



## Issues pertaining to expert evidence and the reasoning about punishment in a neuroscience-based sentencing appeal



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### ABSTRACT

In this paper, we focus on, a significant Australian sentencing appeal in which, after hearing expert evidence pertaining to cognitive function, brain scans, and neuropsychological testing, the Court imposed a less severe sentence than that originally imposed. Our aim is to produce an interdisciplinary critical analysis of the decision, and we approach this by analysing the judicial comments on the evidence pertaining to the offender's mental condition, and the reasoning about punishment. We conclude that the Court's inferences about frontal lobe damage and likely dementia are contestable, and the reasoning about mitigation of punishment based on these questionable inferences could have been improved by a focus on sentencing's retributive aim.

### 1. Introduction

In this paper, we critically analyse, *R v Lepore* [2013] SASCFC 13, a South Australian sentencing matter involving discussion of expert evidence derived from neuroscience. In this appeal, after hearing expert evidence in support of a mitigation claim that addressed tests of cognitive function, the results of a CT scan and neuropsychological assessment, the Court found the offender to have frontal lobe impairment and likely dementia. As a result of this it, reduced the punishment from a custodial to non-custodial sentence, touching on issues of moral agency.

Our analysis is drawn from two perspectives: an evidentiary perspective which focuses on the inferences drawn by the court, about the offender's moral agency, and a perspective which evaluates the reasoning in the judgment in relation to the purposes of punishment. We argue that both approaches reveal problems with the decision. The

analysis of this case also draws attention to some more general issues with the way the law deals with impaired moral agency. Prior to our analysis we will outline some of the motivation for the analysis and explain why this particular case was chosen.

### 2. Our approach

Our analysis is a contribution to neurolaw, the field of academic study which focuses on the way that law does, or should, respond to evidence derived from neuroscience.<sup>1</sup> Whilst there are contributions from other countries,<sup>2</sup> to date, much of the published work in the field has come from the USA.<sup>3</sup> This paper is a contribution to the relatively small body of knowledge about how such matters are treated in Australasia and offers a critical perspective on an important Australian case which was identified from the Australian Neurolaw Database.<sup>4</sup> It addresses evidentiary, legal and ethical concerns.<sup>5</sup>

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<sup>1</sup> Scholars who have addressed neurolaw questions include lawyers, philosophers, psychologists, psychiatrists, behavioural geneticists and neuroscientists. To appreciate the diversity of those engaged with such questions, see Francis X Shen's Law and Neuroscience Bibliography <http://www.lawneuro.org/bibliography.php> and Shen (2010).

<sup>2</sup> For examples see Catley and Claydon (2015), Sirgiovanni, Corbellini, and Caporale (2016) de Kogel and Westgeest (2015).

<sup>3</sup> For examples see Farahany (2016) and Denno (2015).

<sup>4</sup> The Australian Neurolaw Database is joint project between Macquarie University and the University of Sydney and was the source of the case for this analysis. See <https://neurolaw.edu.au/>.

<sup>5</sup> For an example of some Australian work see Houston and Vierboom (2012) and Bartlett, Hall and Carter (2013).

We chose to analyse *R v Lepore* [2013] SASCFC 13 ('*Lepore*') for four reasons. First, it is a case where the discussion of neuroscientific evidence had a very significant role in the outcome of the decision. In many cases involving neuroscientific evidence, it is unclear what, if any, impact the evidence had. However, in this case the impact is clear as it was introduced on appeal and thus the outcome of the appeal can be compared with the outcome of the initial sentencing. Second, this was a decision of a superior court (the decision was from the South Australian Court of Criminal Appeal which is the highest criminal court in the state hierarchy) and the neuroscientific evidence formed the basis of the appeal. The only higher court in Australia is the High Court, and it has not heard a sentencing appeal that is based primarily on issues relating to evidence derived from neuroscience. Third, the appellate decision is a joint decision of three judges and can thus be considered to be one that has received substantial consideration by the judiciary.<sup>6</sup> Fourth, the analysis of the judicial reasoning in the case usefully highlights some broader issues raised by the use of neuroscientific evidence in sentencing matters, and ethical issues relating to the way that the law treats impaired moral agency.

Walvisch and Carroll (2017) have urged that judges ensure that "expert evidence is soundly based, relevant and clearly focuses on the link between the offender's mental condition and the particular principles that are in issue" (2017:25). The aim here is to question whether this occurred in *Lepore*. Our analysis of this significant case can serve to identify some pitfalls in drawing inferences from expert witnesses, and problems with reasoning about punishment that may also appear in other decisions.

The evidentiary aspect to our critical analysis takes place in the form of an evaluation of the inferences of the Court about the offender's capacities as a moral agent. This analysis is psychiatric in orientation. The evaluation of the reasoning with respect to the purposes of punishment is informed by some of the discussions of moral agency and punishment that are to be found in legal theory, ethics, empirical findings about the aims of punishment, and relevant case law. Thus, the overall aim is to address the merits of the decision from two perspectives - one which is evidentiary, and one that examines the way that punishment is justified - and thereby produce an interdisciplinary critical analysis of the case.

It is important to note that the second perspective, the reasoning about punishment, can be divided into two parts. In critically analysing this reasoning we consider both a perspective that is *internal* to law, which considers whether the judges have followed the law as it stands, and a perspective that exposes the legal principles that bear upon the case to scrutiny in light of moral principles and concerns about the efficacy of the legal principles.

To summarise our approach one might say that it is one that highlights concerns that relate to the inferences made from the evidence in this case, concerns about the way that the judges have decided it in light of the existing legal principles that bear upon the decision, and concerns about the content of the relevant legal principles themselves.

A limitation of our analysis is that we do not have access to all of the evidence that was available to the courts and so the issues we identify relate to the inferences and reasoning as revealed in the sentencing decision.

### 3. *R v Lepore*

Mr. Lepore pleaded guilty to a number of charges including one count of indecent assault and two counts of aggravated assault. He appealed against sentence after the District Court sentenced him to two years and two months imprisonment (with a non-parole period of 10 months). The facts of the case reveal an offender with a very late first contact with the penal system.

#### 3.1. *The facts*

Mr. Lepore was a 76-year-old married man with no prior convictions. In September 2010 he pulled his car to the side of the road to offer a lift to a young woman - W. She refused, but four months later he saw her again, using a public telephone. He walked into the telephone box and, over the course of short period, touched her buttocks and breasts, offered her money to have sex with him, and then offered her \$400 not to tell the police. Four days later Mr. Lepore was arrested and granted bail. Over the next two days he sought out W in violation of his bail conditions, angrily asking her why she had reported him and then threatened her two primary-school-aged children as they walked to school, attempting to pull them into his car.

At the original sentencing various medical reports were received by the court but none identified any condition that might explain his criminal behaviour. A psychiatrist who had seen Mr. Lepore for eleven years expressed his opinion that he was of low intelligence and that he "suffered from anxiety and stress, but that he had no mental illness" [15]. The judge did not suspend the 10-month sentence he imposed.

In gaining the appeal, the defendant sought to adduce evidence that was not before the sentencing judge that raised the possibility that Mr. Lepore had dementia. The Full Court allowed the appeal noting that the trial judge had "thought it quite extraordinary" that the defendant would offend in this way, and it may have involved "some 'psychiatric trigger'" [30].

The new evidence consisted of a number of new reports. The first was a second report from Mr. Lepore's original treating psychiatrist dated August 2012. He now expressed the view that Mr. Lepore had "a dementing process affecting the frontal lobes" and that this could explain his criminal behaviour.

The second and third reports were from a consultant physician. The first of these, was dated October 2011, seven months after the offences, and was marked "not to be used for medico-legal purposes". In it the physician indicated that Mr. Lepore "scored 25 out of 30 in a test of cognitive functioning" and that a CT scan at that time revealed "some cerebral atrophy". He concluded that Mr. Lepore "may well have an early dementing process" [33]. In a second report, dated September 2012, the physician stated that in October 2011 he had felt the patient had had early dementia and "if further assessment and investigations confirm that he has frontal lobe dysfunction it is likely that this would have led to the disinhibited and abnormal sexual behaviour that he displayed ... when he committed the offences ..." [35].

A fourth new report was from "an experienced forensic psychiatrist". He considered that a SPECT scan and neuropsychological assessment was important to evaluate whether the defendant had an underlying dementing process, but that if the defendant did have frontal lobe impairment this would "raise serious concerns about his mental competence to commit the alleged offences" [36]. Finally, a forensic neuropsychologist concluded in a fifth new report that, Mr. Lepore probably had "moderately severe cognitive impairment" in the context of a vascular dementia. He noted though that, while this might compromise the defendant's ability to "evaluate and comprehend the nuances of another person's behaviour", he would have difficulty accepting that this would extend to the criminal behaviour exhibited in the absence of any evidence of severe disinhibition or impulsivity [37].

#### 3.2. *Decision*

The Court noted that "the medical evidence raises the likelihood of a dementiv [sic] illness" and then concluded that "[t]he defendant suffers from a frontal lobe impairment" and "suffered from a mental condition at the time of offending" and that this helps to explain the defendant's mental state at that time [38]. This conclusion will form the focal point for the evidentiary aspect to our critical analysis in section 4.

The Court then cited two judgements to support the notion that in cases where an offender suffers from a mental disorder the element of

<sup>6</sup> Sulan, Peek and Blue JJ.

general deterrence in sentencing may be diminished and noted that the original sentencing Judge could not have had an opportunity to consider the impact of the disorder during the original sentencing and therefore that the original sentencing discretion miscarried.

In resentencing the Court noted that the defendant's offending was serious, but also took note of his guilty plea, his conduct, personal circumstances, absence of prior convictions and stable employment history. The Court described him as having "good prospects for rehabilitation" and opined that, if adequately supervised, the risk of re-offending was remote [45]. As will be seen later, we will draw into question whether the Court was right to believe that Mr. Lepore's rehabilitative prospects gave any reason to warrant a less severe sentence.

Though the original sentencing Judge had found that the element of general deterrence was tempered by the defendant's low intelligence, the Appeal Court found this should play an even lesser role as his mental impairment was "somewhere between moderate and severe" and that "disinhibition resulting from that mental impairment was a cause of the defendant's offending" [46]. The appeal was allowed and Mr. Lepore's original sentence was suspended on his entering a three-year bond that provided, among other things, that he not leave his home except in the company of his family. In addition to questioning the Court's rehabilitative conclusion, and whilst accepting that the focus on general deterrence gave a good legal reason to mitigate, we question whether it provided a good moral reason to reduce Mr. Lepore's sentence in light of concerns about the efficacy of general deterrence as a sentencing consideration.

Combining both aspects to the critical analysis we will argue that, at least as revealed by the published decision, the evidentiary basis for the Court's conclusion about a frontal lobe impairment affecting Mr. Lepore was weak. We will also argue that, *even if one accepted the conclusion* about mental condition which we have cast doubt over, the reasoning about punishment is also problematic.

If contrary to what we have argued, one was to accept the Court's conclusion about impaired mental condition, we agree that mitigation may be appropriate *but for different reasons than those stated by the Court*. The Court reasoned towards mitigation by way of a focus on the deterrent and rehabilitative aims of punishment. However, we argue that there seems to be little reason to believe that Mr. Lepore had good prospects for rehabilitation and we also argue that a focus on deterrence, whilst legally unproblematic, is questionable for other reasons.

If one were to accept that Mr. Lepore's mental condition was impaired, a viable route to mitigation with both legal and moral merit would have been to focus on the way the impairment diminished his moral culpability for what he did, and to focus on sentencing's retributive aim to suggest that he deserved less punishment. We also argue that there may be other reasons connected with sentencing's retributive aim that would have been viable approaches to mitigation for Mr. Lepore.

In short, one aspect of our interdisciplinary critical analysis of the case, the part which focusses on the psychiatric evaluation of the expert evidence, suggests problems with inferences about evidence, and the other aspect of the critical analysis, the one which focusses on the reasoning about punishment, suggests problems with the normative reasoning that was based on the questionable inferences about facts. We will now turn to the evidentiary issues pertaining to the psychiatric evaluation.

#### 4. Evidentiary issues

There are a number of reasons to doubt the conclusions about Mr. Lepore's moral agency drawn by the Court on the evidence available from the decision. First, the evidence that Mr. Lepore may have had a dementing illness at the time of the offence seems contestable and based entirely on the five new reports tended by the physician, the psychiatrists and the neuropsychologist. The report tended at the original sentencing by Mr. Lepore's treating psychiatrist, who had known

him over a decade, was the most contemporaneous to the crimes and described Mr. Lepore as having no mental illness. It was not until his second report, dated eighteen months after the incidents, that his treating psychiatrist speculates that if Mr. Lepore had "a dementing process affecting the frontal lobes" [sic] that might have been the cause of the incident via disinhibition [34]. He by no means states that Mr. Lepore does have dementia but suggests more testing be conducted to determine whether he does or not.

In his original 2011 report, the consultant physician's conclusions were also tentative. He stated that Mr. Lepore "*may well have* an early dementing process" [emphasis added] [33]. This conclusion seems to have been based on Mr. Lepore's 25/30 score on what we assume was the Folstein Mini-Mental State Examination (MMSE)<sup>7</sup> – a very commonly used 30-point scale – and the finding of "some cerebral atrophy" on CT scan. Though by the time of a subsequent report in September 2012, the physician reported that when he saw him in 2011, Mr. Lepore "*had* early dementia" [emphasis added], not that he "*may well have*" had it. It is not clear from the evidence available why the consultant physician came to believe that this earlier conclusion was insufficiently strong. In fact, on the evidence cited, his original conclusion seems on much stronger ground.

Though the term "cerebral atrophy" likely conjures up images of a withered brain in the lay mind, the reported CT findings are so non-specific as to be nearly meaningless. Depending on its degree, "some volume loss" will be nearly universal among people who are over 75 (Drayer, 1988). Interestingly there is no suggestion of specific frontal lobe atrophy on CT as one might see in a frontal lobe dementia.

One also wonders to what extent their Honours may have been influenced by the score of 25/30 in the test of cognitive functioning. Though a numerical score may sound precise and have the ring of science about it, on its own a score the MMSE means little or nothing.<sup>8</sup> Twenty-five as it happens is not a very low score and to the extent that it is low, the MMSE mainly tests vocabulary, reasoning and memory (Soubelet & Salthouse, 2011); it says little or nothing about impulsivity or disinhibition which appears to be the cognitive issue that the Court seems to feel is the most salient.

The forensic psychiatrist did not, at least in the passage quoted in the judgment, come to any conclusion on the likelihood of a dementing illness. Instead, he considered that a SPECT scan<sup>9</sup> would be useful (although no such scan was tended in evidence) and he recommended neuropsychological testing "in order to evaluate whether the defendant has an underlying dementing process or abnormal brain function", stating the frontal lobe abnormalities might explain Mr. Lepore's crimes if they were evident [36].

The forensic neuropsychologist felt that, when he saw Mr. Lepore, he did indeed show features of vascular dementia, but he clearly

<sup>7</sup> See Folstein, Folstein, and McHugh (1975).

<sup>8</sup> In conducting the MMSE an examiner simply asks the subject a series of questions and gives a series of commands (Folstein et al., 1975). These include inquiries as to the current time (year, season, date, day, month) and the patient's current location (state, county, town, hospital and floor). The commands include requests to repeat and then remember three words, to spell the word "world" backwards or to count backwards from 100 to 65 by sevens. Although these tasks all test very different domains, all are counted equally and the patient loses one point for each mistake made. It would be easy for example for a patient to lose three points when visiting a specialist in his rooms simply because he did not know the suburb of the practice, the practice name and the floor of the room in which the specialist practiced. A patient without proficiency in English might lose five points on the spelling question – as each correct letter is awarded a point – and similarly an innumerate patient could lose five points on the serial sevens.

<sup>9</sup> While CT and MRI scans allow imaging of the structure of the brain, single-photon emission computerized tomography (SPECT) scans allow some measure of the brain's function by estimating the degree of blood flow to different brain parts. Frontal lobe dementia is frequently associated with decreased blood flow to the frontal and temporal lobes of the brain (Rohrer & Rosen, 2013).

minimized the possibility that this could account for his criminal behaviour on the evidence available to him.

In light of these reports (at least to the extent that they are revealed to us in the judgment) the Court's conclusion that Mr. Lepore's crimes were caused by disinhibition due to an (unspecified) mental condition seems contestable at the very least.

All of the forensic psychiatrist's comments quoted seem to be directed at educating the Court on the possibilities "if there is frontal lobe impairment" [emphasis added] [36]. He doesn't seem to be saying that Mr. Lepore has frontal lobe impairment. Similarly, the neuropsychologist, endorsed by the forensic psychiatrist as the expert best placed to judge Mr. Lepore's cognitive abilities, is clear that he believes it is unlikely that any impairment Mr. Lepore might have could explain his criminal behaviour via disinhibition.

## 5. Reasoning in relation to the purposes of punishment

Despite these evidentiary concerns, and for the purposes of analysing the Court's reasoning about the implications of their conclusions mentioned earlier, from now on it will be assumed that the offender did indeed have "a frontal lobe impairment" and "suffered from a mental condition at the time of offending". We make this assumption in order to demonstrate that it is not merely inference from fact that is open to criticism but also the reasoning about punishment.

It will also be assumed that 'disinhibition resulting from that mental impairment was a cause of the defendant's offending' [46] and that the impairment was "somewhere between moderate and severe" [46].

As suggested in section 3, our concerns relate to two of the purposes of punishment discussed by the Court in relation to determination of sentence; rehabilitation and deterrence and one that was *not* explicitly referred to, but which could have been; the retributive aim.

We argue that if the conclusions of the Court pertaining to the dementia are accepted (and we have raised doubts over whether these conclusions ought to be accepted) then there may be a legal case for mitigation, which also has ethical merit, but that is not in accordance with the explicit reasoning in the judgment. The better case for mitigation would suggest that if Mr. Lepore was indeed impaired, he deserved less punishment because the impairment reduced his moral culpability. This goes to sentencing's retributive aim, and we will argue that there may be other reasons which seem connected with the retributive aim that might also support mitigation for Mr. Lepore.

### 5.1. Rehabilitation

Turning now to the reasoning in the judgment, our first issue goes to the offender's prospects of rehabilitation. The Court stated that "[t]he defendant has good prospects of rehabilitation. If he is adequately supervised, the risk of his reoffending is remote" [45]. It was unclear from the decision why the Court came to this conclusion.

Although the Court noted that there was strong support from the offender's family and that they had 'ensured that the defendant is supervised whenever he leaves the house' [14] it is also not clear that this would constitute rehabilitation. According to the Court, the offender had a 'moderate to severe' impairment that led to disinhibition and the kind of offending displayed.

It is not apparent how family supervision would address the impairment, and if anything the supervision appears to be a form of informal incapacitation rather than rehabilitation. It must also be borne in mind that generally, frontal lobe dementias are progressive and this seems to have bearing on the prospect for rehabilitation (Bang, Spina, & Miller, 2015). This issue was not addressed by the Court.

However, the supervision may well bear upon the offender's dangerousness and could bear upon the degree to which there was a need to protect the community. This consideration could point in the direction of mitigation but for a reason unconnected with Mr. Lepore's rehabilitation. Thus, in this case, it seems strange to reason to mitigation

by way of a focus on rehabilitation as it seems that the Court was instead considering ways of managing an offender whose prospects for rehabilitation were poor.

### 5.2. General deterrence

In the decision, there was a more significant discussion of deterrence as a factor in the mitigation that led to the suspension of the sentence. The Court appeared to follow a very well established line of earlier precedents in regarding the impairment as a reason to give general deterrence (the deterrence of other potential offenders) 'little weight' [39–40]. It appeared to endorse the view that this is because a mentally impaired offender 'is not an appropriate medium for making an example to others' [39] and varied the sentence in a downward direction.

This seems to suggest that general deterrence had some, but not very much, weight in the determination of Mr. Lepore's sentence, presumably less than it would have had but for the mental impairment of the offender.

The consideration of general deterrence seems to have been a significant factor in the reduction of the sentence from a custodial to non-custodial one. This reasoning seems to be in line with a more general view of sentencing in which judges pay attention to general deterrence as a factor in sentencing and sometimes give it a lot of weight and sometimes little, varying sentences accordingly.<sup>10</sup>

However, this approach to sentencing, whilst in line with existing precedent, is problematic. It might be argued that deterrence should be removed as a sentencing consideration *generally*, because it works on an erroneous assumption – that people are normally aware of the penalties that they face when they commit offences, and respond rationally (insofar as they are less likely to offend if they face the risk of harsh penalties than they would if they faced the risk of less harsh penalties). Whilst this may sometimes be true, there is significant empirical work suggesting that this is not normally the case (Robinson & Darley, 2004) and it is not clear there is any reason to believe that the sentencing of Mr. Lepore is an exception to the norm. In light of this, perhaps it might be said to be a good thing that the Court gave little weight to deterrence – granting it greater weight may have been futile.

However despite the concern addressed in the previous paragraph, the Court was obliged to follow the law and, as it accepted, general deterrence is a sentencing consideration. It is a feature of the legislative regime in operation in South Australia and the court was legally justified in paying attention to that.<sup>11</sup>

In addressing Mr. Lepore's case for mitigation, it is noteworthy that the Court did not refer to the most influential Australian case on the relationship between the mental condition of the offender and sentencing – *R v Verdins*; *R v Buckley*; *R v Vo* [2007] VSCA 102 ('*Verdins*'). In *Verdins*, the Court set out a number of principles<sup>12</sup> that bear upon this question, one of which is the moderation of need for general deterrence due to the offender's mental condition. Although *Verdins* was decided in another state, Victoria, it could have been used to support various aspects of Mr. Lepore's plea including the moderation of general deterrence in response to his mental condition. We will return to discuss *Verdins* in relation to other reasoning about the punishment of Mr. Lepore.

<sup>10</sup> The *Criminal Law (Sentencing) Act 1988* (SA) s 10(1) outlines a number of factors to be taken account in sentencing including general deterrence. This act was in force at the time of Mr. Lepore's sentencing but has now been replaced by the *Sentencing Act 2017* (SA).

<sup>11</sup> The *Criminal Law (Sentencing) Act 1988* (SA) s 10(1) (i)

<sup>12</sup> For the *Verdins* decision to be relevant to the sentencing of an offender with an impaired mental condition, it was made clear that the impairment is not required to be "a serious mental illness" and a wide range of mental disorders or issues of mental functioning could support such a reduction (5). See Walvisch (2010) for a discussion of *Verdins*.

It is also noteworthy that Court did not explain why Mr. Lepore's particular mental condition, which they took to be "a frontal lobe impairment" causing "disinhibition" made him an inappropriate medium for general deterrence. In work responding to *Verdins*, Walvisich has surveyed the reasoning given by Australian judges for the moderation of general deterrence in circumstances where the offender's mental condition was an issue. He notes that courts have engaged in such moderation in response to the impact of the offender's mental condition on the criminal conduct for which they are being sentenced, the likely effectiveness of the sentence to deter others, and the justice of using such impaired offenders for general deterrence (2010: 192–193). He argues that the reasoning for the moderation of general deterrence in response to specific mental conditions has not been made entirely clear by the judiciary (2010:193).

We have general concerns about the use of general deterrence as a sentencing consideration and we do not intend to consider how the courts might wish to justify their approach to the moderation of general deterrence in respect of the sentencing of those who they take to have impaired mental function. However, we do have a view on why a mentally impaired offender "is not an appropriate medium for making and example to others" and this relates to concerns about justice. A sentencing regime that will not mitigate in respect of impaired offenders is unjust. This goes to what we argue would be a better foundation for mitigation if (contrary to what has been argued earlier) the evidence for mental impairment was compelling. This is the view that the offender deserves less punishment because of his mental condition.

However, prior to considering an approach to mitigation based on culpability and desert we will briefly consider specific deterrence as a punitive aim insofar as it relates to Mr. Lepore's offending.

### 5.3. Specific deterrence

Whereas general deterrence aims to deter other potential offenders through the punishment of the offender specific deterrence aims to punish in order to deter the offender themselves. In South Australia, this is also a relevant consideration in sentencing.<sup>13</sup> The Court in *Lepore* did not address specific deterrence perhaps because the offender's likely supervision by family members made the risk of reoffending remote. Regardless, if one were to accept that Mr. Lepore had a dementing illness feature impairment of his frontal lobes, there is good reason to believe that he would not have been a good candidate for specific deterrence, because he would lack the cognitive ability to link his sentence with his crime and to moderate his future behaviour in line with this.

According to *Verdins*, the question of whether specific deterrence can be eliminated as a sentencing consideration:

depends upon the nature and severity of the symptoms of the condition as exhibited by the offender, and the effect of the condition on the mental capacity of the offender, whether at the time of the offending or at the date of the sentence or both (32).

It is interesting to note that the court in *Verdins* does not seem to envisage a progressive diminution of mental capacity as might be the case with Mr. Lepore. Nor does it envisage the informal supervision discussed in the sentencing of Mr. Lepore.

We will now turn to what we regard as the preferable route to mitigation for Mr. Lepore, which is reasoning which focusses on desert. It will be seen that, on the assumption that the Court's conclusions about Mr. Lepore's agency are well founded, there may be a number of reasons connected with the law's retributive aim to mitigate punishment.

### 5.4. Retribution

Like other Australian jurisdictions, South Australia has a retributive aim (among other consequentialist aims) and this aim is apparent in the notion of adequate punishment which appears in *Criminal Law (Sentencing) Act 1988* (SA) s 10(1)(j).

On a retributive view, to fail to take account of Mr. Lepore's mental condition would be to impose excessive rather than adequate punishment. It would be to impose undeserved punishment. Mr. Lepore's frontal lobe dementia might be relevant to mitigation because the frontal lobe dementia may create difficulties in complying with the criminal law. *Hart* (2008) says this about mitigation:

[t]he special features of mitigation are that a good reason for administering a less severe penalty is made out if the situation or mental state of the convicted criminal is such that he was exposed to an unusual or specially great temptation, or his ability to control his actions is thought to have been impaired or weakened otherwise than by his own action, so that conformity to the law which he has broken was a matter of special difficulty for him as compared with normal persons normally placed (2008:15).

The link between difficulty and mitigation is plausibly an ethical principle.<sup>14</sup> Nelkin has argued that difficulty is relevant to the assessment of degrees of blameworthiness (Nelkin, 2016). In the context of punishment, the significance of difficulty to mitigation seems to relate to the retributive aim of sentencing; it is not fair to punish those who have difficulties in doing the right thing to the same extent as those who can easily do the right thing.<sup>15</sup>

As has been mentioned, for the purposes of this section it has been assumed that Mr. Lepore was affected by impairment in the form of dementia involving frontal lobe damage which led to the 'disinhibition' which 'was a cause of the defendant's offending' [46] and that the impairment was "somewhere between moderate and severe" [46].

If this is accepted, then on a retributive view Mr. Lepore's frontal lobe dementia might be thought of as having created difficulties in complying with the law. Those difficulties arose "otherwise by his own action" (there is no suggestion that he is responsible for his mental condition) and this affects his culpability. Unfortunately the Court did not specify the precise nature of the disinhibition they took to have had a role in the offending behaviour, and so it is hard to be clear on the precise nature of difficulty of compliance with laws Mr. Lepore infringed. However, according to a retributive line of thinking, the difficulty led to diminished culpability that in turn has a diminishing effect on his retributive desert and thus may give reason to mitigate punishment.<sup>16</sup>

It thus seems that a more persuasive justification for the reduction of punishment is to be found in relation to retributivism than in the consequentialist aims of deterrence or rehabilitation referred to by the Court.

Whilst this approach to mitigation did not appear to have been argued in *Lepore*, (there is no mention of Mr. Lepore's moral culpability in the decision), it seems that it is an approach that may have been a legal possibility, as well as being one with ethical merit.

<sup>14</sup> One of the present authors has made this claim in earlier work *McCay* (2012).

<sup>15</sup> However there are some significant questions that pertain to the assessment of difficulty. For example is the difficulty of compliance with a norm just to be assessed in relations to difficulties present at the time of a failure to comply, or should a more historical view of difficulty be adopted which takes into account the difficulty of forming a self that had greater capacity as a moral agent, or who would have been more motivated to comply with a norm that has in fact been infringed? A diachronic approach to difficulty would substantially increase the epistemic problem of assessing how much punishment is deserved.

<sup>16</sup> Retributivists such as *Duff* (2001), *Von Hirsch* (1993) argue that punishment is to be determined by focusing on both harm and culpability.

<sup>13</sup> The *Criminal Law (Sentencing) Act 1988* (SA) s 10(1) (i)

As has been mentioned, the Court noted Mr. Lepore's "low intellectual functioning". His impairment was between "modest and severe" and resulting disinhibition "was a cause of the defendant's offending" (46).

With this in mind it is worth considering how a legal argument might be made involving the ideas of difficulty, and moral culpability in relation to criminal law's retributive aim.

In *Verdins*, it was made clear that "impaired mental functioning" can reduce the moral culpability of the offender in a number of circumstances, one of which is where it has led to disinhibition (26). It thus seems that it might be argued that the disinhibition resulting from Mr. Lepore's dementia and frontal lobe damage made it more difficult for him to comply with the law and as a result of *Verdins*, this is a factor that the court should take into account in assessing his moral culpability for what he did.

Thus, a legal argument might be made for mitigation that might accord with the rationale for mitigation cited by Hart. This approach would have been desirable from the perspective of an advocate of a rational and ethically justified legal system, as it provides a coherent case for mitigation in light of the purposes of punishment (problems with the employment of other aims of punishment in furtherance of mitigation having been demonstrated above).

However, perhaps there are other approaches to mitigation that are may also be viewed as connected with sentencing's retributive aim, that might also have supported mitigation for Mr. Lepore. In *Verdins* the Court also regarded implications of the mental functioning in relation to the burden of imprisonment and the likely effects of imprisonment on the offender's mental health as considerations in the sentencing of those with impaired mental functioning. This might be thought of consistent with a retributive view in which it is important to pay attention to those issues, as to dismiss the fact that a particular offender will suffer more than others as a result of imprisonment would be to unfairly impose more punishment than is deserved.

Perhaps Mr. Lepore might have argued that to imprison him would involve disproportionate punishment, as his disinhibition would make the prison environment very difficult to navigate making it unfairly burdensome on him. If it was the case that his dementia could not be appropriately treated and managed in prison, he might argue that this may also lead to a greater impact on his mental condition than prison would have on others and thus a disproportionate and undeserved punishment.

According to *Verdins* the court can take account of the offender's impaired functioning in relation to the kind of sentence imposed (32).<sup>17</sup> Perhaps a desert-based series of arguments might have a role in supporting an argument for suspending the sentence rather than having it served in prison.

## 6. Conclusion

As a 76-year-old first offender, Mr. Lepore's actions seemed baffling and left the courts without a proper explanation. The initial sentence was a long one for a first offender of his age, and whilst one can understand the search for something that might shed light on why Mr. Lepore offended in the way he did, and that might also thereby give reason to mitigate, the sentencing court was given no evidence that enabled them to make sense of the crimes.

The court of appeal did receive expert evidence that led them to attribute his behaviour to dementia, thereby pointing the way to mitigation. However, a close analysis of the evidence as it appears in the decision, does not seem to explain Mr. Lepore's aberrant behaviour, and so the evidentiary basis of his successful appellate mitigation strategy appears questionable.

<sup>17</sup> See *R v Bernstein* (2008) for an example of a case in which the Court did this.

Whilst the Court reasoned towards mitigation for Mr. Lepore by way of a focus on rehabilitation and deterrence, a preferable approach (which was also legally viable) would have involved retributive reasoning. Such retributive reasoning could have focused on the difficulties of complying with the criminal law derived from the impairment that the court has, apparently without adequate evidential support, presumed.

In view of the rapid development of the neurosciences and their increased use in courts, it is important to consider how the courts are responding to the kind of evidence discussed in this paper. Whilst much of this kind of analysis has taken place in the USA, less is known about how the Australian courts are responding. Our interdisciplinary analysis of the South Australian sentencing appeal *Lepore* has drawn attention to some evidentiary concerns, and issues with reasoning about punishment that might be born in mind in future scholarship in the field of neurolaw. In particular it is worth considering whether in other cases, the inferences from psychiatric evidence are appropriate and whether the courts are reasoning about punishment in a way that is problematic.

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