reified, and encourage those qualities associated with idealised models of the self, referred to in the literature as 'homo economicus' or an 'entrepreneurial self' (e.g., including independence, ambition, self-reliance, and competitiveness) (Adams, Estrada-Villalta, Sullivan & Markus, 2019; Arfken, 2018; Beattie, 2019; Pickren, 2018; Teo, 2018).

'Common-sense' therefore, reproduces so-called 'neoliberal subjectivities', ways of thinking and being in the world, that actualise a portrayal of existence that is both atomised and characterised by self interest; sociality becomes 'thinly' characterised as almost exclusively driven by 'rational choice' and 'cost-benefit analysis' (Teo, 2018). The psychological 'knowledge' that legitimates this paradigm is produced mainly by exemplary academic institutions, accordingly restructured to resemble 'business-like entities' (Bettache & Chiu, 2019; Estrada-Villalta, Sullivan & Markus, 2019). Reflecting a wider so-called 'culture of surveillance', their modern objective is to maximise productivity in the image of business and corporate models that inform institutional policy and management; indeed

academia is considered one of the most scrutinised occupational fields to these ends (Bettache & Chiu, 2019). Consequently, academics under this purview become monetised commodities (Maiese & Hanna, 2019). They are ranked on various measures in accordance with their publication value in a digital journal-based economy, which is tracked and displayed in esteemed databases online (Maiese & Hanna, 2019). These metrics determine funding and therefore impact tenure, dismissal, promotion, and the courses retained by given universities. Flowing downwards then, the current value system prioritises specific formats of research output and methodologies, which constrains the type of knowledge that proliferates in the collective milieu (Bettache & Chiu, 2019). Specifically, the demands of bibliometric culture have supposedly fortified the positivist tradition, to the detriment of qualitative approaches and the paradigms that apply them (e.g., structured interviewing, thematic analysis, and so on); such methods aim to enrich theory by capturing subtleties of experience and interaction otherwise obscured by quantitative methods (Bettache & Chiu, 2019). Gjorgjioska and Tomicic (2019) highlight this trend in application to Social Representation Theory (SRT): SRT was developed alongside the onset of neoliberalism in response to the consequently positivist drift that continued to characterise mainstream social science (so voiced by numerous critics). Though theoretically distinct, SRT here precedes enactivism in its attendance to culturally embedded experience, applying a decidedly social epistemology in a field of entrenched individualism: "SRT distances itself from the atom notion of the individual and sees her in a dialectical relationship with society (its conventions, norms and values)" (Bettache & Chiu, 2019, p. 12). Its ontological suppositions engendered notions of dynamism, constructionism, and social change, reflecting a foundational step toward a more social and ultimately, relational agency (Bettache & Chiu, 2019). The impact of a surrounding hegemony on developments like SRT is therefore telling; despite its initial objective, the SRT community now aligns with the prevailing quantitative emphasis and

value free axiology coupled with a fundamental individualism (Bettache & Chiu, 2019). The ideological impact of neoliberalism thereby skews its own evaluation, which becomes an 'unscientific' endeavour in the wake of the values it espouses. Cultural context and social structures are consequently minimised as explanatory forces of psycho-social phenomena (Bettache & Chiu, 2019). This much at least, is echoed by various scholars who, far from presenting psychological science as a dispassionate bystander, describe an enabling hegemony of epistemological and ontological consequences (Adams, Estrada-Villalta, Sullivan & Markus, 2019; Bettache & Chiu, 2019; Teo, 2018).

This influence extends to healthcare under the banner of 'medical neoliberalism', a term of the critical literature that denotes its manifestation in this domain as part of a wider cultural trend toward privatisation, surveillance, and the commodification of health (Cosgrove & Karter, 2018; Fisher, 2007). Critics suggest this in part, involves an implicit production of a 'rationality' sustained by discourses that place the subject as responsible for their own health in conjunction with the normalisation of an increased monitoring of bodies with macro-technologies (e.g., tools for screening diagnostic categories: depression, anxiety, and so on) (Cosgrove & Karter, 2018; Fisher, 2007). Healthcare thus allegedly becomes a product to be purchased, and the patient, a consumer in another aisle of the free marketplace. In connection with this, neoliberalism is implicated as sustaining a biologically reductionist view of mental illness that is primarily amended with chemical intervention, which afford clients an independent 'productive' lifestyle as enabled by their self-government thereby justifying their use (Bettache & Chiu, 2019; Cosgrove & Karter, 2018). This view is termed by some as 'biopsychiatry', a hegemonic discourse that depicts cognitive, affective and behavioural complications as tantamount to diseased brain states, thus shaping mental health services fundamentally (public and private research, treatment, education, and professional initiatives) (Dougherty, 2019). Peters (2019) for example, in her analysis of clinician

interviews at rape crisis centres, illustrates how distress is operationalised as a disease for which the 'infected' become responsible for their own management. Being a common diagnosis for survivors of sexual violence, post-traumatic stress disorder (PTSD), which has been an official diagnostic category since the 1980s, exemplifies as much, given its characteristic focus on intra-individual phenomena (flashbacks, hypertension). This pathologisation of human suffering has been long met with critique, namely highlighting its emphasis on deficit and its obstruction of socio-political context in theoretical explanations and therefore interventions (Peters, 2019); medical neoliberal frameworks have little room for attendance to social or racial inequity despite its centrality in relevance to criminal behaviours, such as sexual violence (Peters, 2019).

Neoliberal ideology is thus ultimately depicted by various critics as expanding beyond mere economic policy, infiltrating mainstream culture and reformatting psychological life (Arfken; 2018; Pickren, 2018; Teo, 2018). In principle the implications are profound, involving the reification of a fundamental individualism, and a palliative orientation toward psychological phenomena that are potentially reflective of harmful power dynamics, intersectionality, and oppression (Arfken, 2018; Teo, 2018). In this way it is claimed the wider system maintains an enabling 'blindness' to its core structural issues. I have here provided a summarised account of key criticisms of neoliberalism and its influence on psychological knowledge production and practice with a focus on the individualism and attached notions of self-governance it espouses. This has not been a comprehensive treatment of this multi-faceted relationship, but rather one intended to highlight the value driven nature of embedded scientific practices and prevailing core assumptions of the nature of agency. Based on the challenges here voiced, there are apparent normative commitments that have consequences for the explanatory paradigms that predominate and the applications that extend from them (Winston, 2018). The following chapter will continue this inquiry as it

directly concerns correctional theory and rehabilitative settings, given the ideological neoliberal climate described, and the insights of an enactive and embedded agency, as illustrated throughout this project.

Chapter Six: Efficacy and Agency in Correctional Practice

Rehabilitative or correctional spaces are governed by the dual function of protecting communities and managing the care of incarcerated individuals (Phelps, 2011). The modern form of 'correction' comes with intrinsic implications, namely that concerned individuals need to be 'corrected' and thus speaks to a utilitarian rehabilitative function: maximising a public good by reducing harm (as opposed to a deontological conception of rehabilitation that emphasise the restoration of rights and responsibilities to those previously deemed morally unworthy) (McNeill, 2012). The theoretical output of forensic psychology is essential to this process, producing the means by which criminal behaviour is conceived, naturalised and intervened. Its consequences are therefore significant, concerning the incarceration and management of those deemed legally 'criminal'. The question then, of how offending individuals who as 'criminals' are theoretically represented, explained and therefore attended, warrants an enduring scrutiny. Since its emergence in the 19th century, psychology has displaced a religious rehabilitation of reflective sinners, with the treatment of the issues within individuals that cause criminal behaviours, mainly understood as products of social learning that could be amended with re-education, a notion famously halted with the cynicism of the late 1960's and 1970's (McNeill, 2012) By then, the state of rehabilitative practice and its foundational notion of 'offender treatment' was increasingly met with opposition, testified by the emblematic 'What Works' project of sociologist Robert Martinson (1974); in this piece a comprehensive review of 231 studies between 1945 and 1967 concluded that the state of rehabilitative practice was ineffective in terms of reducing recidivism (Sarre, 2001). With apparently little supporting evidence, rehabilitation became perceived as flawed in its core assumptions of criminal aetiology, which critics claim overlooked the social and structural origins of crime, as well as its normative nature (McNeil, 2012). Additionally, the exposure of discriminatory practices in correctional institutions

revealed the potential and reality of systematic abuses of power against vulnerable populations (McNeil, 2012). 'Nothing Works' was consequently the prevalent doctrine and attitude towards correctional domains at this time, fuelling an increasing demand for 'scientific' corroboration from forensic researchers and practitioners (Cullen, 2013).

Current practice internationally is primarily informed by the developments of
Canadian psychologists Andrews and Bonta and their colleagues, who advanced the 'What
works' tradition of the late 1970s, with the development of the RNR model on the basis of an
empirically grounded cognitive-behavioural approach to rehabilitation (Berman, 2004; Bonta
& Andrews, 2017; Polaschek, 2012). Since its initial formulation in 1994, the RNR has come
to characterise rehabilitative practice internationally, being applied in Canada, the United
States of America (USA), Europe, Australia and New Zealand (Polaschek, 2012; Ward,
Melser & Yates, 2007). It can be conceived as a practice framework, which generically are
"not intended to replace treatment or explanatory theories, they offer something unique. They
offer program designers a tool for constructing and delivering a range of interventions to
individuals who have committed crimes and constitute an epistemic hub of a kind into which
relevant features of explanatory and treatment theories can be "plugged" into" (Ward &
Durrant, 2021, p. 1). The RNR thus directs rehabilitative practice primarily toward reducing
risk (as opposed to well-being or community-well-being directly). This it does in adherence
to principles of proven association with recividistic outcomes (Bonta & Andews, 2017):

- Risk involves two aspects: the notion that criminal behaviour can be predicted and that
 the level of treatment services should match the risk level of the subject being treated.

 In other words, high risk subjects should receive more intensive services and low risk
 subjects comparably minimal intervention.
- *Need*: needs in this context are referred to as criminogenic needs, those which are significantly associated with recidivism. The so called 'central eight' or 'big eight'

risk factors are those identified in 'The Psychology of Criminal Conduct' as dynamic risk factors that are associated with changes in the likelihood of recidivism, if themselves targeted. In the context of intervention, the argument is that services aimed at reducing recidivism must address criminogenic needs in order to effect change as is the focus of correctional rehabilitation (these include history of antisocial behaviour, antisocial personality pattern, antisocial cognition, antisocial associates, problematic circumstances of home, school or work, a paucity of positive/leisurely activities, and substance abuse).

• Responsivity entails two aspects, general and specific responsivity: general responsivity stipulates that effective interventions are based on cognitive behavioural and social learning theories. Specific responsivity refers to the notion that treatment ought to be congruent with attributes of the subject, for example including interpersonal sensitivity, anxiety, verbal intelligence, or cognitive maturity.

These principles constitute the core of the RNR, to which an additional 15 overarching, organisational and clinical principles have since been added (Bonta & Andrews, 2017). In its entirety, the RNR constitutes the practical extension of the body of empirical and theoretical research known as the General Personality and Cognitive Social Learning Perspective (GPCSLP), most recently formulated in 'The Psychology of Criminal Conduct 6th Edition' (2017). Whatever shortcomings may be addressed, the RNR has been described as an "original substantive contribution to the development of criminal justice assessment, intervention research, programme accreditation and programme integrity" (Polaschek, 2012, p. 8). Since the 'Nothing works' era, this framework has filled the vacuum with a growing array of principles refined with substantial empirical scrutiny (Ward et al., 2007). These originated from the Personal Interpersonal and Community Reinforcement Perspective (PIC-R), a theoretical project that integrates sociological, psychological, and aetiological theories

in order to explain crime at the individual level; social learning theory primarily explicates individual behaviour within this framework, hence the significance of modelling, observational learning, and cognition, which is targeted with cognitive behavioural therapy (CBT) (Bonta & Andrews, 2017). The RNR thus in sum constitutes an empirically supported, theoretical means of guiding rehabilitation that fundamentally caters to the principle of dynamic risk management.

The RNR and Enactivism

With the essentials of the theoretical underpinning of mainstream rehabilitative practice provided, an imminent question might concern its efficacy; what can be said in sum is that outcomes are modest, yielding weak effect sizes and entailing significant issues pertaining to client engagement and completion (Klepfisz, Daffern & Day, 2016; Lipsey & Cullen, 2007; Schmucker & Lösel, 2015; Ward, 2019). While this cannot be attended exhaustively within the scope of this project, key critiques include the fact that the fundamental approach of risk assessment misapprehends the process of desistance, instead treating crime itself as a dependent measure of evaluating the success of our programmes (McNeill, 2012). Reconviction fails to reflect positive change or behaviour because it more accurately measures detection of criminal activity, which itself entails a certain occurrence of events (witnessing, reporting etc.); these are removed from the desired notion of a positive shift in identity, that is, desistance from crime and primarily underly the enforcement of legal norms (McNeill, 2012). The constructed nature of crime itself has already been addressed as determined by collective notions of morality that are codified and implemented in a given time and space. Because of this, 'crime' and its related constructs such as offence and offender types, which are of utility to current judicial evaluation and process, are a limited lens of explaining behaviour for psychologists (Ward & Carter, 2019; Ward, 2020). Thus because the 'risk paradigm' foundationally depends on crime (the fundamental notion of risk

is relative to criminal outcomes) and offence-related frameworks in explanation and application, it has borne a host of theoretical criticisms; Ward (2020) has described this state of the field as one of 'theoretical illiteracy' due to the following key elements:

- A misdirected focus on crime; explanatory theories should not focus on offence, crime or similar categories. Because crime is a psychologically arbitrary construct, its related categories yield limited explanatory value because they fail to track coherent phenomena, social or psychological processes out in the natural world. Criminal outcomes result from a mix of psychological, social, and contextual factors that reflect issues running deeper and wider than offence driven explanations are likely to yield. Better explanatory and therefore treatment targets would be gained by appealing to current theories of human functioning more generally (Dent et al., 2020).
- Dynamic risk factors entail an array of theoretical issues for example including their vague, incohesive, and composite nature (Heffernan, Wegerhoff & Ward, 2019; Ward, 2019; Ward & Beech, 2014; Ward & Fortune, 2016; Strauss-Hughes et al., 2019). The need principle of the RNR lends primary attendance to seven of the 'central eight' risk factors in correctional treatment and therefore case formulation, (seven of the eight are dynamic and therefore receptive to change, as opposed to the static 'criminal history'). These are well established amalgamated correlates with a history of application in risk assessment and prediction, which has led to their import to the explanation of criminal phenomena (Ward, 2019). According to Bonta and Andrews (2017), these factors have a cumulating effect on the outcome of offending, alongside the immediate situation and distal factors, which influence the perceived rewards and costs of a given criminal action. In this fashion, DRFs have been imbued with causal status by RNR proponents, a principle subject to a variety of criticisms (Ward, 2019). Namely, dynamic risk factors cannot be said to simply cause crime

(rather functioning as markers of causality), nor is there substantive evidence of association with desistance from offending (Heffernan et al., 2019; Ward & Fortune, 2016). They are better conceived as collections of various factors associated with criminal outcomes. Being the "children of risk prediction", this makes sense; their multifaceted nature has no bearing on their predictive success, but theoretical explanation requires a good deal of disentangling in order to illustrate a coherent set of causes underlying and causing crime related problems (Ward & Fortune, 2016, p. 80). Despite their limited explanatory value however, they ultimately serve the dual function of prediction and explanation within correctional research, program development, and treatment delivery (Ward & Fortune, 2016).

• Creating distinctly forensic classification systems obstructs practice and research from mainstream knowledge about human agency (Dent et al., 2020; Ward & Carter, 2019). For forensic psychologists, key classification systems involve offence type which for example, can determine the allocation of programme types for offenders such as an Intimate Partner Violence (IPV) programme in response to a domestic violation. The present criticism is that this framework is conceptually thin, given the basis of solitary criminal outcomes. Groups of individuals convicted of crimes are often varied psychologically, having little more in common than the commitment of a single behaviour (Ward, 2020; Ward & Carter, 2019). This means that important differences useful to explanatory and executive ends become overlooked by insensitive treatment strategies. Risk bands (categorising by level of low, medium, or high risk) and DRFs are unlikely to resolve this issue for reasons summarised above.

The RNR is thus here argued to constitute a practice framework that is data driven in that its central currency is dynamic risk factors, statistical tools that suffer from a dual function problem (Ward & Fortune, 2016). In its explanation beyond these, the GPCSL depends

primarily on social learning theory and portrays behavioural outcomes as situated in relation to probabilistic risk factors, more specifically the aforementioned 'central eight' (Dent et al., 2020). Cognition is thereby represented as an exclusively internal process, directing attention inwards toward higher level reasoning processes or features (beliefs, attitudes, and so on) as abstracted from the goal driven nature or phenomenological nature of human agency, which is alternatively reduced to a statistically determined mechanism (Dent et al., 2020). This leaves minimal attendance to affective, embodied, or relational components that we have seen expounded under an enactive perspective, which reformulates cognition as the dynamic interplay between brains, bodies and environments (Reid & Mgombelo, 2015; Ward, 2017). By this account, agents are not passive recipients of probabilistic forces, but themselves action oriented to meet biological and psychological goals, as guided by their holistic pre-theoretical cognitive-affective processes and features of their environments (Dominey, Prescott, Bohg, Engel, Gallagher, Heed, Hoffman, Knoblich, Prinz, & Schwartz, 2016).

This relates to a core issue in the exclusive emphasis of (criminally) behavioural outcomes in explanations of crime itself; because agents are goal driven in the action they effect, a narrow focus on criminal outcomes is likely to preclude a broader understanding of the life worlds agents operate within, the context in which these behaviours and habits are formed, the goals they aim to fulfill, and therefore how they may be redirected. Criminal action may reflect a broad array of motivations and functions across a variety of lives, which vary in accordance with the history of embodied and embedded agents (Dent et al., 2020). Regardless, forensic psychological practice remains directed on the basis of crime-based categories (offence types), using broad amalgamations of environmental, cognitive and, interpersonal correlate clusters (DRFs) towards strictly internal intervention targets (Ward, 2021). Explanations on which rehabilitative practice depend are in this way

relatively weak, given a characteristic exclusion of embeddedness and embodiment, and the meaningfully enacted nature of action and therefore crime (Dent et al., 2020). All such components are excluded in explanation by the GCPSL in its theoretical internalism: which informs an approach that targets criminal behaviours without aiming to understand their functions in the lives of those ideally rehabilitated.

Practice itself primarily entails the application of CBT (Bonta & Andrews, 2017). Its defining principle is namely to intervene upon the cognitions (attitudes or thinking patterns supportive of offending) of the individuals attending programs, and equip them for cognitive self-management, thereby driving more prosocial behaviours outside correctional contexts (Berman, 2004; Strauss-Hughes et al., 2020). This reflects the traditional model of cognition that characterises correctional science, which portrays behaviour as driven primarily by brain-bound 'cognitive processes', maintaining a chronic divide between cognition and affect (Ward, 2017). Indeed, theoretical treatment of affect in this domain is notably limited in contrast with progressive conceptions of affect, such as those described in former sections of this paper. Emotion is alternatively conceived in primarily negative terms as something that causes deviation or overwhelms an otherwise 'rational' mental state (Davis, 2018; Ward, 2017). Accordingly, practice and treatment are mainly concerned with regulating the influence of negative emotions in their tendency to dysregulate or disinhibit or otherwise implicitly exclude affective elements of functioning from the process (Davis, 2018; Ward, 2017).

To illustrate, the *Reasoning and Rehabilitation* program is a typical and widely delivered cognitive behavioural program that aims to teach skills and values that are requisites of prosocial competence and challenge antisocial behaviour (Berman, 2004). It relies on the assumption that individuals who have offended do not possess the necessary social and cognitive skills to navigate daily demands prosocially (Ross, Fabiano & Ewles,

1988; Berman, 2004). Therapeutic targets include deficits such as impulsivity, which it defines as a lack of reflection about the consequences of behaviour and therefore high responsivity to immediate ideas and thoughts (Davis, 2018; Berman, 2004). Because of the theoretical assumptions of the basis of programs such as these, treatment targets are traditionally 'cognitive' features such as thoughts, beliefs, desires, and so on. However, for an enactivist, impulsivity for example, must involve affect to convey a felt importance and desirability to motivate (a problematic) action due to the way a given situation is affectively framed. Maise (2014) for example theorises with respect to the impulsivity exhibited by individuals with psychopathy, that a deficit in affective framing is part of the causal picture, leaving them unmoved emotionally in their deliberations and more prone to certain forms of wrongdoing.

Despite the central role of affect in cognition, it is a mostly excluded and misunderstood component in correctional settings due to the fundamental assumption that it is thought that primarily drives behaviour and that emotions are peripheral (Davis, 2018; Ward, 2017). As previously illustrated however, an agent's affective experience of themselves and the world, is a constant and central aspect of phenomenology and the process of serving action (Dent et al., 2020). Agents make sense of their worlds through their affective embodied experience; an agents affective orientation shapes the way they highlight and interpret their surroundings and carves out future possibility, a gateway for further cognitive processes of reasoning and deliberation to commence (Maise & Hanna, 2019). Agency is therefore in part constituted of a core affectivity outside of strictly 'cognitive' processes that guides and constrains possibilities of action in accordance with fundamental goals, a resource overlooked in a practice framework that is ultimately non-agential in its treatment of individuals (Dent et al., 2020).

The Good Lives Model

As part of the theoretical picture of correctional science, it is useful to outline the Good Lives Model (GLM) which is an alternative practice framework developed in response to the prominent emphasis on risk reduction inherent in rehabilitative practice currently and over the past 30 years (Ward & Fortune, 2013). In relation to the theme of this thesis, the GLM is a strength-based approach that attends to the aspirations and abilities of individuals and directs practitioners to help them obtain the social and psychological resources necessary to achieve personally meaningful goals (Ward & Fortune, 2013). It is an alternative to the RNR that maintains principles of risk, need and responsivity, and espouses an empirical treatment coupled with a grounding in the concept of human dignity and universal human rights (Ward & Fortune, 2013). Drawing on principles of anthropological, social, biological and psychological findings, the GLM relies on the assumption that all agents are goal directed in their pursuit of primary and secondary goods; primary goods are outcomes sought for their own sake, while secondary or instrumental goods are the means of these. For example, learning to play the piano in order to attain the primary good of a creative capacity. The authors of the GLM propose that all individuals to some degree strive to obtain among 11 primary goods, varying in accordance with their differences in life experiences and core values (healthy living and functioning, knowledge, excellence in work, excellence in play, excellence in agency, inner peace, friendship, community, spirituality, pleasure and creativity) (Ward, Yates & Willis, 2011). With respect to offending, this framework distinguishes between direct and indirect pathways; a direct pathway refers to cases of criminal behaviour actively exerted in order to achieve primary goods. For example, committing violence toward a family member in order to attain a sense of autonomy. Indirect pathways refer to cases where individuals have attempted to obtain primary goods with maladaptive strategies, causing a ripple effect toward criminal behaviour, such as tension emerging between the pursuit of intimacy and autonomy (this could lead to states of

loneliness which invoke substance consumption and in turn increase the probability of a criminal outcome for example) (Ward et al., 2007; Ward et al., 2011)

Criminogenic needs (RNR constructs) in this context become external (antisocial associates) or internal (impulsivity) obstacles in an agent's pursuit of primary goods: antisocial associates for example provide the realisation of belonging and community. The GLM thus advocates that practitioners direct intervention in accordance with 'good life plans' that are reflective of a given agent's core values and goals; within this framework, individuals who have offended are not othered, but assumed to function as all agents do, actively driven by personal values and goals (Ward et al., 2007; Ward et al., 2011). The overarching objective is to equip individuals with the resources (skills, knowledge, opportunity) to achieve their primary goods prosocially and legally. There is thus a clear alignment with enactive notions of an action-oriented and co-dependent agency, given theoretical and practical attention devoted to external resources and scaffolds necessary for the personal realisation of a variety of skills and goals (Davis, 2018; Dent et al., 2020). Ward (2017) one of the authors of the GLM himself highlights this congruence, in that exploration of what agents care about necessarily involves considerations of negative and positive affect, and the evaluative framing patterns from which action proceeds. On this basis, proponents suggest that enactivism offers a rich theoretical resource or rehabilitative practical approaches that incorporate the agency of individuals and their functioning with their *Umwelt*, their affective worlds (Davis, 2018; Dent et al., 2020; Ward, 2017).

Neoliberalism and Correctional Practice

Neoliberalism has been outlined in this project as a global political-economic ideology that is in part characterised by an emphasis of market-based values, an atomised and individually driven agency which is attached to norms of exclusively personal accountability on this basis (Kramer, Rajah & Sung, 2013; Maiese & Hanna, 2019). It is submitted as

deeply entrenched, constituting the common sense of mainstream culture and therefore embedded and institutionalised within justice and penal systems internationally (Bettache & Chiu, 2019; Dougherty, 2019; Maiese & Hanna, 2019; Pickren, 2018). If such premises are accepted, the context of work and practice for forensic psychologists is fundamentally shaped by neoliberal assumptions and policies, including principles of individual responsibility for mental well-being, behaviour, poverty, inequality, and ethnic discrimination (Teague, 2016; Goldberg, 2009). The 'criminal' that the forensic practitioner intends to rehabilitate, is of course, part of a criminal justice system in which individuals are evaluated as to the extent they might be held accountable for their criminal behaviours (Waller, 2011). Guiding decisions in these contexts are 'folk' notions of responsibility that tend to depend on agents' possession of certain cognitive capacities to be held accountable or responsible for their behaviours (Baron, 2019). These enable a necessary receptivity to a variety of reasons (including moral reasons) to act and entail a historical element by which agents are attributed and ownership of self (Hirstein, Sifferd & Fagan, 2018). In other words, agents necessarily intervene upon their dispositional selves across time, which moulds their responsivity to certain reasons above others in accordance with the decisions they make (Waller, 2011). Thus, because of our capacity to shape ourselves in this fashion, we are rendered responsible for the dispositional selves we are and the behaviours we produce (Histein et al., 2018; Waller, 2011). Accounts such as these are alleged to firmly ground compatibilist views of responsibility, which is therefore preserved in the context of a deterministic universe (Hirstein et al., 2018). Accordingly, even if an agent cannot then possess the ability to have done otherwise (with respect to any given act), their agency and therefore responsibility is preserved due to their ability to intervene upon themselves diachronically (Hirstein et al., 2018; Waller, 2011).

It is on such notions that criminal responsibility is roughly based and emphasised by neoliberal ideology, which depicts offending individuals as wholly culpable for their actions (Waller, 2011). Thus, the generic principles of individualism and self-government, translate to an exclusive focus on internal or personal factors that arguably fail to address and conceal or minimise considerations of structure and social inequality in explanations and therefore reactions to crime; to concretise this idea, Kramer Rajah and Sunget (2013) for example provide an analysis of cognitive behavioural programs in which correctional officers are demonstrated to transmit ideological tenets with an embrace of exclusively individual responsibility, while downplaying the significance of broader socio-economic factors in their obstruction of employment opportunity for their clients. Broader power imbalances of the social-structural kind thus become irrelevant in the face of the individual capacity to make choices, on which punitive responses to crime can be justified (Teague, 2016; Goldberg, 2009; Wacquant, 2009). It is argued by some critics that cognitive behavioural programs are themselves grounded in broader discourses that define the self as "responsible" and "law abiding, thereby othering and explaining criminality in terms of personal deficiencies while failing to address significant structural barriers to reintegration (Kramer et al., 2013). In principle the notion that rehabilitative practice sufficiently entails targeting internal cognitive features of individuals inside correctional facilities, legitimates a fundamental exclusion of material and social contexts in understanding criminal outcomes and agency (Kramer et al., 2013). This presents a problematic image of correctional psychology, one that depicts its primary therapeutic response (CBT) as complicit with broader neoliberal principles, given the availability of alternative theoretical means of understanding and attending to human agency. As Smail (2005, p. 1368) notes in his piece, 'Power, Interest and Psychology', "in order to maximise its effectiveness, consumer capitalism, the engine of profit, needs to detach individuals from an accurate understanding of, and significant influence within, the social

and material environment they occupy". Psychology, he argues is an instrumental tool of ideological power in this respect, alluding to a historically operationalisation of mental distress as solely individual and internal, deeming material relations between individuals and society irrelevant: the internal world of disembodied cognition becomes the targeted space of intervention (Smail, 2005). According to this view practices such as CBT are flawed in their tendency to frame material circumstances as psychological conditions and thereby neglect the impact of distal ideological forces that reflect the interests of the powerful in society (Smail, 2005). There may therefore be good reason to worry over the role and impact of forensic psychologists as embedded in an ideology described in this project, in its conception of self and therefore crime. Given the aforementioned state of 'theoretical illiteracy' within correctional psychology, there remains minimal incorporation of theoretical perspectives that illuminate elements of human agency beyond a basically cognitive-driven model, which is thereby more easily recruited alongside neoliberal notions of function. If it is posited and generally reified by correctional science that criminal action is sufficiently explained in terms of internally and individually realised cognition, then principles of exclusive responsibility and rehabilitation on this basis appears reasonable, as does a characteristic abstraction of self from material and social contexts.

As has been illustrated in contrast, the enactive paradigm presents a fundamentally different image of human function, one that contradicts the neoliberal image of self in its presupposition of a profound dynamic co-dependence between agents and their worlds; accordingly human identity becomes genuinely relational as opposed to egocentric and firmly embodied and thereby embedded in a social-material context and environment (Dominey et al., 2016; Kyselo, 2014; Reid & Mgombelo, 2015). Indeed, if such propositions are to be taken seriously, they presents issues for the state of correctional science as described in this thesis and the individualism with which it is complicit. Namely, from an action-oriented and

enactive perspective, a "human being is not an isolated individual responsible alone for his/her destiny, but rather a member of a grounded cultural system" (Dominey et al., 2016, p. 355). Given that mainstream correctional practice currently entails the application of CBT within an exclusively risk oriented framework, in conjunction with the application of a socially significant label 'criminal', it might be described as fundamentally palliative. It directs rehabilitative efforts exclusively on the basis of deficiency as abstracted from context and core elements of ourselves as human agents. Enactive principles alternatively demand attendance towards the person beyond the act, grounding our 'selves' in the phenomenological, embodied, affective experience of agency, and outward toward the environments and socio-cultural contexts in which habits of body and mind might be changed and scaffolded toward prosocial outcomes (Davis, 2018; Dent et al. 2020; Ward, 2017).

I suggest that there is an important distinction between principles of a co-dependent, embodied, and fundamentally social agent, and the individual personally driven 'criminal'. A redirection of behaviours within enactivism necessitates understanding criminality as part of the goal driven nature of agents, in their socio-cultural and material context of functioning. This presents issues for a system that appears punitively inclined to understand crime as a primarily individual, and not social or material, issue (Teague, 2016; Wacquant, 2009). Such individualism has indeed been noted among many elements to be constitutive of the problematic treatment of culture in correctional contexts, where an over-representation of indigenous groups is typical in neoliberal nations with colonial histories (Beck & Blumstein, 2018; Korn, 2003; Primm, Osher & Gomez, 2005; Strauss-Hughes et al., 2019; Weatherburn, Fitzegerald & Hua, 2003). In Aotearoa for example, the Māori people lived for over a millennium before being dispossessed as a result of the colonising practices of mainly British interests (King, 2003; Marie, 2010; McMullan, 2011; Strauss-Hughes et al., 2019). Currently they make up approximately 15 percent of the general population, but half of the prison

population (Strauss-Hughes et al., 2019; Mcintosh, & Workman, 2017; McMullan, 2011; Williams, 2019). Given historical contexts of this kind and the structural forces they reflect, to theoretically understand and respond to crime exclusively as constituting internal issues of individuals is narrow and manifestly unjust. Arguably, this view precludes a recognition of the inequality that colours the marginalisation of distinctive cultural groups and the fundamentally shaping effect of culture itself. Individuals are not, as neoliberal ideology would purport, abstract, exclusively autonomous, and self-driven, but equally a refraction of socio-cultural space-time, co-dependent on their environments to realise the types of prosocial outcomes rehabilitative practice aims to facilitate (Smail, 2005). Therefore, it is only with an extra-individual inclusion of socio-economic context coupled with a rich conception of culture that explanations may better represent criminal outcomes and facilitate pro-social trajectories. As expounded, humans are fundamentally acculturated agents in that they are comprised of physical and psychological habits that reflect their normative conditions of development and function (Dent et al., 2020; Maise & Hanna, 2019; Strauss-Hughes et al., 2019). They are influenced throughout their development and lives, through the institutions to which they are borne and belong (Maise & Hanna, 2019; Zawidski, 2018). Culture is thus a profoundly shaping force and a central aspect of an agent's sense-making in the world, constituted of consolidated affective-framing patterns that make up embodied affective and habitual means of interpreting personal significance (Dent et al., 2020). Mainstream correctional science however, remains limited in its treatment which in essence relegates culture to a 'responsivity' principle, an element that affects treatment engagement based on group membership; it thus becomes peripheral to biological, psychological, and social aspects of criminal behaviours (Dent et al., 2020; Strauss-Hughes et al., 2019).

Ward (2020) notes that, among the dangers of ignoring good theoretical practice, is an increasing dogmatism regarding current theories in place, a tendency to view science as

strictly empirically driven and a resilience to epistemic pluralism (this is the notion that in scientific practice it is appropriate to incorporate various theoretical perspectives of the same phenomena at the same or different levels of explanation). Naturally, different means of understanding human functioning may bear differently on the 'common sense' of prevailing ideology and in its theoretically limited and risk-oriented treatment of agency, dominant rehabilitative practice services principles that are characteristic of neoliberal ideology; a conception of mind that is disembodied and abstract. Due to its theoretical illiteracy, correctional science is largely divorced from the insights and implications of enactivism that depicts agents as fundamentally shaped by their material and social environments; a principle at odds with neoliberal assumptions of an agency understood as insulated and individually driven (Kramer et al., 2013). Understanding agency as relational and subject to socio-cultural forces beyond traditionally cognitive events, clearly complicates dominant conceptions of the abstract individualism reified by judicial process and exacerbated within a broader neoliberal ideology. It reminds us that individuals who have offended, are like all of us. Thoroughly shaped and entangled in our respective socio-cultural and material context which constrains and shapes ourselves and agency accordingly (Dominey et al., 2016). Though individuals are putatively held equal before the law, society itself is transparently unequal in its provision of opportunity and resource to sustain a 'good life', which varies in accordance with the embodiment and socio-economic embeddedness of individuals. In a system entrenched in a cultural logic that centralises, disembodies, and individualises agents, enactivism constitutes an essential alternative theoretical perspective and resource for forensic practitioners, who otherwise operate on the basis of a mono-theoretical risk-oriented framework that offers no contradiction to prevailing neoliberal assumptions (Adams et al., 2019; Beattie, 2019; Maiese & Hanna, 2019; Peters, 2019).

Chapter Seven: Conclusions

Enactivism is a contemporary account of cognitive science that illustrates agency as constituted by embodied cognitive-affective systems, embedded in their socio-cultural contexts that shape the way they make sense of the world and themselves (Dominey at al., 2016); Kyselo, 2014; Maiese, 2018; Maiese & Hanna, 2019). While dominant views of mindedness have typically centred on brain bound cognitive events, enactivism reformulates cognition as an action-oriented process of establishing relevance and meaning in the world in order to adapt (Dominey et al., 2016). Agents accordingly become grounded in the phenomenological lived experience of their bodies with which they remain in constant engagement with the social and material world in order to meet their needs, as determined by their history as a brain-body-environment system (Dent et al., 2020). As illustrated, they are further proposed to be fundamentally social and shaped by prevailing cultural ideology through the institutional influence they bear across their lives (Maiese & Hanna, 2019). On this basis critical theorists allude to the toxic impact of neoliberalism in which modern contemporary society is entrenched; this has been described as a global 'common sense' or cultural logic of Western capitalism, characterised by principles concerning the human condition, as well as social and economic management of society (Bettache & Chiu, 2019; Maiese & Hanna, 2019). Specifically, as depicted in neoliberal ideology, society is atomised, comprised of abstracted, disembodied, and autonomous minds, who are thereby held individually accountable on this basis (Maiese & Hanna, 2019; Peters, 2019). I have thus aimed to situate correctional science and rehabilitation in context of the biases neoliberalism has been claimed to reinforce in psychological theory and practice, when considering perspectives and treatment of agency in comparison to enactive principles of function.

As detailed in this thesis, the current efficacy of rehabilitation broadly speaking is modest in terms of achieving recidivistic outcomes, and fundamentally flawed theoretically

(Klepfisz, Daffern & Day, 2016; Dent et al., 2020; Ward, 2020). Practitioners are guided by a mono-theoretical practice framework (the RNR) driven by an emphasis on risk reduction and armed with risk prediction tools as a means of explanation (Ward, 2019; Ward, 2020). CBT being the primary tool of practice, is thereby directed towards cognitive deficiency and management on the theoretical basis of the GPCSL. Correctional science is thus insulated from broader theories of human functioning due to this preoccupation with risk (Dent et al., 2020; Ward, 2020). Consequently, despite the fundamental goal of rehabilitation, the agency of individuals we aim to reintegrate in our communities is represented in narrow terms (Dent et al., 2020). Cognition is operationalised as thoroughly internal and disembodied in an exclusion of affect, culture, and context in explanatory and therefore practical ends (Davis, 2018; Dent et al., 2020; Ward, 2017). Contrarily, enactivism presents crime like all action, as part of the sense-making in which all agents engage, therefore fulfilling adaptive ends relative to the normativity of core values and goals (Dominey et al., 2016). It therefore reinforces the logic of explaining and changing criminal outcomes on this basis; classifying behaviours in terms of their functionality and directing practice towards facilitating agents' capacity to act adaptively and prosocially in the contexts of their communities.

In its insulation from alternative theoretical resources such as those offered by contemporary cognitive science, it is claimed that RNR driven practice negates the foundational cognitive-affective engagement of agents upon their socio-cultural and material worlds; the scaffolded and acculturated nature of mindedness. I argue that the depiction of agency offered by such notions is in opposition to the assumptions neoliberal ideology is purported to entail; in this thesis these have included notions of an abstracted and insulated agent, who is thereby held solely responsible and intervened upon in psychological contexts (e.g., medical neoliberalism and its treatment of mental health) (Cosgrove & Karter, 2018; Fisher, 2007). With respect to crime this fosters an understanding in terms of deficient

personal choices, precluding broader historical cultural contexts that are characterised by historical and structural inequality (Kramer et al., 2013; Strauss-Hughes et al., 2019). For forensic psychologists not to be complicit in this image they must provide explanations that exceed internal disembodied features of individuals as removed from the environments in which they ultimately need to participate prosocially. An enactive perspective promotes the principle of attending to agents in the context of their lives, where they function in their environments as complex dynamical systems (Dent et al., 2020). By decentralising intrapersonal features of agents, it necessarily incorporates a socio-cultural environment and context as part of explanation and directs practical consideration to internal and external barriers to living an adaptive and prosocial life. It thereby challenges an abstraction of mind and provides essential iteration of the fact that crime is not an exclusively individual issue, but one of societies and their management.

In sum, the theoretical state of correctional science has been outlined as stagnant and consequently implemented on the basis of thin and peripheral conceptions of agency, "a nonagential treatment, modular account of human functioning with little regard to an individual's first-person, subjective understandings of their own actions" (Dent et al., 2020, p. 19). Due to its malnourishment in this respect, forensic practitioners operating mono-theoretically on the basis of the RNR are ill-equipped to provide explanatory alternatives to prevailing normative assumptions of human function and agency. In their inaccuracy and individualism, they are conversely at risk of reifying atomistic conceptions of crime. The notion of a 'criminal', which reflects the law's understanding of responsibility in its treatment is one criticised by various scientific and philosophical accounts of mind, in part as limited in its narrow focus on the causal role of mental states (Morse, 2015). Correctional science however need and ought not be constrained by such conceptions. While cultural political-economic ideological notions and structures extend far beyond the purview of correctional psychologists and can only be

addressed by multiple levels of scrutiny and change across society, the explanations they nonetheless provide are integral to understanding and responding to crime (Strauss-Hughes et al., 2019). As fostered on poor explanation, dominant correctional theory and practice remains complicit with ideological presumptions of function, as opposed to those yielded by authentic scientific attendance (Dent et al., 2020; Ward, 2017; Ward, 2020). There is thus an essential need for forensic practitioners to incorporate and look to theoretical resources outside the presently dominant practice framework (RNR) such those offered by and based on enactivism. As argued in this thesis, this can shift our explanatory focus beyond ideology and toward a view of human functioning based on our best science. We are creatures of context, meaning, and culture, as well as agents.

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