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MENTAL COMPETENCY LAW AND PLEA BARGAINING: A  
NEUROPHENOMENOLOGICAL CRITIQUE

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I. INTRODUCTION

They talked of cause and effect, as if they believed it possible to isolate an event and hold it up to scrutiny in a pure, timeless space, outside the mad swirl of things. They would speak of whole peoples as if they were speaking of a single individual, while to speak even of an individual with any show of certainty seemed to me foolhardy.<sup>1</sup>

Perhaps it is most fitting that we begin with our thesis: the knowing and voluntary prong establishing the constitutionality of plea-bargaining is woefully incapable of doing so. This is because the jurisprudential assumption that human beings are rational actors capable of making decisions that maximize their interests is, when exposed to social and natural science, flawed. There are three

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<sup>1</sup> JOHN BANVILLE, *THE BOOK OF EVIDENCE* 17 (1989).

themes addressed in this article. First, we deliver an assessment of the existing case law guiding determinations of mental competency to plea. Second, we apply the current science of neuropsychology and cognitive psychology to an understanding of how human beings cognate. The third theme addressed in this article demonstrates the extent to which human beings are, in combination with biology, constituted by their political, economic, and cultural locations.

In a collateral sense our thesis bears some resemblance to the United States Supreme Court's "death is different" jurisprudence.<sup>2</sup> To state the obvious, a death eligible criminal trial ought to be as close to procedurally pristine as possible given the plausibility of conviction and execution. Following reintroduction of the death penalty in *Gregg v. Georgia*<sup>3</sup> where, incidentally, the majority acknowledged that, "the penalty of death is different in kind from any other punishment . . ."<sup>4</sup> there were numerous Supreme Court opinions where the Court made clear its concern over what Scott E. Sundby has called the "unreliability principle."<sup>5</sup> Specifically, the unreliability principle states: "[I]f too great a risk exists that constitutionally protected mitigation cannot be properly comprehended and accounted for by the sentencer, the unreliability that is created means that the death penalty cannot be constitutionally applied."<sup>6</sup> Sundby inaugurates the unreliability principle based upon textual analysis of the Eighth Amendment's emphasis on "individualized consideration," and a slew of cases beginning with *Woodson v. North Carolina* (1976),<sup>7</sup> where "Justice Stewart's . . . opinion laid out the Eighth Amendment principle of individualized consideration."<sup>8</sup> In fact, "*Woodson* . . . required *as a constitutional rule* the consideration of 'the possibility of compassionate or mitigating factors stemming from *the diverse frailties of humankind*.'"<sup>9</sup> In *Lockett v. Ohio* (1978),<sup>10</sup> the Court held that a "sentencer must be allowed to consider 'any aspect of a

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<sup>2</sup> See *Furman v. Georgia*, 408 U.S. 238, 286–87 (1972). Thanks to Marc Miller for drawing our attention to this connection.

<sup>3</sup> *Gregg v. Georgia*, 428 U.S. 153, 187, 188 (1976).

<sup>4</sup> *Id.* at 187, 188.

<sup>5</sup> Scott E. Sundby, *The True Legacy of Atkins and Roper: The Unreliability Principle, Mentally Ill Defendants, and the Death Penalty's Unraveling*, 23 WM. & MARY BILL OF RTS. J. 487, 496 (2014).

<sup>6</sup> *Id.*

<sup>7</sup> *Woodson v. North Carolina*, 428 U.S. 280 (1976).

<sup>8</sup> Sundby, *supra* note 5, at 497, 498.

<sup>9</sup> *Id.* at 498 (second emphasis added).

<sup>10</sup> *Lockett v. Ohio*, 438 U.S. 586 (1978).

defendant's character or record . . . ."<sup>11</sup> Because death is different, argued the Court in *Lockett*, full consideration of mitigating evidence and enhanced reliability is mandatory.<sup>12</sup> In *Skipper v. South Carolina* (1986),<sup>13</sup> the Court held that "it is 'now well established' that the defendant has the constitutional right to have 'any relevant mitigating evidence' considered."<sup>14</sup> *Penry v. Lynaugh* (1989)<sup>15</sup> provides perhaps the most important language with Justice O'Connor writing for the majority:

[I]t is not enough simply to allow the defendant to present mitigating evidence to the sentencer. The sentencer must also be able to consider and give effect to that evidence in imposing sentence . . . . Only then can we be sure that the sentencer has treated the defendant as a "uniquely individual human being" and has made a reliable determination that death is the appropriate sentence. "Thus, *the sentence imposed at the penalty stage should reflect a reasoned moral response to the defendant's background, character, and crime.*"<sup>16</sup>

The unreliability principle articulated in these cases paved the way for two opinions that significantly changed American death penalty jurisprudence. In 2002, the United States Supreme Court held in *Atkins v. Virginia*<sup>17</sup> that execution of the mentally ill was unconstitutional.<sup>18</sup> In 2005, the Court held in *Roper v. Simmons*<sup>19</sup> that execution of youth was unconstitutional.<sup>20</sup> In each case the Court considered the defendant's mental state as providing significant mitigation since the sentencer would not be able to properly comprehend and account for the mitigation.<sup>21</sup>

To sum up, the Supreme Court of the United States has created what we believe to be an enlightened unreliability principle when considering mitigation in capital cases where:

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<sup>11</sup> Sundby, *supra* note 5, at 499.

<sup>12</sup> *See id.* at 500.

<sup>13</sup> *Skipper v. South Carolina*, 476 U.S. 1 (1986).

<sup>14</sup> Sundby, *supra* note 5, at 501.

<sup>15</sup> *Penry v. Lynaugh*, 492 U.S. 302 (1989).

<sup>16</sup> *Id.* at 319 (first citing *Hitchcock v. Dugger*, 481 U.S. 393, 394 (1987); then quoting *Woodson v. North Carolina*, 428 U.S. 280, 304 (1976); and then quoting *California v. Brown*, 479 U.S. 538, 545 (1987) (O'Connor, J., concurring)) (emphasis added).

<sup>17</sup> *Atkins v. Virginia*, 536 U.S. 304 (2002).

<sup>18</sup> *See id.* at 321.

<sup>19</sup> *Roper v. Simmons*, 543 U.S. 551 (2005).

<sup>20</sup> *See id.* at 578–79.

<sup>21</sup> *See id.* at 572–73; *Atkins*, 536 U.S. at 320–21.

- **Individualized consideration** (8<sup>th</sup> Amendment),<sup>22</sup> because of
- The “**diverse frailties of humankind**” (*Woodson*)<sup>23</sup>, requires consideration of
- The **defendant’s background, character, and crime** (*Lockett*),<sup>24</sup> which should then lead to
- **Full consideration of mitigating evidence and enhanced reliability** (*Penry*)<sup>25</sup>



**Figure 1**

The combined effect of each factor led the Court to declare execution of the mentally ill and youth to be unconstitutional.<sup>26</sup> But here’s what we don’t quite understand. We get the fact that “death is different” because it’s the ultimate sentence. What we do not understand is why the unreliability principle articulated by the Court isn’t afforded to all criminal defendants. Specifically, if the unreliability principle is reasonably premised on solid jurisprudential and social scientific footing, and we believe that it is, why is it that the supremely prudent criteria established by the Court to make absolutely certain that all mitigation is properly introduced and understood in order to guarantee as much as humanly possible a safe conviction and fair sentence isn’t constitutive of all criminal prosecutions and sentences? It seems to us that the gestalt of the unreliability principle is equally applicable

<sup>22</sup> U.S. CONT. amend. VIII. See *Woodson v. North Carolina*, 428 U.S. 280, 304 (1976).

<sup>23</sup> *Id.* (emphasis added).

<sup>24</sup> See *Lockett v. Ohio*, 438 U.S. 586, 607 (1978).

<sup>25</sup> *Penry v. Lynaugh*, 492 U.S. 302, 328 (quoting *Franklin v. Lynaugh*, 487 U.S. 164, 184 (1988) (O’Connor, J., concurring); and then quoting *Woodson*, 428 U.S. at 305).

<sup>26</sup> See *Roper*, 543 U.S. at 578–79; *Atkins*, 536 U.S. at 321.

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to, for example, plea-bargaining. And since plea-bargaining accounts for the greatest proportion of felony convictions in the United States,<sup>27</sup> shouldn't it be incumbent upon those administering justice to adhere to the four criteria of the unreliability principle cited in the case law above? In the interest of fair and equitable due process we think that it should, and the remainder of this Article will be dedicated to arguing strongly for application of just such a principle to plea jurisprudence.

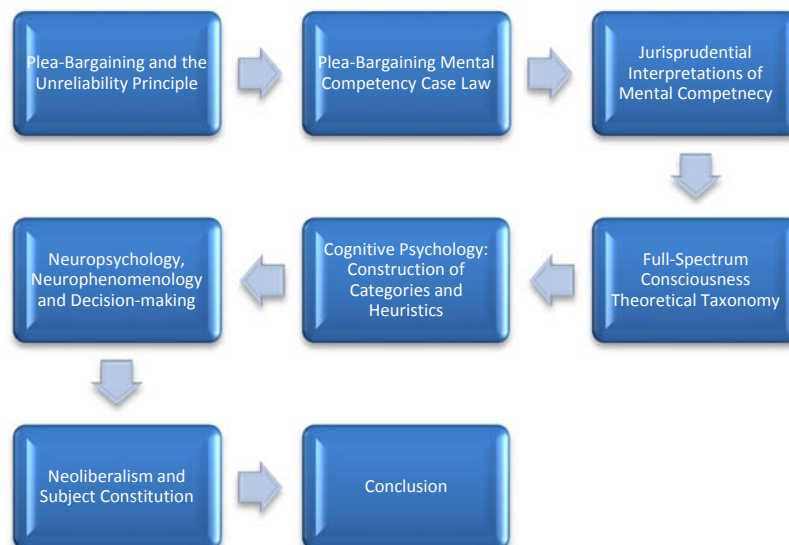
In this paper we seek to address one aspect of plea-bargaining—the knowing and voluntary criteria necessary for establishing mental competency to plea. When we speak of mental competency we are not suggesting that the knowing and voluntary criteria only applies to those with a designated mental illness (as in *Atkins*), but rather, that the competency to plea-bargain as established by the knowing and voluntary criteria assumes a free thinking, free acting, reasonable, rational actor under the law. As we will demonstrate, this is a legal fiction. A more accurate reflection of the relevance of the consciousness of criminal defendants for guilt and sentencing determinations is found in the Supreme Court's death penalty jurisprudence. As such, there is legal precedent for the case that we are going to make, but as far as we know there has been no court of criminal appeal to adopt in total the four aspects of the unreliability principle and require its application to plea-bargains. For the reasons that we outline in this Article, we think that should change.

This Article proceeds in the following way. First, in Part II we introduce the case law establishing the knowing and voluntary criteria of plea-bargaining. Next, we present case law relating to cases where mental competency claims have been raised consistent with the knowing and voluntary criteria. We then compare and contrast the “understand and assist” and “reasoned choice” options as they relate to the most efficacious mental competency criteria. In Part III we provide a brief overview of mental competency law beginning with European Common Law, followed by its evolution in the United States. Part IV introduces what we call, “A Different Air to Breathe,” an alternate theoretical lens through which to consider mental competency and the constitution of the knowing and voluntary prongs. We do this by introducing critical inquiry through application of the sociological imagination as applied to deconstruction of the essentialism that fetishizes reason in the law.

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<sup>27</sup> See Douglas Guidorizzi, *Should We Really “Ban” Plea Bargaining?: The Core Concerns of Plea Bargaining Critics*, 47 EMORY L.J. 753, 770 (1998).

We conclude Part IV by introducing a theoretical taxonomy based upon the work of Ken Wilber. Wilber's full spectrum consciousness taxonomy provides for a comprehensive explication of human consciousness, one that is capable of embracing multivariate macro-structural and micro-level influences. Wilber's taxonomy will provide the theoretical framework capable of capturing the complexity of the argument we will be making in this Article. In Part V we get into the substantive assessment of consciousness. We begin with a discussion of the human creation of categories and heuristics as habitual shorthand ways to guide decision-making. This specifically requires an understanding of cognitive psychology. Moving more deeply into the neurological aspects of decision-making, we introduce neurophenomenology. We do this by first providing readers with a lay overview of brain composition and function. This is important because human decision-making is a profoundly complex manifestation of brain structure and chemistry. In Part VI we directly tackle the question of free will through application of neuropsychology. The final substantive section of our Article is Part VII and it moves away from neuropsychology and cognitive psychology to focus attention on the significance of subject constitution within contemporary neoliberal cultures. This is important because the positioning of human beings consistent with *homo economicus* isolates humans and emphasizes the contractual nature of virtually all aspects of existence. Since plea-bargaining is premised on the making of contracts between equitable partners engaged in negotiation, it is import to understand the hegemonic influence of neoliberal ideology to the proliferation of that process. Viewed visually, our Article progresses in the following way:



## II. MENTAL COMPETENCY AND PLEA BARGAINING CASE LAW

A defendant's decision to plead guilty requires him to forfeit his Fifth and Sixth amendment rights including the right to confront one's accuser, the right to a jury trial and the right against self-incrimination.<sup>28</sup> Despite this apparent disadvantage to a defendant charged with a crime, approximately ninety-four to ninety-seven percent of all felony cases are resolved through guilty pleas.<sup>29</sup> A defendant may plead guilty for a variety of reasons; they may wish to absolve their guilt by admitting to the crime they committed; they may wish to avoid the burden that the trial will place on the defendant and the defendant's family, a trial may not seem worth that burden if there is a considerable amount of inculpatory evidence against the defendant; or the government may offer the defendant a lesser charge and reduced sentence if he pleads guilty.<sup>30</sup> These factors, on their own or in combination, provide an explanation for why so many defendants choose to plead guilty. The advantages for the government of plea bargaining are clear; the prosecutor is allowed tremendous discretion through the determination of which cases to plea bargain and what charge to offer during the course of the plea bargain,<sup>31</sup> and the government avoids expending scarce resources in a costly investigation and trial while securing a guilty verdict.<sup>32</sup> In *Brady v. United States* this "mutuality of advantage" for both the State and the defendant is cited to explain the high volume of plea-bargaining in the United States.<sup>33</sup> *Brady* presumes that defendants with only a slight chance of acquittal will plead guilty to a lesser charge.<sup>34</sup>

Despite the Supreme Court's enthusiasm for plea bargaining expressed in *Brady*, the case law associated with plea bargaining cautions against accepting guilty pleas without first assessing whether the plea was made "knowingly and voluntarily."<sup>35</sup> A

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<sup>28</sup> See *Plea Bargain*, LEGAL INFO. INST., [https://www.law.cornell.edu/wex/plea\\_bargain](https://www.law.cornell.edu/wex/plea_bargain) (last visited Feb. 16, 2016).

<sup>29</sup> See *Lafler v. Cooper*, 132 S. Ct. 1376, 1388 (2012); *Missouri v. Frye*, 132 S. Ct. 1399, 1407 (2012).

<sup>30</sup> See *Brady v. United States*, 397 U.S. 742, 750–51 (1970).

<sup>31</sup> See LINDSEY DEVERS, PLEA AND CHARGE BARGAINING: RESEARCH SUMMARY 2 (2011). "The plea bargaining process has been criticized for allowing prosecutors too much discretion compared with judges, who are held to concise sentencing guidelines." *Id.*

<sup>32</sup> *Brady*, 397 U.S. at 752.

<sup>33</sup> *Id.*

<sup>34</sup> Only one percent of cases that go to trial end in acquittal. See DANIEL GIVELBER & AMY FARRELL, NOT GUILTY: ARE THE ACQUITTED INNOCENT? 43 (2012).

<sup>35</sup> See, e.g., *Brady*, 397 U.S. at 747–48; *Boykin v. Alabama*, 395 U.S. 238, 242, 243–44

related concern pertains to mental competency. These requirements for accepting a guilty plea are codified into Federal Rule of Criminal Procedure 11(b)(1), where under oath and before a judge in open court, a defendant will be informed of the abdication of rights brought about by a guilty plea, the right to plead not guilty and proceed to trial, the charges being brought against him or her, and the minimum and maximum sentence.<sup>36</sup> The court must also determine whether there is a factual basis for the plea.<sup>37</sup> Defendants may withdraw a plea prior to the court's acceptance of it, or prior to the imposition of sentence if the court rejects the plea under 11(c)(5);<sup>38</sup> or the defendant can show a fair and just reason for the withdrawal.<sup>39</sup>

### A. *The "Knowing" Criteria*

A plea that is knowingly entered into is made by a defendant whom is, "fully aware of the direct consequences" of the plea<sup>40</sup> as reflected by the record; in other words, the transcript must show that the defendant is aware of the constitutional rights they are relinquishing by pleading guilty.<sup>41</sup> Additionally, the defendant must also understand the nature of the charges against him and the record must also reflect this.<sup>42</sup> In *Bousley v. United States*<sup>43</sup> the plea was considered intelligent so long as the defendant received "real notice of the . . . charge[s] against him," in satisfaction of Federal Rule 11.<sup>44</sup> No cognizable comprehension of the charges was required.<sup>45</sup> Important, in *Bradshaw v. Stumpf*<sup>46</sup> the plea was considered knowing despite the defendant's post-sentencing claim that *he didn't understand* the specific intent requirement for aggravated murder.<sup>47</sup> The Court held that because the defendant's

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(1969); *McCarthy v. United States*, 394 U.S. 459, 466 (1969).

<sup>36</sup> FED. R. OF CRIM. P. 11(b)(1).

<sup>37</sup> FED. R. OF CRIM. P. 11(b)(3).

<sup>38</sup> FED. R. OF CRIM. P. 11(c)(5).

<sup>39</sup> FED. R. OF CRIM. P. 11(d).

<sup>40</sup> *Brady*, 397 U.S. at 755. Throughout, the adjectives "knowing" and "intelligent" are used interchangeably to mean the same thing.

<sup>41</sup> See *Boykin v. Alabama*, 395 U.S. 238, 243-44 (1969).

<sup>42</sup> See FED. R. CRIM. P. 11(b)(1)(G), 11(g).

<sup>43</sup> *Bousley v. United States*, 523 U.S. 614 (1998).

<sup>44</sup> See *id.* at 618 (quoting *Smith v. O'Grady*, 312 U.S. 329, 334 (1941)).

<sup>45</sup> See *Bousley*, 523 U.S. at 619 (citing *Brady*, 397 U.S. at 756-57) (holding that defendant's plea was considered intelligent despite the fact that he failed to assess every relevant factor associated with the plea).

<sup>46</sup> *Bradshaw v. Stumpf*, 545 U.S. 175 (2005).

<sup>47</sup> See *id.* at 182, 183.



attorneys had *explained* the elements of the charge to him, and that this was affirmed in open court, the defendant's acceptance of the plea was knowingly made.<sup>48</sup> Of course, the gulf between explanation and understanding may be quite wide indeed. The mere fact that attorneys for the defendant explained the intent requirement by no means guarantees that the defendant understood that explanation. But consistent with Federal Rule 11(b)(1), all that is required of the judge when accepting a plea is the elucidation of the charges being brought against the defendant, and the minimum and maximum sentence.<sup>49</sup> Once recited in open court, and affirmed by the defendant, the knowing criteria is satisfied.<sup>50</sup>

### B. The "Voluntary" Criteria

The Supreme Court has deemed pleas voluntary when they are made absent threats and misrepresentation,<sup>51</sup> and requires the plea to be "an intentional relinquishment" of constitutional rights.<sup>52</sup> According to Federal Rule 11(b)(2), the court must also assess the voluntariness of the plea. Recitation of the Federal Rule simply requires the judge in open court to receive an affirmative response from the defendant to the statement: "the plea is voluntary and did not result from force, threats, or promises (other than promises in [the] plea agreement)."<sup>53</sup>

The Supreme Court has noted that "[t]he concept of 'voluntariness' contains an ambiguous element."<sup>54</sup> In *Parker v. North Carolina* the majority decision dictated that a plea is not involuntary if the defendant enters the plea seeking to avoid the death penalty if convicted at trial, and that even if a defendant *involuntarily* confesses, the plea is constitutional and voluntary because of the significant amount of time that had lapsed between the confession and a plea.<sup>55</sup> In addition to ruling that the state's threat of a harsher punishment does not undermine the

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<sup>48</sup> *Id.* at 183.

<sup>49</sup> FED. R. CRIM. P. 11(b)(1)(G)–(I).

<sup>50</sup> See FED. R. CRIM. P. 11(b)(1), (g); see, e.g., *Bradshaw*, 545 U.S. at 183 (holding that the defendant's plea was informed where defendant's counsel represented on the record that the elements of the crime were explained to defendant and defendant confirmed that such representation was true).

<sup>51</sup> *Brady v. United States*, 397 U.S. 742, 755 (1970).

<sup>52</sup> *Boykin v. Alabama*, 395 U.S. 238, 243 n.5 (1969) (quoting *Johnson v. Zerbst*, 304 U.S. 458, 464 (1938)).

<sup>53</sup> FED. R. CRIM. P. 11(b)(2).

<sup>54</sup> *Parker v. North Carolina*, 397 U.S. 790, 801 (1970) (Brennan, J., dissenting).

<sup>55</sup> See *id.* at 694, 795–796 (citing *Brady*, 397 U.S. at 758).

voluntariness of a plea, the Supreme Court has also ruled that the threat of capital punishment with a verdict of guilty when pursuing trial does not constitute an involuntary plea,<sup>56</sup> despite the ruling in *United States v. Jackson*<sup>57</sup> two years earlier that the Federal Kidnapping Act, which could only have the death penalty imposed by a jury, was unconstitutional “because it makes ‘the risk of death’ the price for asserting the right to [a] jury trial, and thereby ‘impairs . . . free exercise’ of that constitutional right.”<sup>58</sup>

Ultimately the reasoning in *Brady* influenced subsequent Supreme Court decisions regarding the voluntariness of pleas. In *United States v. Farris*<sup>59</sup> the Fourth Circuit Court of Appeals held a plea to be voluntary even though the defendant was threatened with deportation to Guantanamo Bay if convicted at trial.<sup>60</sup> In some cases there’s no need for the lower court to address the question of voluntariness so long as the totality of the circumstances is suggestive of fair procedure. In *United States v. Ward*,<sup>61</sup> for example, the court found that the state court judge failed to address the defendant in open court to discern the voluntariness of the plea, a violation of Rule 11(b)(2).<sup>62</sup> The plea was considered voluntary on appeal because counsel was deemed effective, and there was no apparent coercion.<sup>63</sup> Even threats made by a prosecutor to re-indict a defendant with harsher charges should the defendant refuse to plea has been determined by the U.S. Supreme Court to be a plea that was voluntarily entered into.<sup>64</sup> Threatening a defendant with harsher punishment following federal prosecution should he refuse to plea to state charges is considered non-coercive, non-vindictive, and voluntary.<sup>65</sup> A plea procured following threats to prosecute a family member or some other third party is considered by the courts to be voluntary.<sup>66</sup> Perhaps the most troublesome opinions arising

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<sup>56</sup> *See id.*

<sup>57</sup> *United States v. Jackson*, 390 U.S. 570 (1968).

<sup>58</sup> *See id.* at 571, 572 (quoting *United States v. Jackson* 262 F. Supp. 716, 718 (D. Conn. 1967)).

<sup>59</sup> *United States v. Farris*, 388 F.3d 452 (4th Cir. 2004) (per curium).

<sup>60</sup> *Id.* at 457.

<sup>61</sup> *United States v. Ward*, 518 F.3d 75 (1st Cir. 2008).

<sup>62</sup> *Id.* at 84; *see also* FED. R. CIV. P. 11(b)(2) (“Before accepting a plea of guilty or nolo contendere, the court must address the defendant personally in open court and determine that the plea is voluntary and did not result from force, threats, or promises.”).

<sup>63</sup> *See Ward*, 518 F.3d at 86.

<sup>64</sup> *See Bordenkircher v. Hayes*, 434 U.S. 357, 358, 365 (1978).

<sup>65</sup> *See, e.g., United States v. Forrest*, 402 F.3d 678, 690–91 (6th Cir. 2005); *Hays v. United States*, 397 F.3d 564, 569, 570 (7th Cir. 2005); *United States v. Williams*, 47 F.3d 658, 662 (4th Cir. 1995).

<sup>66</sup> *See, e.g., United States v. Spilmon*, 454 F.3d 657, 658, 659 (7th Cir. 2006); *United States*

from questions addressing voluntariness are those where a defendant claims third party coercion, but where they've stated in open court that they were voluntarily entering the plea.<sup>67</sup> Following *Blackledge v. Allison*,<sup>68</sup> an affirmative declaration of voluntariness "in open court carr[ies] a strong presumption of verity."<sup>69</sup> Of greatest concern is the faulty presumption that Rule 11(b)(2) in any way guarantees that a defendant's open court statements are made voluntarily.<sup>70</sup> In *United States v. Padilla-Galarza*,<sup>71</sup> a motion to withdraw a plea was rejected because the court considered the plea to have been voluntarily entered into despite the defendant's claim that he had been coached through the hearing by his defense attorney, and he was suffering from mental impairment.<sup>72</sup> Because the defendant stated in court that he understood the agreement ("knowing"), the defense attorney did not raise any concerns about the defendant, and the court found the defendant "articulate and in command of himself," the motion to withdraw was denied.<sup>73</sup> *United States v. Hernandez*<sup>74</sup> affirmed the voluntariness of a plea because the defendant stated in open court through a translator that he had discussed the plea with his attorney, and he understood it.<sup>75</sup> Subsequently he would claim that he had been misled by his attorney regarding the consequences of the plea.<sup>76</sup>

In *Corbitt v. New Jersey*<sup>77</sup> the majority ruled that plea-bargaining did not violate the equal protection clause of the 14th amendment.<sup>78</sup> Like previous court opinions the plea met constitutional knowing

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v. Hodge, 412 F.3d 479, 488, 489, 492 (3d Cir. 2005); *United States v. DeFusco*, 949 F.2d 114, 119 (4th Cir. 1991); *United States v. Marquez*, 909 F.2d 738, 741, 743 (2d Cir. 1990); *United States v. Buckley*, 847 F.2d 991, 1000 n.6 (1st Cir. 1988); *United States v. Diaz*, 733 F.2d 371, 373, 374–75 (5th Cir. 1984); *United States v. Usher*, 703 F.2d 956, 958 (6th Cir. 1983).

<sup>67</sup> See generally Richard Klein, *Due Process Denied: Judicial Coercion in the Plea Bargaining Process*, 32 HOFSTRA L. REV. 1349, 1399–1400, 1401 (2004) (stating how when a defendant says they are voluntarily entering a plea, an answer of "no" is not often a proper reflection of the circumstances; a record of the court proceedings must also reflect that the defendant is voluntarily entering the plea in order for the guilty plea to be deemed constitutional).

<sup>68</sup> *Blackledge v. Allison*, 431 U.S. 63 (1977).

<sup>69</sup> *Id.* at 74.

<sup>70</sup> See *supra* notes 53–54 and accompanying text; see *infra* notes 71–76 and accompanying text (providing examples of cases in which the voluntariness of defendant statements is not clear).

<sup>71</sup> *United States v. Padilla-Galarza*, 351 F.3d 594 (1st Cir. 2003).

<sup>72</sup> See *id.* at 597, 598, 601.

<sup>73</sup> *Id.* at 598.

<sup>74</sup> *United States v. Hernandez*, 242 F.3d 110 (2d Cir. 2001).

<sup>75</sup> See *id.* at 112.

<sup>76</sup> See *id.*

<sup>77</sup> *Corbitt v. New Jersey*, 439 U.S. 212 (1978).

<sup>78</sup> See *id.* at 226.

and voluntary standards if the record indicates that the defendant understood the charges against him and entered the guilty plea without threats or false promises. The majority opinion in *Corbitt* held that promising a defendant leniency in sentencing to induce a guilty plea was not suggestive of a threat of retaliation should the defendant choose to exercise his right to trial where, if he was to be found guilty, he would likely face far more severe punishment.<sup>79</sup> There are costs and benefits to both pursuing a trial and entering the guilty plea and “[e]qual protection does not free those who made a bad assessment of risks or a bad choice from the consequences of their decision.”<sup>80</sup>

### C. Mental Capacity

Despite the “reasoned choice” position taken by the Ninth Circuit Court of Appeals with regard to the standard of competency in the *Moran* case discussed below, the test of mental competency to plea is the same as the one used to determine whether one is fit to stand trial—“understand and assist.”<sup>81</sup> Case law in this area suggests that challenging the voluntariness of a plea based upon mental competency is nearly always a loser. For example, in *United States v. Morrisette*,<sup>82</sup> the plea was considered valid despite the fact that the defendant was heavily medicated on anti-psychotic drugs.<sup>83</sup> Since the court was convinced that the medications did not affect the defendant’s cognitive ability, and since the defendant appeared coherent while in court, the plea was voluntarily entered into.<sup>84</sup> Likewise in *Dennis v. Budge*,<sup>85</sup> the Ninth Circuit Court of Appeal found the defendant competent to enter his plea despite the defendant’s record of mental illness and suicide attempts.<sup>86</sup> The Court was convinced that a psychologist’s evaluation, and the defendant’s courtroom demeanor were suggestive of competency.<sup>87</sup>

While the overwhelming case law in this area upholds pleas despite claims challenging mental competency, there are a few that

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<sup>79</sup> *See id.*

<sup>80</sup> *Id.*

<sup>81</sup> *See* *Indiana v. Edwards*, 554 U.S. 164, 170, 172 (2008) (quoting *Drope v. Missouri*, 420 U.S. 162, 171 (1975)); *see infra* notes 116–23 and accompanying text.

<sup>82</sup> *United States v. Morrisette*, 429 F.3d 318 (1st Cir. 2005).

<sup>83</sup> *See id.* at 321, 323, 323 n.1.

<sup>84</sup> *Id.* at 322–23.

<sup>85</sup> *Dennis v. Budge*, 378 F.3d 880 (9th Cir. 2004).

<sup>86</sup> *See id.* at 882, 892.

<sup>87</sup> *See id.* at 891–92.

do not. *Burt v. Uchtman*<sup>88</sup> is one such case.<sup>89</sup> Here the Seventh Circuit invalidated a plea because the court failed to conduct a competency hearing.<sup>90</sup> It was known to the court that the defendant had suffered severe mental problems, was using psychotropic medications, and had difficulty remaining alert.<sup>91</sup> Important for our purposes is the Eighth Circuit Court of Appeal opinion in *Shafer v. Bowersox*.<sup>92</sup> Here, the Court ruled the plea invalid because experts had established that the defendant tended to make, “impulsive and irrational decisions.”<sup>93</sup> Despite being in possession of this information prior to accepting the plea, the court none-the-less failed to hold a competency hearing.<sup>94</sup> What’s interesting in regard to this case and the language used in the Eighth Circuit opinion is that *one need not be mentally ill to make “impulsive and irrational decision[s],”* in fact as we shall establish below, it’s quite simply a very human way to act.<sup>95</sup>

#### *D. The Impact of Knowing and Voluntary Case Law on Pleas*

Each of the cases discussed in the previous section helped to shape the legal definition of “knowingly and voluntarily” with regard to the constitutionality of guilty pleas in ways that raise serious concerns for due process. As evidenced by the majority opinions in these decisions, the U.S. Supreme Court and the many circuit courts that have ruled on the knowing and voluntary and mental competency claims demonstrate a woeful lack of scientific understanding regarding a defendant’s ability to make decisions in their own best interest and fail to take contemporary brain science and phenomenological factors into consideration when determining whether a plea is voluntary. While defendants who are found legally incompetent cannot voluntarily plead guilty,<sup>96</sup> the two prong test established in *Dusky v. United States*<sup>97</sup> and used to determine mental incompetence also fails to take the ability of a defendant to

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<sup>88</sup> *Burt v. Uchtman*, 422 F.3d 557 (7th Cir. 2005).

<sup>89</sup> *See id.* at 569.

<sup>90</sup> *See id.* at 566.

<sup>91</sup> *See id.*

<sup>92</sup> *Shafer v. Bowersox*, 329 F.3d 637 (8th Cir. 2003).

<sup>93</sup> *Id.* at 652, 655.

<sup>94</sup> *See id.* at 649–50.

<sup>95</sup> *See id.*

<sup>96</sup> *See Westbrook v. Arizona*, 384 U.S. 150, 150 (1966); *see also Pate v. Robinson*, 383 U.S. 375, 378 (1966) (noting that the conviction of a legally incompetent defendant violates due process).

<sup>97</sup> *See Dusky v. United States*, 362 U.S. 402, 402 (1960).

make reasonable decisions into account. While case law surmises that the defendant's obvious guilt and a large body of inculpatory evidence are the primary motivators for guilty pleas, scholarly research demonstrates that there are innumerable environmental and biological factors that influence the decision making process to varying degrees.<sup>98</sup> The philosophy behind these court decisions is hindered by a colloquial view of how humans make decisions, and a deeply entrenched philosophical commitment to viewing human beings as fully reasonable and rational cost calculators who will seek to maximize pleasure and minimize pain. As we shall demonstrate, this is not always the case.

The assumptions articulated by the various courts of appeal concerning plea bargaining—the assumption that the decision to plea is made “knowingly and voluntarily,” the assumption that the parties involved will act to maximize their interests, and the assumption that the state and the defendant are equitable partners to a contractual negotiation—are incompatible with contemporary neuroscience and social psychology research.<sup>99</sup> In contradistinction to rational actor models that constitute much of the legal scholarship and case law surrounding the knowing and voluntary criteria to plea, new scholarship firmly establishes the imperfect decision-making processes characteristic of human beings.<sup>100</sup> Still, despite decades of solid social scientific evidence to the contrary, procedural legitimization for the efficacy of plea bargaining continues to promulgate the mystifying and reifying assumption that human beings are first and foremost rational cost calculators.<sup>101</sup> As is so often the case the Court finds itself woefully ill equipped to accommodate application of contemporary social science to the matters before it.

This incompatibility affects most significantly those who are already a statistically significant population prosecuted by the legal system—those with mental illness,<sup>102</sup> those with a history of

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<sup>98</sup> See Eugene R. Milhizer, *Rethinking Police Interrogation: Encouraging Reliable Confessions While Respecting Suspects' Dignity*, 41 VAL. U. L. REV. 1, 36–37, 37 nn.144–45 (2006) (demonstrating the outside influences that may cause a defendant to confess and plead guilty to a charge).

<sup>99</sup> See Stephen J. Schulhofer, *Plea Bargaining as Disaster*, 101 YALE L.J. 1979, 1980, 1981 (1992).

<sup>100</sup> See Paul Horwitz, *Free Speech as Risk Analysis: Heuristics, Biases, and Institutions in the First Amendment*, 76 TEMP. L. REV. 1, 26 (2003).

<sup>101</sup> See Guidorizzi, *supra* note 27, at 770–71 (“The benefits of the certainty of conviction and the efficiency of process outweigh the cost for securing a conviction.”).

<sup>102</sup> “56% of State prisoners, 45% of Federal prisoners, and 64% of jail inmates [had a mental health problem].” DORIS J. JAMES & LAUREN E. GLAZE, MENTAL HEALTH PROBLEMS

victimization,<sup>103</sup> and those with a history of substance abuse.<sup>104</sup> Recognizing the prevalence of plea-bargaining and the forfeiture of constitutional rights by a defendant agreeing to a plea deal,<sup>105</sup> the astonishing lack of interest in application of social scientific insights to the structural and subjective machinations constituting the process presents as willful ignorance in the service of prosecutorial mandates. At issue is the Court's determination of knowing and voluntary as established in Federal Rules of Criminal Procedure, Rule 11, and codified in a line of cases decided in the 1970s beginning with *Brady v. United States* and its progeny.

*E. "Understand and Assist" or "Reasoned Choice"?*

In November of 1984 Richard Allan Moran pled guilty to three counts of first-degree murder and was sentenced to death.<sup>106</sup> Moran had robbed a saloon in Las Vegas, shooting both a patron and the bartender four times each.<sup>107</sup> He then shot and killed his former wife and attempted to end his own life by shooting himself in the abdomen and slitting his wrists.<sup>108</sup> Moran initially entered a plea of not guilty to the three first-degree murder charges.<sup>109</sup> He was then evaluated by two psychiatrists and found to be competent to stand trial; after which the state announced its plans to seek the death penalty.<sup>110</sup> Two and a half months later Moran changed his plea from not guilty to guilty; according to Moran, the change in plea was "to prevent the presentation of mitigating evidence at his sentencing."<sup>111</sup> Despite being advised by the trial court of the "dangers and disadvantages" accompanying a decision to waive appointed counsel and defend himself, Moran chose to waive

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OF PRISON AND JAIL INMATES, BUREAU OF JUSTICE STATISTICS 1 (2006).

<sup>103</sup> It is noted that:

State prisoners who had a mental health problem (27%) were over two times more likely than those without (10%) to report being physically or sexually abused in the past.

Jail inmates who had a mental health problem were three times more likely than jail inmates without to have been physically or sexually abused in the past (24% compared to 8%).

*Id.* at 5.

<sup>104</sup> "About 74% of State prisoners and 76% of local jail inmates who had a mental health problem met criteria for substance dependence or abuse." *Id.* at 1.

<sup>105</sup> *Nebraska Press Ass'n v. Stuart*, 427 U.S. 539, 600 (1976); *Boykin v. Alabama*, 395 U.S. 238, 243 (1969).

<sup>106</sup> *Godinez v. Moran*, 509 U.S. 389, 391–92, 393 (1993).

<sup>107</sup> *Id.* at 391.

<sup>108</sup> *Id.*

<sup>109</sup> *Id.*

<sup>110</sup> *Id.* at 391–92.

<sup>111</sup> *Id.* at 392.

appointed counsel and defended himself.<sup>112</sup>

The court determined based on psychiatric evaluations that Moran's waiver of counsel and subsequent guilty plea were made knowingly and voluntarily and sentenced Moran to death for two of the murders.<sup>113</sup> Moran later sought post conviction relief in the United States District Court for the State of Nevada on the grounds that he was "mentally incompetent to represent himself."<sup>114</sup> The District Court denied review.<sup>115</sup> An appeal to the Ninth Circuit Court of Appeals, however, led to a reversal.<sup>116</sup> At issue was Moran's capacity to knowingly and voluntarily waive his constitutional rights.<sup>117</sup> The Ninth Circuit held that the lower court had applied the "the wrong legal standard of competency," contending that *the competency to waive constitutional rights is based upon a higher standard than what is required for a defendant to stand trial*.<sup>118</sup> To stand trial a defendant must demonstrate "a rational and factual understanding" of the charges and proceedings, and must be able to assist counsel<sup>119</sup> However, to waive counsel and to plead guilty a defendant must possess "the capacity for 'reasoned choice' among the alternatives available to him."<sup>120</sup> The Ninth Circuit held that the trial court had erred in accepting Moran's guilty plea.<sup>121</sup> While Moran was evaluated by psychologists and determined by the trial court to have a "rational and factual understanding" of the court proceedings, and sufficient ability to consult with and aid his attorney and was therefore found competent to stand trial, the record indicated that he was not competent to waive his Fifth and Sixth Amendment rights.<sup>122</sup> The Ninth Circuit affirmed a more stringent mental competency standard for those confronted with abdication of their constitutional rights, and concluded that due process mandates that the accused should be evaluated for their capacity "to make a reasoned choice

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<sup>112</sup> *Id.* at 392, 393.

<sup>113</sup> Moran's sentence for the murder of his ex-wife was reversed and remanded by the Nevada Supreme Court for "imposition of a life sentence without the possibility of parole." *Id.* (citing *Moran v. State*, 734 P.2d 712, 715 (Nev. 1987)).

<sup>114</sup> *Godinez*, 509 U.S. at 393.

<sup>115</sup> *Id.*

<sup>116</sup> *Moran v. Godinez*, 972 F.2d 263, 268 (9th Cir. 1992).

<sup>117</sup> *Id.* at 264.

<sup>118</sup> *Id.* at 266.

<sup>119</sup> *Godinez*, 509 U.S. at 394 (quoting *Moran*, 972 F.2d at 266).

<sup>120</sup> *Godinez*, 509 U.S. at 394 (quoting *Moran*, 972 F.2d at 266).

<sup>121</sup> *See id.* at 267.

<sup>122</sup> *See id.* at 268.



among the alternatives presented to him.”<sup>123</sup>

Relying upon its previous opinion in *Dusky*,<sup>124</sup> in a 7-2 decision the United States Supreme Court reversed the Ninth Circuit Court opinion and held that the determination of a defendant’s competency to forfeit assistance of counsel, and plead guilty, is only dependent upon the defendant’s ability to understand the court proceedings and possess the ability to consult with and assist their attorney.<sup>125</sup> The “understand and assist” criteria was, for the Ninth Circuit, too low of a threshold when determining a defendant’s competency to abdicate rights.<sup>126</sup> By rejecting the Ninth Circuit’s “reasoned choice” as the standard of mental competency required to abdicate rights and affirming the “understand and assist” criteria originally appearing in *Dusky*, “understand and assist” became the minimum threshold by which competency is determined.<sup>127</sup>

Moran is one such defendant to be denied due process because of the Court’s lack of distinction between decision-making and other executive functions in the brain. Moran’s psychological evaluation indicated that he understood what was happening to him and why, and was therefore competent to stand trial.<sup>128</sup> His actions, attempted suicide, and psychological evaluations all establish Moran’s extreme depression and complete disinterest in advocating for himself, and the record shows that he waived his right to counsel for the purpose of not having mitigating evidence presented on his behalf.<sup>129</sup>

There are two significant points to be made from the outset. First, The *Moran* decision demonstrates a profound lack of awareness regarding insights into human decision-making generated by scholars in the natural and social sciences. Second, legal language is political and legal language is ideological. Embedded in the language selected by justices in judicial opinions is assumptions about human beings and the political, economic, cultural, psychological, and neurological effects upon the appropriateness of their actions.<sup>130</sup> Each of these topics will be taken up in greater detail in Part IV, but in order to fully appreciate

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<sup>123</sup> See *Sieling v. Eyman*, 478 F.2d 211, 214–15 (9th Cir. 1973).

<sup>124</sup> *Drusky v. United States*, 326 U.S. 402, 402 (1960).

<sup>125</sup> *Godinez*, 509 U.S. at 402.

<sup>126</sup> *Id.* at 397 (quoting *Sieling*, 478 F.2d at 214).

<sup>127</sup> See *Godinez*, 509 U.S. at 397–98.

<sup>128</sup> See *id.* at 391.

<sup>129</sup> See *id.* at 409–10 (Blackmun, J., dissenting).

<sup>130</sup> See ANTHONY G. AMSTERDAM & JEROME BRUNER, *MINDING THE LAW* 3 (2000); BRUCE A. ARRIGO, *MADNESS, LANGUAGE AND THE LAW* 147–48 (1993).

the imprudence of applying the knowing and voluntary standard to the plea bargaining situation it's important to contextualize U.S. Circuit and Supreme Court opinions on the subject within well-developed theoretical literatures.

The "understand and assist" test is a two-prong test established by the Supreme Court in *Dusky V. United States* for the purpose of determining a defendant's competency to stand trial.<sup>131</sup> It requires that the defendant present "a rational as well as factual understanding of the proceedings against him" and "sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding."<sup>132</sup> This standard takes several factors of the defendant's current state of mind into consideration for determining competency, including but not limited to a defendant's understanding of the charges against him, his understanding of the various roles in the courtroom (e.g. judge, prosecution, defense attorney, police officers, witnesses, experts), his ability to evaluate the possible outcomes of the trial, and his ability to communicate with his attorney and aid his attorney with facts from the case.<sup>133</sup> Contrary to the "understand and assist" standard is the "reasoned choice" standard. Unlike the "understand and assist" standard, which was primarily crafted to determine fitness to stand trial, the "reasoned choice" standard for determining mental competency was crafted by the Ninth Circuit Court of Appeals *specifically for determining a defendant's competence to plead guilty*.<sup>134</sup> Relying heavily on *Westbrook v. Arizona's* differentiation between competence to stand trial and competence to waive assistance of counsel,<sup>135</sup> in *Seiling v. Eyman* the Ninth Circuit held that the abdication of constitutional rights when pleading guilty, specifically the Fifth and Sixth Amendments, mandated a higher standard of mental competency review.<sup>136</sup> Citing Judge Hufstedler in *Schoeller v. Dunbar*,<sup>137</sup> the Ninth Circuit concluded, "[a] defendant is not competent to plead guilty if a mental illness has substantially impaired his ability to make a reasoned choice among the

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<sup>131</sup> *Dusky v. United States*, 362 U.S. 402, 402 (1960).

<sup>132</sup> *Id.*

<sup>133</sup> For a complete list please see GARY B. MELON ET AL., *PSYCHOLOGICAL EVALUATION FOR THE COURTS: A HANDBOOK FOR MENTAL HEALTH PROFESSIONALS AND LAWYERS* 130 tbl.6.1 (3d ed. 2007).

<sup>134</sup> *Compare Dusky*, 362 U.S. at 402 (defining the "understand and assist" standard), *with Seiling v. Eyman*, 478 F.2d 211, 215 (1973) (defining the "reasoned choice" standard).

<sup>135</sup> *See Westbrook v. Arizona*, 384 U.S. 150, 150 (1966).

<sup>136</sup> *See Seiling*, 478 F.2d at 214.

<sup>137</sup> *Schoeller v. Dunbar*, 423 F.2d 1183 (9th Cir. 1970).

alternatives presented to him and to understand the nature of the consequences of his plea.”<sup>138</sup> The Court continued by saying, “[w]e think this formulation is the appropriate one, for it requires a court to assess a defendant’s competency with specific reference to the gravity of the decisions with which the defendant is faced.”<sup>139</sup>

This paper posits that the current “understand and assist” threshold for determining competency to plea is too limited and devoid of scientific merit. We contend that of the two options the “reasoned choice” standard provides a more significant level of protection for those suffering from mental illness and is the more efficacious criteria. Were we to be forced into choosing from among only these two options we’d most certainly argue strongly for “reasoned choice.” However, as we will make clear in the sections to follow, even the “reasoned choice” language is confounded by a too limited understanding of how *normative* decision-making takes place. As such the matter before us is not solely one of determining substantial mental impairment, as the Ninth Circuit suggested in *Schoeller*, but rather, to discern the complexity of human decision-making more generally, and whether the knowing and voluntary criteria can withstand social scientific scrutiny when applied to run-of-the-mill plea bargain cases.<sup>140</sup> As we will demonstrate below, it cannot.

We will first discuss the history of mental incompetency law and the current incompetency standard in the United States. We will then analyze and refute the arguments made in *Godinez v. Moran* against employing the “reasoned choice” standard federally as a constitutional right. Next, we will describe the rationality of the constitutionality of plea-bargaining as opined in *Brady v. United States*<sup>141</sup> and the economic theories that are assumed to be true in the opinion. After, we will describe and refute the theoretical assumptions made in *Brady* and explain how they are unworkable within the context of the “understand and assist” threshold. Finally, we will describe the ways in which the “understand and assist” threshold falls short of the assumptions made in *Brady*, and later in Federal Rule 11, according to sociological, cognitive psychology and neuropsychology research. But before we begin we want to present a brief conceptual description of our theoretical

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<sup>138</sup> *Sieling*, 478 F.2d at 215 (quoting *Schoeller*, 423 F.2d at 1194 (Hufstedler, J., dissenting)).

<sup>139</sup> *Sieling*, 478 F.2d at 215.

<sup>140</sup> See *Schoeller*, 423 F.2d at 1194 (Hufstedler, J., dissenting).

<sup>141</sup> *Brady v. United States*, 397 U.S. 742, 744 (1970).

approach.

It is our contention that for a host of reasons the approach to determination of mental competency by the courts is too limited to be of any real value when attempting to discern whether a defendant truly understands and appreciates the gravity of plea-bargaining. Parsing and deconstructing the concepts—“knowing” and “voluntary”—presents a far more complex and integrated set of subjective intrapersonal and objective structural relationships that make *pro forma* attempts to discern either via application of Federal Rule 11 too simplistic and factually discordant with social science. It is to the matter of discerning the far more complex nature of human decision-making that we now turn.

### III. HISTORICAL INTERPRETATIONS OF MENTAL COMPETENCY

The discussion in this section will present a brief history of mental competency law, beginning with English Common Law, and its application to the law in the United States.

#### A. *Mental Competency at Common Law*

The issue of mental competency and plea-bargaining has been recognized since the seventeenth-century in English Common Law, where if a defendant refused to make a plea it had to be determined whether that defendant was “mute of malice” or “mute by visitation from God”.<sup>142</sup> “Mute of malice” referred to a defendant who was consciously refusing to speak; a defendant who is mute as a product of their own agency.<sup>143</sup> “Mute by visitation from God” literally refers to defendants who were mute, physically unable to speak and therefore unable to communicate.<sup>144</sup> This definition was later expanded to mentally incompetent defendants where as early as 1800 it is noted that any part of a trial may be delayed, including the execution, if a defendant became “absolutely mad”.<sup>145</sup> The apparent merging of the standard of being “mute by visitation from god” (physically unable to speak), and a being “mad” (mentally incompetent), is logical as each condition deeply impairs the ability of the defendant to advocate on their own behalf. This idea of being

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<sup>142</sup> GARY B. MELTON ET AL., *PSYCHOLOGICAL EVALUATIONS FOR THE COURTS: A HANDBOOK FOR MENTAL HEALTH PROFESSIONALS AND LAWYERS* 126 (3d ed. 2007).

<sup>143</sup> *See id.*

<sup>144</sup> *Id.*

<sup>145</sup> *See* MATHEW HALE, *THE HISTORY OF PLEAS OF THE CROWN* 30–31 (Sollom Emlyn ed., 1800).

able to defend oneself effectively appears to be at the crux of the reasoning for the mental competency standard at Common Law, as evidenced in *King v. Frith*:<sup>146</sup>

[N]o man shall be called upon to make his defense at a time when his mind is in that situation as not to appear capable of so doing; for, however guilty he may be, the inquiring into his guilt must be postponed to that season, when by collecting together his intellects, and having them entire, he shall be able so to model his defense as to ward off the punishment of law . . . .<sup>147</sup>

### B. Mental Competency Law in the United States

At its inception the United States judicial system was heavily influenced by the adversarial system adopted from English Common Law.<sup>148</sup> There is little case law regarding plea-bargaining at Common Law because it was standard practice for a judge to discourage a defendant from pleading guilty and to encourage trial by jury.<sup>149</sup> This was presumably to ensure procedural justice guaranteed by the adversarial trial process, as well as concern over coerced confessions. The concept of “voluntariness” in the United States arose from case law regarding coerced confessions and protection of Fifth and Sixth Amendment rights.<sup>150</sup> In *Bram v. United States*,<sup>151</sup> the U.S. Supreme Court ruled that confessions obtained under duress were inadmissible and that a confession must be shown to be voluntary in the record.<sup>152</sup> This reasoning stems from the plain and clear language of the right against self-incrimination in the Constitution as well as a distrust of the affect of coercion and manipulation on a defendant’s mind.<sup>153</sup> The idea

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<sup>146</sup> T. B. HOWELL & THOMAS JONES HOWELL, A COMPLETE COLLECTION OF STATE TRIALS AND PROCEEDINGS FOR HIGH TREASON AND OTHER CRIMES AND MISDEMEANORS 307 (1817).

<sup>147</sup> *Id.* at 318.

<sup>148</sup> See LAWRENCE M. FRIEDMAN, A HISTORY OF AMERICAN LAW 16, 21 (3d ed. 2005).

<sup>149</sup> See HALE, *supra* note 145, at 35.

<sup>150</sup> See Mark A. Godsey, *Rethinking the Involuntary Confession Rule: Toward a Workable Test for Identifying Compelled Self-Incrimination*, 93 CALIF. L. REV. 465, 468, 470–71, 499 (2005).

<sup>151</sup> *Bram v. United States*, 168 U.S. 532 (1897).

<sup>152</sup> See *id.* at 542–43.

<sup>153</sup> The Court in *Bram* notes:

In 3 Russell on Crimes, (6th ed.) 478, it is stated as follows: ‘But a confession, in order to be admissible, must be free and voluntary; that is, must not be extracted by any sort of threats or violence, nor obtained by any direct or implied promises, however slight, nor by the exertion of any improper influence. . . . A confession can never be received in evidence where the prisoner has been influenced by any threat or promise; for the law

that the incentive of a lesser sentence or the threat of the death penalty does not affect voluntariness is a radical departure from these ideas. A guilty plea is among other things “an admission of guilt and a waiver of [several] constitutional rights.”<sup>154</sup> Beginning in 1930,<sup>155</sup> but more comprehensively in 1970,<sup>156</sup> the Supreme Court established a much less strict definition of voluntariness for guilty pleas than with confessions described in *Bram*. Before landmark cases such as *Brady*, the Supreme Court was reluctant to determine how coercive plea bargaining was, preferring to leave the decision to the trial courts.<sup>157</sup>

Essential to determining the voluntariness of both guilty pleas and confessions is the defendant’s state of mind. *Youtsey v. United States*<sup>158</sup> incorporated what we refer to as the “incompetency doctrine,” which made trying a mentally incompetent defendant unconstitutional.<sup>159</sup> Defendant Youtsey had progressive and degenerative epilepsy, and while he was competent at the commission of the crime and therefore culpable, at the time of the trial he could no longer remember the crime.<sup>160</sup> The ruling reversed the lower court’s decision and required that the trial court investigate the sanity of the defendant at the time of the commission of the crime, and at the time of trial, to ensure that the defendant was able to “rationally defend himself.”<sup>161</sup> The criteria for determining mental competency articulated in *Youtsey*, such as

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cannot measure the force of the influence used, or decide upon its effect upon the mind of the prisoner, and therefore excludes the declaration if any degree of influence has been exerted.’

*Id.*

<sup>154</sup> *McKrell v. State*, 452 N.E.2d 946, 949 (Ind. 1983) (citing *Stowers v. State*, 363 N.E.2d 978, 982 (1977)).

<sup>155</sup> *See, e.g.*, *United States v. Patton*, 281 U.S. 276, 294–95, 311 (1930).

<sup>156</sup> *See, e.g.*, *Corbett v. New Jersey*, 439 U.S. 212, 218–20 (1978) (quoting *Brady v. United States*, 397 U.S. 742, 751 (1970)); *Bordenkircher v. Hayes*, 434 U.S. 357, 361 (1978); *Chaffin v. Stynchcombe*, 412 U.S. 17, 33 (1973); *Santobello v. New York*, 404 U.S. 257, 261 (1971); *North Carolina v. Alford*, 400 U.S. 25, 39 (1970); *Brady*, 397 U.S. at 749, 755.

<sup>157</sup> *See Shelton v. United States*, 246 F.2d 571, 573 (5th Cir. 1957).

<sup>158</sup> *Youtsey v. United States*, 97 F. 937 (6th Cir. 1899).

<sup>159</sup> *See id.* at 940, 947–48.

<sup>160</sup> *Id.* at 940.

<sup>161</sup> *Id.* at 947–48. The court noted that:

“[I]t [is] doubtful whether the accused was capable of appreciating his situation, and of intelligently advising his counsel as to his defense, if any he had. This evidence indicated that the disease had progressed, and with it the impairment of mind and memory. We think the learned trial judge should have adopted some method of satisfying himself that the accused was able to rationally defend himself, before putting him on trial under the plea of not guilty. For this error we are constrained to reverse the case . . . .”

*Id.* at 947.

understanding the charges and being able to assist one's attorney, are echoed in the "understand and assist" test established in *Dusky* over 60 years later.<sup>162</sup>

In the United States, a defendant's ability to competently advocate for herself is inherent to both the integrity of our legal system, as well as the effectiveness of an adversarial system. Due process requires that a defendant must enter a guilty plea "knowingly and voluntarily,"<sup>163</sup> as such a plea can only be valid if the defendant is "competent" at the time the defendant entered the plea.<sup>164</sup> If a defendant does not understand the rights she is forfeiting, the plea is not entered knowingly, and if she enters a guilty plea without "an understanding of the law in relation to the facts," the plea is not entered voluntarily.<sup>165</sup> A defendant's ability to enter a plea knowingly and voluntarily determines a defendant's competence.<sup>166</sup>

Until recently, federal law made no distinction between the competency to stand trial and the competency to plead guilty.<sup>167</sup> A Defendant's competency to stand trial is determined by a two-prong requirement decided in *Dusky*, which asserts that a defendant is competent to stand trial if they: a) have a rational, factual as well as procedural understanding of the charges against them, and b) are able to presently consult with their attorney and are able to aid their attorney in their defense.<sup>168</sup> Some states find fault with this standard because it does not specifically address competence for plea bargaining and they have adopted a standard that assesses a defendant's ability to make decisions and understand the outcome of decisions.<sup>169</sup> With its decision in *Indiana v. Edwards*,<sup>170</sup> the U.S. Supreme Court held that requiring a higher level of mental competency for a defendant to *waive assistance of counsel and represent himself* (abdication of a constitutional right consistent with *Sieling v. Eyeman*) at trial than the mental competency

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<sup>162</sup> *Dusky v. United States*, 362 U.S. 402, 402 (1960).

<sup>163</sup> *Santobello v. New York*, 404 U.S. 257, 261–62 (1971); *McCarthy v. United States*, 394 U.S. 459, 466 (1969); *United States v. Mathers*, 539 F.2d 721, 725–26 (D.C. Cir. 1976).

<sup>164</sup> *Id.* at 725.

<sup>165</sup> *McCarthy*, 394 U.S. at 466.

<sup>166</sup> *See Mathers*, 539 F.2d at 725, 726.

<sup>167</sup> *See Westbrook v. Arizona*, 384 U.S. 150, 150 (1966).

<sup>168</sup> *Dusky v. United States*, 362 U.S. 402, 402 (1960) ("[T]est must be whether he has sufficient present ability to consult with his lawyer with a reasonable degree of rational understanding—and whether he has a rational as well as factual understanding of the proceedings against him.").

<sup>169</sup> *See Sieling v. Eyeman*, 478 F.2d 211, 214–15 (9th Cir. 1973).

<sup>170</sup> *Indiana v. Edwards*, 554 U.S. 164 (2008).

required to *stand* trial was constitutional.<sup>171</sup> This ruling did not however overturn *Moran* because it does not address the constitutionality of a defendant who is borderline competent under the *Dusky* standard to *plead* guilty.<sup>172</sup> Apparently influential for the majority in the *Edwards* decision was an amicus brief submitted by American Psychiatric Association and American Academy of Psychiatry and Law detailing the research in support of defendants having different competencies for different cognitive processes.<sup>173</sup> This research indicates that the legal view of competency should be changed significantly with new scientific research, and enhanced technology (e.g., F-MRI, PET scans, and EEGs).<sup>174</sup> The vast amount of information about the mind that we have gleaned since the establishment of competency standards should be put to use in determining whether or not the “understand and assist” threshold for competency can be applied to a defendant’s competence to plead guilty.

#### IV. A DIFFERENT AIR TO BREATHE

The essence of critical inquiry is deconstruction of the taken-for-granted. This is a fundamental characteristic of scientific investigation regardless of whether it originates in the natural sciences, social sciences, or humanities.<sup>175</sup> In 1959, American sociologist, C. Wright Mills, published his classic work, *The Sociological Imagination*.<sup>176</sup> Possessing a sociological imagination implores us to problematize the status quo in order to expose identity as manifestation of the confluence of pre-existing political, economic, and cultural conditions.<sup>177</sup> By way of illustration, consider this sociologically inspired maxim, “Most of us are danced

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<sup>171</sup> See *id.* at 177–78.

<sup>172</sup> See *id.* at 174 (explaining that the court will be addressing whether a defendant who is mentally competent to stand trial is also competent to represent himself).

<sup>173</sup> See Amici Curiae Brief at 17–32, *Indiana v. Edwards*, 554 U.S. 164 (2008) (No. 07-208).

<sup>174</sup> See, e.g., William A. Woodruff, *Evidence of Lies and Rules of Evidence: The Admissibility of f-MRI Based Expert Opinion of Witness Truthfulness*, 16 N.C. J.L. & TECH. 105, 114–15 (2014).

<sup>175</sup> See generally C. WRIGHT MILLS, *THE SOCIOLOGICAL IMAGINATION* 78–79 (3rd prt. 1979) (“The social scientist who spends his intellectual force on the details of small-scale milieux is not putting his work outside the political conflicts and forces of his time. He is, at least indirectly and in effect, ‘accepting’ the framework of his society. But no one who accepts the full intellectual tasks of social science can merely assume the structure. In fact, it is his job to make that structure explicit and to study it as a whole.”).

<sup>176</sup> *Id.*

<sup>177</sup> See generally *id.*, at 15 (“[The sociological imagination] . . . promise[s] an understanding of the intimate realities of ourselves in connection with larger social realities.”).



by strings about which we are unaware, and over which we have no control.”<sup>178</sup> Critical inquiry like that expressed through application of the sociological imagination is designed to uncover the “strings,” and by doing so, activate our agency. Let’s consider what might be an obvious example.

So far as we know, none of us *chose* the religious affiliations we were exposed to, or our class, race/ethnicity, sex, gender, country, state, city, or neighborhood. To state the obvious, we were born into a pre-existing set of structural arrangements that played a significant role in constituting our respective identities.<sup>179</sup> What is more, none of us chose our mothers and father’s, nor did we have any control over their prenatal activities (e.g., smoking, drinking, using narcotics, spouse abuse) or genetic traits. What’s thrilling about this is that we, all of us, are truly unique in the universe. Our biological, sociological, and psychological composition is so complex in its diversity that no two of us experiences the world in precisely the same way. For example, our ability to empathize with the experiences of others, what makes us truly unique in the animal kingdom, is in part a product of well-functioning mirror neurons that “light up” in the brain whenever we perform an action and we see another person do the same.<sup>180</sup> Similarly, neuroscience has demonstrated that the limbic system affects moral decision-making.<sup>181</sup> What will become clear as our story unfolds in this article is that it is virtually impossible to disentangle specific causes for human behavior from the complex interaction of biological, sociological, and psychological factors that constitute each of us. As such, what are we to make of the scientifically vacuous and unsophisticated knowing and voluntary method proscribed by Federal Rule 11?

In contradistinction to what is generally accepted within the natural and social sciences, the law holds as a founding principle that all human beings are “equal.” Perhaps, in the United States at least, it all began with these immortal words: “We hold these truths to be self-evident, that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that

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<sup>178</sup> We attribute this maxim to Reece McGee, Emeritus Professor of Sociology at Purdue University. Dr. Schehr was a Purdue University graduate assistant assigned to Professor McGee to assist with his Introduction to Sociology course. Professor McGee would commence each new semester with this maxim.

<sup>179</sup> See *infra* text accompanying notes 245–46, 248–50.

<sup>180</sup> RICK HANSON & RICHARD MENDIUS, *BUDDHA’S BRAIN: THE PRACTICAL NEUROSCIENCE OF HAPPINESS, LOVE & WISDOM* 25 (2009).

<sup>181</sup> *Id.* at 10.

among these are Life, Liberty and the pursuit of Happiness.”<sup>182</sup> A similar expression can be found in Article I of the Universal Declaration of Human Rights: “All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.”<sup>183</sup> The Enlightenment-inspired commitment to human equality before the law was a laudable construct, especially when we consider the oppressive conditions that existed throughout the Middle Ages that exposed common people to harsh and unpredictable punishment.<sup>184</sup> However, when it comes to determining whom we really are when standing before a prosecutor, judge, or jury, the notion of equality becomes far more nuanced, and far more troublesome. That is because the categories we use to distinguish from among the law abiding and those guilty of criminal acts are fraught with assumptions about human beings that fail to capture the levels of complexity constituting human beings. For as the new science of neurophenomenology makes clear, “brains are like snowflakes,” no two are the same.<sup>185</sup>

In this article we seek to expose the practice of plea-bargaining, especially its designation of the “knowing” and “voluntary” criteria, to critical inquiry consistent with the sociological imagination. We will demonstrate that recognition of the complex confluence of biological, sociological, and psychological variables constituting all human beings makes any attempt to precisely determine conscious awareness of “mental state” virtually impossible. By doing so, we hope to demonstrate that while the mental competency test used to discern the constitutionality of plea-bargaining (knowing and voluntary) is a functionally expedient way to dispense with heavy caseloads, it fails to properly discern the true nature of human comprehension and decision-making, thereby throwing into question whether and to what extent a criminal defendant is

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<sup>182</sup> THE DECLARATION OF INDEPENDENCE (1776).

<sup>183</sup> G.A. Res. 217 (III) A, Universal Declaration of Human Rights, at Art. 1 (Dec. 10, 1948).

<sup>184</sup> See PHILOSOPHY, CRIME, AND CRIMINOLOGY 10–11 (Bruce A. Arrigo & Christopher R. Williams eds., 2006) (explaining that the Enlightenment placed an emphasis on all individuals being equal in their characteristics); GEORGE RUSCHE & OTTO KIRCHHEIMER, PUNISHMENT AND SOCIAL STRUCTURE 19, 20 (2009); Gordon S. Wood, *The American Enlightenment, in AMERICA AND ENLIGHTENMENT CONSTITUTIONALISM* 159, 162, 167 (Gary L. McDowell & Johnathan O’Neill eds., 2006); MARY E. VOGEL, PLEA BARGAINING, THE COURTS AND THE MAKING OF POLITICAL AUTHORITY 134 n.5 (2007).

<sup>185</sup> See David Eagleman, *The Brain and the Law: How Neuroscience will Shift Blameworthiness*, YOUTUBE (June 18, 2013), <https://www.youtube.com/watch?v=753cCnAXR6E>. Eagleman is the Director of NeuLaw.org. David M. Eagleman, NEULAW, <http://neulaw.org/people> (last visited Sept. 13, 2016).

culpable and fully cognizant of the gravity of the situation confronting him.

Conceptually what we request of our readers is in some regard a suspension of disbelief. With due application of the sociological imagination we request a commitment to rethink the taken-for-granted in order to find, as Gilbert Ryle proposed, “a different air to breathe.”<sup>186</sup> For example, are we human beings really equal? Do we possess the same brains capable of reason? Should we apply the unreliability principle to determination of the knowing and voluntary component of pleas? What follows is a very brief introduction to the origin of our contemporary jurisprudential commitment to reason, followed by what we propose is a far more scientifically accurate presentation of human consciousness, one that is based upon an integrated model of the complex intersection of physiological, psychological, and sociological experiences constituting human identity.

#### A. *The Onset of Reason*

Contemporary jurisprudence is constituted by an essentialist folk psychology, one that valorizes mental states as “fundamental to a full causal explanation and understanding of human action.”<sup>187</sup> Due process in the United States “presupposes . . . that human action will at least be rationalizable by mental-state explanations or that it will be responsive to reasons, including incentives, under the right conditions.”<sup>188</sup> Law presumes that human beings are intentional actors capable of being guided by culturally accepted standards that are morally sound and prudent.<sup>189</sup> As a consequence the basic elements necessary to establish commission of a criminal act require proof of mental state, “such as purpose, knowledge or recklessness.”<sup>190</sup> Blameworthiness as a factor of contemporary legal practice, then, means that, “[l]egally responsible agents are . . . people who have the general capacity to grasp and be guided by good reason in particular legal contexts.”<sup>191</sup> Reason. Rationality. Freethinking, freely acting agents. Where did this notion of human

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<sup>186</sup> See CHRISTOPHER PHILLIPS, *SOCRATES CAFÉ: A FRESH TASTE OF PHILOSOPHY* 194 (2001).

<sup>187</sup> See Stephen Morse, *Neuroscience and the Future of Personhood and Responsibility*, in *LAW AND NEUROSCIENCE* 123, 123 (2014).

<sup>188</sup> See *id.*

<sup>189</sup> See *id.* at 124.

<sup>190</sup> See *id.* at 125.

<sup>191</sup> See *id.*

behavior originate? For logical consistency the legal assumption that all human beings are possessive of the same capacity for reason must be fitted with the complimentary assumption that all human beings have the same brains, the same sociological arrangements, and the same psychological interpretations.<sup>192</sup> Where did such a notion come from?

The emergence of modernity in the 17<sup>th</sup> and 18<sup>th</sup> Centuries had as its primary *raison d'être* a rejection of a Middle Ages theocratic approach to understanding behavior that was steeped in religious mysticism and dualistic expressions of human nature as either good or evil.<sup>193</sup> Perhaps the defining epistemological revelation emerging with 18<sup>th</sup>-century modernism originates with the works of Caesar Beccaria and Jeremy Bentham, and “offered a perspective of human nature and behavior that was largely free of theological influence, establishing instead the locus of crime in individual reason and thought.”<sup>194</sup> Firmly grounded in classical utilitarian philosophy, human beings were no longer thought to be either tempted or possessed, but rather, were imbued with “the principle of rationality, emphasizing personal responsibility, free choice, and hedonistic calculation.”<sup>195</sup> Classical theorists emerging during the Age of Reason framed human behavior as a triumph of knowledge over ignorance (a perspective born of Plato’s recitation of the same).<sup>196</sup> A long list of ethical hedonist philosophers beginning with Epicurus (342-270),<sup>197</sup> and continuing in the Middle Ages with Erasmus (1466-1536) and Thomas More (1478-1535) who paved the way for 18<sup>th</sup>-century articulations of ethical hedonism espoused by Francis Hutcheson (1694-1747) and David Hume (1711-1776), each expressed the conviction that human beings would and should seek to maximize pleasure and minimize pain.<sup>198</sup>

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<sup>192</sup> See Owen D. Jones & Timothy H. Goldsmith, *Law and Behavioral Biology*, 105 COLUM. L. REV. 405, 466 (2005); Stephen J. Morse, *Uncontrollable Urges and Irrational People*, 88 VA. L. REV. 1025, 1036, 1037 (2002).

<sup>193</sup> See 2 ENLIGHTENMENT, THE ENCYCLOPEDIA OF PHILOSOPHY 519, 521 (Paul Edwards et al. eds., 1967); PHILOSOPHY, CRIME, AND CRIMINOLOGY, *supra* note 184, at 9.

<sup>194</sup> *Id.*

<sup>195</sup> *Id.*

<sup>196</sup> See, e.g., *id.* at 6 (describing the essence of Plato’s moral philosophy).

<sup>197</sup> *Hedonism*, UTILITARIANISM, <http://www.utilitarianism.com/hedonism.html> (last visited Feb. 11, 2016); see Dan Weijers, *The Origins of Hedonism*, INTERNET ENCYCLOPEDIA OF PHILOSOPHY, <http://www.iep.utm.edu/hedonism/#SH1f> (last visited Feb. 12, 2016) (summarizing the philosophy of Epicurus). In his letter to Menoeceus, Epicurus says: “We recognize pleasure as the first good innate in us, and from pleasure we begin every act of choice and avoidance, and to pleasure we return again, using the feeling as the standard by which we judge every good.” *Hedonism*, *supra* note 197.

<sup>198</sup> See *Hedonism*, *supra* note 197.

Giving voice to modernist utilitarian expressions of ethical hedonism, the impact of which came to dominate philosophical understandings of human behavior and crime and to influence subsequent policy initiatives relating to sentencing, was Jeremy Bentham and his articulation of the felicity calculus.<sup>199</sup> The felicity calculus is a rational determination by an actor of the cost-benefit ratio characterizing any specific act.<sup>200</sup> According to Bentham, the felicity calculus is constituted by the following considerations: intensity (how intense is the pleasure or pain), duration (how long does the pleasure or pain last), certainty (what is the probability that the pleasure or pain will occur), propinquity (how far off in the future is the pleasure or pain), fecundity (what is the probability that the pleasure will lead to other pleasures), purity (what is the probability that the pleasure will not lead to future pain, and extent (how many persons are affected by the pleasure).<sup>201</sup> To sum up, our contemporary jurisprudential understanding of human beings as free thinking, free acting, reasonable, rational human beings is largely the product of classical theorists and their articulation of ethical hedonism. For Bentham and the Utilitarian's, "human beings are free-willed, capable of independent choice; rational and capable of calculating self-interest; hedonistic, motivated by the pursuit of pleasure and the avoidance of pain; and generally free to determine their own destinies."<sup>202</sup> The substance of the remainder of this article provides a scientific critique of the ideas espoused by the Utilitarians, but for now let's consider a Twentieth-Century response originally proposed by Supreme Court Justices, Benjamin Cardozo and William Brennan.

### *B. A Critique of Reason*

In a 1989 Cardozo Law Review article, Justice William J. Brennan, Jr., inspired by Justice Benjamin Cardozo, addresses head on the narrow judicial prioritization of reason that has defined judicial decision-making in the United States.<sup>203</sup> Anticipating the

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<sup>199</sup> See PHILOSOPHY, CRIME, AND CRIMINOLOGY, *supra* note 184, at 10; F. Rosen, *Introduction*, in AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION lxvii, lxix (J. H. Burns & H. L. A. Hart eds., 1996).

<sup>200</sup> See PHILOSOPHY, CRIME, AND CRIMINOLOGY, *supra* note 184, at 10; Bruce A. Arrigo & Christopher R. Williams, *The Ethics of Advocacy for the Mentally Ill: Philosophic and Ethnographic Considerations*, 24 SEATTLE U. L. REV. 245, 273 (2000).

<sup>201</sup> AN INTRODUCTION TO THE PRINCIPLES OF MORALS AND LEGISLATION, *supra* note 199, at 38–41.

<sup>202</sup> PHILOSOPHY, CRIME, AND CRIMINOLOGY, *supra* note 184, at 10.

<sup>203</sup> See William J. Brennan, Jr., *Reason, Passion, and "The Progress of the Law,"* 10

theoretical approach that we adopt in this article, Justice Brennan says that, “Cardozo drew our attention to a complex interplay of forces—rational and emotional, conscious and unconscious—by which no judge could remain unaffected.”<sup>204</sup> Part and parcel of the positivist law dominating juridic practices of his day, Justice Cardozo openly criticized formalist rationalism by suggesting that: “Principles and logic take a conscientious and thoughtful judge only so far; then, . . . ‘the paths . . . begin to diverge, and we must make a choice between them.’ . . . ‘[P]rinciples are complex bundles’ of history, philosophy, and commentary, and often admit of more than one interpretation or application in any particular case.”<sup>205</sup>

Further, Justice Cardozo asserts that, “[d]eep below consciousness are other forces, the likes and the dislikes, the predilections and the prejudices, the complex of instincts and emotions and habits and convictions, which make the man, whether he be litigant or judge.”<sup>206</sup> The American judiciary was formed in the caldron of partisan politics.<sup>207</sup> To generate some certainty that party politics would not overtly influence judicial decision-making, the federal judiciary adopted a strict adherence to reason and legal formalism to the exclusion of other states of being.<sup>208</sup> According to Justice Brennan, Justice Cardozo’s attack on the fetishism of reason and positive law came largely in response to the *Lochner v. New York*<sup>209</sup> opinion, where the United States Supreme Court struck down a law “limit[ing] the number of hours per week that bakery employees could work.”<sup>210</sup> The Court’s opinion rested on preservation of the right of bakery owners to freely contract with prospective employees.<sup>211</sup> Cardozo’s response to *Lochner* challenged the logical premise upon which it was based—negative liberty, or freedom from restraint.<sup>212</sup> According to Brennan, Cardozo believed that:

[I]t was essential “to consider no contract worthy of respect unless the parties to it are in relations, not only of liberty, but of equality. If one of the parties be without defense or

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CARDOZO L. REV. 3, 3 (1989).

<sup>204</sup> *Id.*

<sup>205</sup> *Id.* at 4.

<sup>206</sup> *Id.* at 5.

<sup>207</sup> *Id.* at 7.

<sup>208</sup> *See id.* at 8.

<sup>209</sup> *Lochner v. New York*, 198 U.S. 45 (1905).

<sup>210</sup> Brennan, *supra* note 203, at 10.

<sup>211</sup> *See id.*

<sup>212</sup> *See id.* at 10–11.

resources, compelled to comply with the demands of the other, the result is a suppression of true freedom.”<sup>213</sup>

Cardozo’s reference to unequal contract is apropos of a more contemporary critique of the constitutionality of plea-bargaining (and not specifically to mental competency), especially as it pertains to the Supreme Court’s adoption of the language of contract law as a way to legitimize it.<sup>214</sup> One of the authors of this article has argued elsewhere the question of the constitutionality of plea-bargaining, a topic that we will not revisit here.<sup>215</sup> But the root point discussed by Justices Cardozo and Brennan is apropos of our primary concern over mental competency. Justice Brennan cites a string of cases interpreting the Fourteenth Amendment’s Due Process Clause.<sup>216</sup> Specifically as it pertains to our concerns, Justice Brennan says that,

Acknowledged. Due process asks whether government has treated someone fairly, whether individual dignity has been honored, whether the worth of an individual has been acknowledged. *Officials cannot always silence these questions solely by pointing to rational action taken according to standard rules.* They must plumb their conduct more deeply, seeking answers in the more complex equations of human nature and experience.<sup>217</sup>

In his *Republic*, Plato explains how it is that those with the requisite capacity for knowledge leading to virtue may, in fact, be turned toward “evil.”<sup>218</sup>

Why, I said, we know that all germs or seeds, whether vegetable or animal, when they fail to meet with proper nutriment or climate or soil, in proportion to their vigour, are all the more sensitive to the want of a suitable environment, for evil is a greater enemy to what is good than to what is not. . . .

And our philosopher follows the same analogy—he is like a plant which, having proper nurture, must necessarily grow and mature into all virtue, but, if sown and planted in an

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<sup>213</sup> *Id.*

<sup>214</sup> *See id.* at 10.

<sup>215</sup> Robert Schehr, *The Emperor’s New Clothes: Intellectual Dishonesty and the Unconstitutionality of Plea-Bargaining*, 2 TEX. A&M L. REV. 385, 386–87 (2015).

<sup>216</sup> Brennan, *supra* note 203, at 15–16, 15 n.45–46, 16 n.47 (first citing *Adamson v. California*, 332 U.S. 46, 61 (1947) (Frankfurter, J., concurring); then citing *Ross v. Moffitt*, 417 U.S. 600, 609 (1974); and then citing *Twining v. New Jersey*, 211 U.S. 78, 106 (1908)).

<sup>217</sup> *Id.* at 16 (emphasis added).

<sup>218</sup> *See The Republic*, in THE WORKS OF PLATO 397, 451 (Irwin Edman ed., 1956).

alien soil, becomes the most noxious of all weeds, unless he be preserved by some divine power.<sup>219</sup>

Nineteenth-century sociology would invigorate Plato's insights about the significance of cultural capital and habitus to shape life chances, and both Cardozo and Brennan are correct to highlight the complex weave of interactions and relationships that constitute subjects. One of Justice Brennan's parting insights in the Cardozo Law Review article draws directly upon the work of prominent sociologist, Max Weber, and Weber's brilliant treatise on bureaucracy.<sup>220</sup> Simply put, as societies become more rational and bureaucratic they also become more alienating and dehumanizing.<sup>221</sup> Justice Brennan, citing Weber, says that, "[b]ureaucracy develops the more perfectly, the more it is 'dehumanized,' the more completely it succeeds in eliminating from official business love, hatred, and all purely personal, irrational, and emotional elements which escape calculation."<sup>222</sup> The rationalization of due process through administration of the plea-bargaining process is a manifestation of Weber's ideal-type bureaucracy. According to Gerth and Mills, "Weber thus identifies bureaucracy with rationality, and the process of rationalization with mechanism, depersonalization, and oppressive routine. Rationality, in this context, is seen as adverse to personal freedom."<sup>223</sup> And much like Cardozo's aversion to increasing rationalization and routinization of the administration of justice, Weber equally: "deplores the type of man that the mechanization and the routine of bureaucracy selects and forms. The narrowed professional, publicly certified and examined, and ready for tenure and career. His craving for security is balanced by his moderate ambitions and he is rewarded by the honor of official status."<sup>224</sup>

In its most essential form, bureaucratic institutions like those responsible for the administration of justice construct an internal labor market that, for those occupying positions within them, require strict adherence to rules and laws and provide precious little space for consideration of any variability, non-linearity, or

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<sup>219</sup> *Id.* at 451, 452.

<sup>220</sup> See MAX WEBER, *ECONOMY AND SOCIETY: AN OUTLINE OF INTERPRETIVE SOCIOLOGY* 975 (Guenther Roth & Claus Wittich eds., 1978).

<sup>221</sup> *Id.*

<sup>222</sup> Brennan, *supra* note 203, at 19.

<sup>223</sup> FROM MAX WEBER: *ESSAYS IN SOCIOLOGY* 50 (H. H. Gerth & C. Wright Mills eds., trans., 1946).

<sup>224</sup> *Id.*



non-normativity.<sup>225</sup> In short, for the prosecutor, defense attorney, and judge, each of whom is steeped in juridic socialization beginning with their training in law school and continuing into legal practice,<sup>226</sup> all explanations for consciousness and the constitution of divided selves, save for those premised upon a ritualized belief in folk psychological understanding of reason, is marginalized, sacrificed on the alter of bureaucratic rationality. As a consequence there is no room for consideration of any category of behavior that fails to suit the rational institutional “needs” generated by actors responsible for administration of contemporary due process. Weber’s insights apply to framing the practice of law as legal formalism. By legal formalism we mean, “the way in which lawyers are trained, and consequently, the ways in which they translate that training into practice. In general, we can say that this practice of law is ‘mechanical jurisprudence,’ producing an ‘emotional insensitivity and underdevelopment of law students and lawyers.’”<sup>227</sup> Consistent with Weber’s emphasis on valorization of bureaucratic process to enhance legitimacy and efficiency, legal formalism creates “an ambiance around legal practice through the application of precedent and analysis of obscure case law, much like that which exists in the natural sciences. Here, the emphasis is on technical precision, the constitution of a scientific approach to the administration of law.”<sup>228</sup> Like Cardozo and Brennan, for whom a bureaucratized administration of justice excised passion, for Richard Delgado legal formalism leaves practitioners with no moral anchor.<sup>229</sup>

In summary, what we can deduce from the theoretical work thus far presented, especially as it applies to the plea process, is that contemporary jurisprudence seeks to eliminate from consideration the messy non-linear ways that human beings cognate, how we make intelligible political, economic, cultural, and environmental stimuli, and how we unscramble interpersonal queues. What is needed is a more nuanced and integrated theoretical approach.

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<sup>225</sup> See WEBER, *supra* note 220, at 224; Brennan, *supra* note 203, at 18, 19.

<sup>226</sup> See Robert Schehr, “*The Lord Speaks Through Me*”: *Moving Beyond Conventional Law School Pedagogy and the Reasons for Doing So*, 2009 INT’L J. CLINICAL LEGAL EDUC. 9, 10, 13 (discussing the impact of law school training on the construction and maintenance of subjects who will engage in system maintenance and occupy the bureaucratic halls of justice).

<sup>227</sup> Robert Schehr, *From Restoration to Transformation: Victim-Offender Mediation as Transformative Justice*, 18 MEDIATION Q. 151, 153 (2000).

<sup>228</sup> *Id.*

<sup>229</sup> Richard Delgado, *Rodrigo’s Thirteenth Chronicle: Legal Formalism and Law’s Discontents*, 95 MICH. L. REV. 1105, 1128 (1997).

*C. An Integrative Theoretical Model*

We join Justices Cardozo and Brennan in seeking a far more nuanced determination of human decision-making and behavior, one that eschews Classical jurisprudence and seeks a more integrated and constitutive model to explain it. Basing his work on cognitive theory educational theorist, Howard Gardner, has famously identified seven intelligences possessed by human beings, they are: visual-spatial, bodily-kinesthetic, musical, interpersonal, intrapersonal, linguistic, and logical-mathematical.<sup>230</sup> While Gardner's work was specifically dedicated to exposition of the ways that students learn, his recognition of multiple intelligences exemplifies a more integrated understanding of human cognition in relation to plea-bargaining and mental competency.<sup>231</sup> Specifically, Gardner's research "documents the extent to which students possess different kinds of minds and therefore learn, remember, perform, and understand in different ways . . . ."<sup>232</sup> He goes on to say that:

[W]e are all able to know the world through language, logical-mathematical analysis, spatial representation, musical thinking, the use of the body to solve problems or to make things, an understanding of other individuals, and an understanding of ourselves. Where individuals differ is in the strength of these intelligences—the so-called profile of intelligences—and in the ways in which such intelligences are invoked and combined to carry out different tasks, solve diverse problems, and progress in various domains."<sup>233</sup>

When juxtaposed to current static rational actor models applied to jurisprudence, Gardner's theory of multiple intelligences offers a far more sophisticated portrait of human cognition and mental competency.

Ken Wilber has generated perhaps the most compelling and comprehensive theoretical model privileging what he calls an "integral approach" to human consciousness.<sup>234</sup> Like Gardner, Wilber identifies multiple human intelligences that include cognitive, interpersonal, moral, emotional, aesthetic, sexual, and

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<sup>230</sup> See Carla Lane, *Multiple Intelligences*, DISTANCE LEARNING TECH. RESOURCE GUIDE, <http://www.tis-london.org/uploads/documents/Multiple-intelligences.pdf> (last updated Feb. 18, 2014).

<sup>231</sup> See *id.*

<sup>232</sup> *Id.*

<sup>233</sup> *Id.*

<sup>234</sup> KEN WILBER, INTEGRAL SPIRITUALITY: A STARTLING NEW ROLE FOR RELIGION IN THE MODERN AND POSTMODERN WORLD 2, 4 (2007).

spiritual.<sup>235</sup> His most thorough explication of the integral hypothesis appears in, *A Brief History of Everything*.<sup>236</sup> Building upon the work of Arthur Koestler, Wilber proposes a theory of consciousness predicated upon the fundamental existence of “holons.”<sup>237</sup> Holons, Wilber explains, refers to any: “entity that is itself a whole and simultaneously a part of some other whole. . . . For instance, a whole atom is part of a whole molecule, and the whole molecule is part of a whole cell, and a whole cell is part of a whole organism, and so on.”<sup>238</sup>

Apropos of our concerns in this article, Wilber applies conceptualization of holons to representations of truth claims.<sup>239</sup> As we will see below when we discuss Wilber’s theoretical matrix in greater detail, coming to complete understanding of truth or validity claims is a far more complex process than acknowledgement of some apparently objective reality.<sup>240</sup> Deeply embedded in the human psyche is a multilayered holon of subconscious meaning-making and comprehension that requires what Wilber refers to as a “full spectrum model” to properly capture it.<sup>241</sup> Inter and intra-subjective states of awareness that are the product of neurological, physiological, subjective social-psychological, cultural, and macro structural embeddedness constitute subjects by way of a multivariate intersection of intra and interpersonal states of awareness.<sup>242</sup> Recognition of humans as “holons,” as organisms within organisms within organisms, from our most rudimentary atomic structure, to our existence as organisms occupying planetary space (and more recently outer space), means that our awareness of ourselves, and others’ awareness of us, is contextualized in a far more complicated set of biological, sociological, and psychological arrangements than is allowed for in contemporary jurisprudence.<sup>243</sup> To sum, human beings are holons, and as such we require a full spectrum theoretical model to thoughtfully understand consciousness and cognition than simple rational actor models can accommodate.

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<sup>235</sup> See *id.* at 23–24.

<sup>236</sup> KEN WILBER, *A BRIEF HISTORY OF EVERYTHING* 286, 310 (2d ed. 2000).

<sup>237</sup> *Id.* at 17.

<sup>238</sup> *Id.*

<sup>239</sup> See *id.* at 108.

<sup>240</sup> See *infra* Part V.

<sup>241</sup> See WILBER, *supra* note 236, at 102.

<sup>242</sup> See *id.* at 102–04; see *infra* Figure 3.

<sup>243</sup> See WILBER, *supra* note 236, at 17–19.

What we propose is a comprehensive theoretical construct, one that integrates all levels of conscious awareness. This is because human beings do not operate solely on one plane of awareness and cognition.

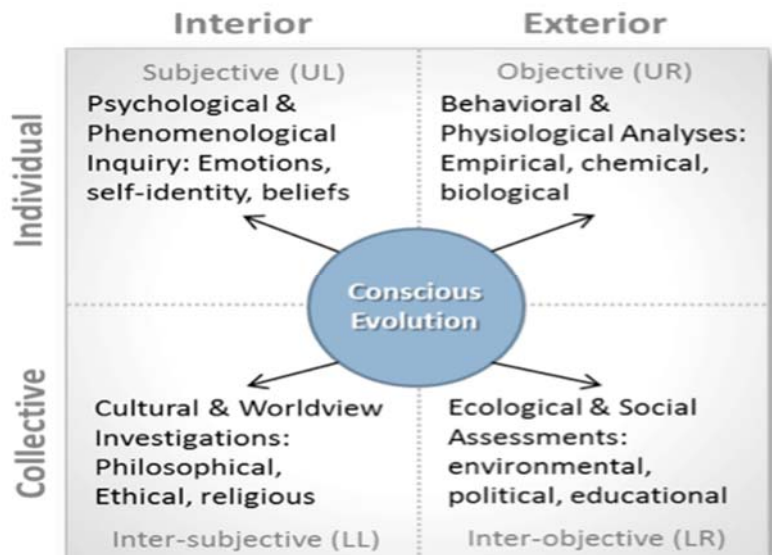


Figure 3: Four Quadrants<sup>244</sup>

To visually represent the combinatory effect of full spectrum consciousness, Wilber has generated a representation of the ways scholars have attempted to explain consciousness by placing their relevant emphases into four quadrants.<sup>245</sup> Each of the quadrants, while heuristically representative, signifies the subjective and collective ways that human beings come to consciousness about themselves as embedded in complex webs of association.<sup>246</sup> The schemata representing decision making about any one subject, but especially something as complex as one's role as a defendant in the criminal justice system, is here represented by Wilber's typology as vastly more nuanced and comprehensive than any one theoretical paradigm alone can capture, and far more sophisticated than the Court has applied in either *Brady* or *Moran*.<sup>247</sup>

<sup>244</sup> *Id.* at 67 fig.5-2.

<sup>245</sup> *See id.* at 74.

<sup>246</sup> *See id.* at 74–75.

<sup>247</sup> *See infra* text accompanying notes 478–81.

The left side of Figure 3 represents interior or subjective realms, while the right side of Figure 3 signifies exterior experiences.<sup>248</sup> The top left quadrant features subjective interpretive aspects of human information processing (hermeneutics), while the top right quadrant signifies positivist physiological processes.<sup>249</sup> The lower left quadrant addresses the self as embedded in local culture, while the lower right quadrant speaks to political and economic structural arrangements.<sup>250</sup>

Wilber further develops the four quadrants with a model of what he calls “validity claims.” Here the emphasis is on the multi-level development of truthfulness, truth, justness, and functional fit.<sup>251</sup>

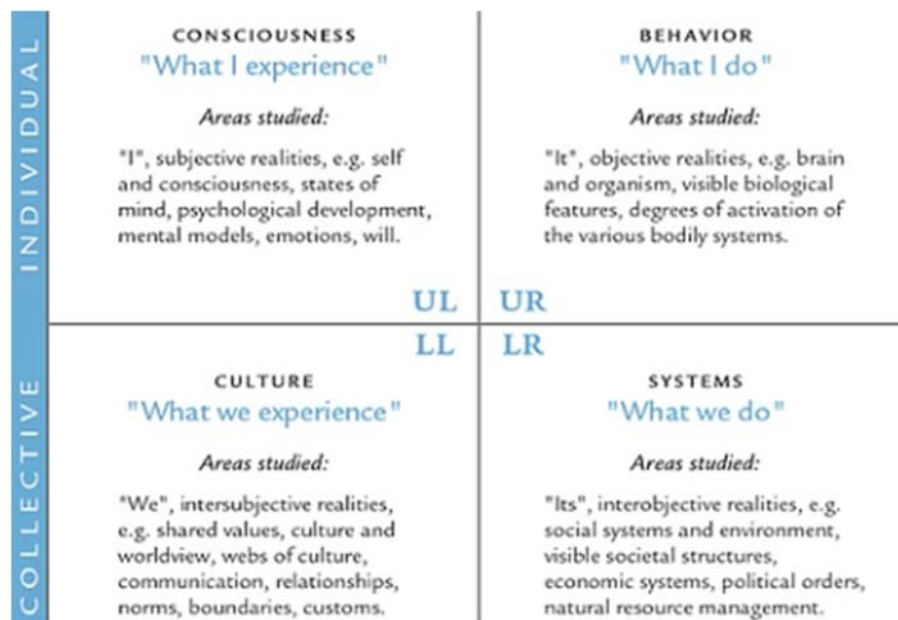


Figure 4: Validity Claims<sup>252</sup>

As with Figure 3, each quadrant identifies a way of coming to understand the world humans inhabit. The left side of Figure 4 addresses subjective awareness as manifested in both one's psychological processing of information, and one's social psychological or constitutive awareness resulting from

<sup>248</sup> See *supra* Figure 3.

<sup>249</sup> See *supra* Figure 3.

<sup>250</sup> See *supra* Figure 3.

<sup>251</sup> See *supra* Figure 3.

<sup>252</sup> WILBER, *supra* note 236, at 97 fig.7-1.

embeddedness in culture.<sup>253</sup> Specifically, we come to know who we are through symbolic interactions with others. The right side of Figure 4 locates subjects within social structure.<sup>254</sup> The top right quadrant speaks to observable factual data that might pertain to physiological as well as structural facts, while the lower right quadrant emphasizes the significance of a subject's constitution within political, economic, and social structure.<sup>255</sup>

Recognition of the complexity of subject constitution is vital if we are to more fully comprehend what is truly meant by the concepts "knowing" and "voluntary." To emphasize one quadrant to the exclusion of others is to produce an incomplete understanding of the way human beings process information. Presently, the court applies only the upper left quadrant of Figure's 3 and 4 when discerning whether a defendant meets the "knowing and voluntary" and mental competency criteria necessary to plea. Rule 11(b)(1) and Rule 11(b)(2) questions pertaining to whether the defendant fully comprehends the charges and the implications stemming from a guilty plea (knowing), in addition to affirming that the plea did not arise from force, threats, or promises (voluntary), fall into the upper left quadrant.<sup>256</sup> Likewise when determining mental competency the court rests its assessment squarely on the upper left quadrant, as it seeks only a rudimentary psychological evaluation of interior-subjective information processing and comprehension. However, human beings process information as part of a complex interaction in each of the four quadrants exemplified by both Figure 3 and Figure 4. To properly discern the depth and breadth of consciousness regarding the plea process in its totality the court must take into consideration each of the four quadrants. That is why even though "reasoned choice" is a superior standard compared to "understand and assist," it is limited by its focus on mental competency.<sup>257</sup> Mental competency must be determined using a far more integrated set of evaluative tools, but so too must those same theoretical, conceptual, and evaluative tools be used to determine normative subject decision-making.

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<sup>253</sup> See *supra* Figure 4.

<sup>254</sup> See *supra* Figure 4.

<sup>255</sup> See *supra* Figure 4.

<sup>256</sup> See FED. R. CRIM. P. 11(b)(1)–(2); see *supra* Figure 3.

<sup>257</sup> See *supra* notes 117–27 and accompanying text.

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V. FULL SPECTRUM CONSCIOUSNESS AND THE CONSTRUCTION OF  
CATEGORIES AND HEURISTICS

In this part of the article we wish to introduce the constitution and relevance of categories as a related epistemological conceptualization to heuristics in cognitive psychology as each throws into question rational actor models axiomatic of contemporary jurisprudence. We begin with a brief discussion of categories, followed by its companion heuristics.

To more predictably function within our lifeworlds<sup>258</sup> human beings construct categories. If we assume along with Amsterdam and Bruner that categories provide human beings with a sort of “mental economy,” a taken-for-grantedness that allows us to function in predictable ways, then we can view the courts’ conceptual application of “knowing and voluntary” as categories for assisting judges to make decisions about mental competency to plea.<sup>259</sup> Categories are pragmatic in that they guide us when making decisions, and they provide for ways to identify and distinguish reference groups.<sup>260</sup> Categories equally assist prosecutors, defense attorneys, and judges by rationalizing due process through bureaucratic application of federal and state rules.<sup>261</sup> Following Federal Rule 11, courts apply the concepts “knowing and voluntary” when discerning the efficacy of a plea.<sup>262</sup> As a pragmatic linguistic tool, the knowing and voluntary criteria appear to objectively provide the court with assurance that guilt has been acknowledged by a defendant who fully comprehends the rights relinquished, the charges being leveled, and is able to assist in his or her own defense. Since it is this benchmark that must be met in order for a plea to be constitutionally invoked, the plea colloquy and the knowing and voluntary criteria serve a rational procedural purpose.<sup>263</sup> At this juncture a defendant whom knowingly and voluntarily confesses guilt for commission of a crime then assumes a status as part of a reference group, a “criminal” who

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<sup>258</sup> See 2 JÜRGEN HABERMAS, *THE THEORY OF COMMUNICATIVE ACTION: LEWORLD AND SYSTEM: A CRITIQUE OF FUNCTIONALIST REASON* 119 (Thomas McCarthy trans., 3d ed. 1987).

<sup>259</sup> See AMSTERDAM & BRUNER, *supra* note 130, at 21, 26.

<sup>260</sup> See *id.* at 22, 23.

<sup>261</sup> See Brennan, *supra* note 203, at 15–16, 22.

<sup>262</sup> FED. R. CRIM. P. 11(b)(1)–(2).

<sup>263</sup> See *Brady v. United States*, 397 U.S. 742, 748 (1970) (“Waivers of constitutional rights not only must be voluntary but must be knowing, intelligent acts done with sufficient awareness of the relevant circumstances and likely consequences.”).

is subject to public sanction.<sup>264</sup> Conversely, should the court determine a defendant to be incompetent during plea colloquy, the defendant will be so labeled and the court may reject the plea.<sup>265</sup> At that moment a new category of “mental incompetence” is applied to the defendant and there are attendant consequences that follow from that determination.<sup>266</sup>

To sum up, the U.S. Supreme Court has generated a category for determining the efficacy of a plea that it has called, “knowing and voluntary.” To more fully appreciate the spectrum of meaning embedded within these concepts we must understand more fully what categories are. Once again, Amsterdam and Bruner are instructive. There are six important things that we must understand about categories and *how they are applied to the plea context*:

- “*Categories are made, not found.*”<sup>267</sup> While there is recognition that we are born with certain physiological and neuropsychological aptitudes, as subjects born and socialized within lifeworlds we humans are introduced to and adopt “template narratives” that help us understand whom we are in relation to other people and to social structure.<sup>268</sup>
- “*Categorizing [i]s [a]n [a]ct [o]f [m]eaning [m]aking.*”<sup>269</sup> Categories help us make sense of the world around us. To categorize someone as knowingly and voluntarily entering a plea creates a sense of whom that person is, and how that person should be viewed and treated by the larger community.<sup>270</sup>
- “*Categories [i]mply a [w]orld [t]hat [c]ontains [t]hem.*”<sup>271</sup> Assuming, as the U.S. Supreme Court does, that a defendant enters into plea negotiations as *homo economicus* or a rational self-satisfying individual implies a philosophical bias imposed upon our meaning making system of *due process* that is at

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<sup>264</sup> See, e.g., *United States v. Collins*, 949 F.2d 921, 927 (7th Cir. 1991).

<sup>265</sup> See, e.g., *id.* at 926.

<sup>266</sup> See, e.g., *Parsons v. State*, 304 N.E.2d 802, 807–08 (Ind. Ct. App. 1973) (citing *Harshman v. State*, 115 N.E.2d 501, 502 (Ind. 1953)).

<sup>267</sup> AMSTERDAM & BRUNER, *supra* note 130, at 27.

<sup>268</sup> See *id.* at 27, 28.

<sup>269</sup> *Id.* at 28.

<sup>270</sup> See *id.* at 28–29.

<sup>271</sup> *Id.* at 29.



once political and ideological, and that is articulated as part of a dominant cultural value system.<sup>272</sup>

- “*Categories [s]erve [p]articular [f]unctions.*”<sup>273</sup> Categories serve to generate cultural cohesiveness, and they may also serve as a way to delegitimize and marginalize.<sup>274</sup>
- “*Categories [b]ecome [e]ntrenched in [p]ractice.*”<sup>275</sup> This is both an institutional and subjective phenomenon. Legal paradigms tend to become codified over time as schools of thought evolve within political and ideological frameworks.<sup>276</sup> These are difficult to change, as hegemonic ideas proliferate as part of a master narrative that defines normativity. Counter-hegemonic discourses are always present, and the dialectical contrast between opposing discourses may generate new epistemological tendrils over time.<sup>277</sup> *Stare decisis* is premised on a commitment to system maintenance through replication of historical reasoning and judgment applied to contemporary decisions, thereby institutionalizing the proliferation of categories.<sup>278</sup> Of course, human beings cling tight to well worn habits, and these too signify categories of belief.
- “*Categories are [n]ever [f]inal.*”<sup>279</sup> The only constant is change. Over time and with rigorous, reasonable, and respectful discursive engagement all categories when put upon as the focus of intense scrutiny will change.<sup>280</sup>

So it is that generation of mental constructs via categories provides a shorthand schemata for interpreting cultural stimuli.

<sup>272</sup> See *infra* text accompanying notes 488–505.

<sup>273</sup> AMSTERDAM & BRUNER, *supra* note 130, at 32.

<sup>274</sup> See *id.* at 32–36.

<sup>275</sup> *Id.* at 36.

<sup>276</sup> See, e.g., Gunther A. Weiss, *The Enchantment of Codification in the Common-Law World*, 25 YALE J. INT’L L. 435, 467 (2000).

<sup>277</sup> See, e.g., Katherine Beckett & Bruce Hoffman, *Challenging Medicine: Law, Resistance, and the Cultural Politics of Childbirth*, 39 LAW & SOC’Y REV. 125, 139–40 (2005).

<sup>278</sup> See, e.g., *Dickerson v. United States*, 530 U.S. 428, 443 (2000) (first quoting *State Oil Co. v. Khan*, 522 U.S. 3, 20 (1997); then citing *Agostini v. Felton*, 521 U.S. 203, 235 (1997); and then quoting *United States v. Int’l Bus. Machs. Corp.*, 517 U.S. 843, 856 (1996)).

<sup>279</sup> AMSTERDAM & BRUNER, *supra* note 130, at 37.

<sup>280</sup> See *id.*

*A. Cognitive Psychology and Bounded Rationality*

In the cognitive sciences, mental constructs leading to the generation of categories that are developed over time and establish the foundation for taken-for-granted or presumed responses to environmental stimuli are referred to as heuristics.<sup>281</sup> Following Edmond and Dror, categories are referred to as “*heuristics, biases or effects*, [and] reflect the systematic recurrence of . . . phenomena across individuals and circumstances, and as fallacies or errors when they lead to error.”<sup>282</sup> Most important for our purposes, Edmond and Dror warn that while heuristics are quite useful in the management of our day-to-day interactions, “[t]hey can, however, be detrimental, encouraging short cuts and mistakes.”<sup>283</sup> Among the types of cognitive bias that have been identified by psychologists, the following appear to be most prevalent: confirmation bias, hindsight bias, anchoring effect, status-quo bias, gambler’s fallacy, and planning fallacy.<sup>284</sup> Among these, the anchoring effect is most salient for our purposes to explain how it could be that a subject might make decisions discordant with their best interests. Simply, a person is under the influence of the anchoring effect when they “rely on the first piece of information offered (the ‘anchor’) when making decisions. Subsequent judgments are influenced by initial information or beliefs (including when that information is unreliable or even arbitrary. . . .”<sup>285</sup> Anchoring effects as categories of belief raise serious concerns with regard to plea-bargaining, especially when suspects are confronted by prosecutors with forensic evidence *suggestive* of guilt.<sup>286</sup> A concern raised by Edmond and Dror pertains to the likelihood of some plea-bargains generating the anchoring effect as the result of contextual bias and cross-contamination of forensic evidence by police and forensic

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<sup>281</sup> See Gary Edmond et al., *Contextual Bias and Cross-Contamination in the Forensic Sciences: The Corrosive Implications for Investigations, Plea Bargains, Trials and Appeals*, 14 LAW PROBABILITY & RISK 1, 5 (2015); Susan Hurley, *Social Heuristics that Make Us Smarter*, 18 PHIL. PSYCHOL. 585, 589 (2005).

<sup>282</sup> Edmond et al., *supra* note 281, at 5.

<sup>283</sup> *Id.*; see Christine Jolls et al., *A Behavioral Approach to Law and Economics*, 50 STAN. L. REV. 1471, 1477 (1998) (“Even when the use of mental shortcuts is rational, it can produce . . . mistakes.”).

<sup>284</sup> See Edmond et al., *supra* note 281, at 6.

<sup>285</sup> *Id.* at 5; see Robert A. Prentice & Jonathan J. Koehler, *A Normality Bias in Legal Decision Making*, 88 CORNELL L. REV. 583, 602–03 (2003).

<sup>286</sup> See Edmond et al., *supra* note 281, at 12, 20; Collin Miller, *Anchors Away: Why the Anchoring Effect Suggests that Judges Should be Able to Participate in Plea Discussions*, 54 B.C. L. REV. 1667, 1701–02 (2013).

practitioners.<sup>287</sup>

[T]here are even fewer opportunities to question forensic analysts or assess the techniques and processes behind incriminating opinions relied upon when negotiating pleas (or responding to questions and assertions during interrogations). Because of time constraints, the manner in which evidence is assembled and defence [sic] (and prosecutorial) performances funded and rewarded, plea bargains tend to afford limited scope for unpacking contamination and weakness in forensic science evidence.<sup>288</sup>

With little time available for proper investigation of the forensic data by the defense, and the significant impact of anchoring effects, the likelihood of a suspect being significantly persuaded by forensic evidence to plead guilty is far greater.<sup>289</sup>

The scholarship addressing the relevance of heuristics as dialectically opposed to rational actor models is far too robust to summarize here. So we'll provide just a very brief set of references for interested readers to consider as we make our way along our path critiquing the utilitarian rational actor model birthing the knowing and voluntary criteria used by the courts when adopting a plea-bargain. In their critique of rational choice theory, Korobkin and Ulen mince no words when they say that, "[t]here is simply too much credible experimental evidence that individuals frequently act in ways that are incompatible with the assumptions of rational choice theory."<sup>290</sup> In addition, like Edmond and Dror, Korobkin and Ulen emphasize that actors often fail to maximize their expected utility, but instead make suboptimal choices among competing options given a set of preferences and use a range of heuristics—rules of thumb—rather than complex cost-benefit analysis. "This 'bounded rationality' results from the high cost of processing information, the cognitive limitations of human beings, or a combination of the two."<sup>291</sup> Chris Guthrie has proposed that human beings most often make "risk-averse decisions when choosing between options that appear to be gains and risk-seeking decisions when choosing between options that appear to be losses. In short, people are often willing to take risks to avoid losses but are

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<sup>287</sup> See Edmond et al., *supra* note 281, at 20–21.

<sup>288</sup> *Id.* at 20.

<sup>289</sup> See *id.* at 20–21.

<sup>290</sup> Russell B. Korobkin & Thomas S. Ulen, *Law and Behavioral Science: Removing the Rationality Assumption from Law and Economics*, 88 CALIF. L. REV. 1051, 1055 (2000).

<sup>291</sup> *Id.* at 1069.

unwilling to take risks to accumulate gains.”<sup>292</sup> Guthrie contends that, “prospect theory predicts that most criminal defendants will make the risk-seeking choice and opt for trial, yet we know that most defendants opt instead to resolve their cases through pleas,” an apparent contradiction.<sup>293</sup> Guthrie cites to Birke for the answer.

Defendants plead because they are misinformed about the values of trials and pleas, and because pleas are framed as gains. Defendants are manipulated into pleading because they possess too little information to overcome framing effects inherent in the valuation of pleas and trials, and because they lack information to accurately value that which they so readily trade away—the right to trial.<sup>294</sup>

In contradistinction to utility maximization theory, defendants facing uncertainty will consider not only the choice that maximizes utility, but also the probability that the maximal outcome will occur.<sup>295</sup> Guthrie applies framing theory to explain how it is that defendants will make decisions about whether or not to plea based upon how litigation options are presented to them (framing effect).<sup>296</sup> Specifically, “litigants evaluate decision options relative to a reference point and make risk-averse decisions when choosing between gains and risk-seeking decisions when choosing between losses.”<sup>297</sup> Application of the framing model to plea-bargaining suggests that, “defendants are more likely to exhibit risk-seeking tendencies because they view both settlement and trial as losses from their prior position.”<sup>298</sup> Citing to Daniel Kahneman and Amos Tversky’s pioneering work on prospect theory, Guthrie concludes by saying that:

[P]rospect theory posits that “people do not normally think of relatively small outcomes in terms of states of wealth,” as the expected utility theory maintains, “but rather in terms of gains, losses, and neutral outcomes.” That is, “people tend to accept the frame presented in a problem and evaluate the

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<sup>292</sup> Chris Guthrie, *A New Social Scientific Assessment of Law and Human Behavior: Prospect Theory, Risk Preference, and the Law*, 97 NW. U. L. REV. 1115, 1116 (2003).

<sup>293</sup> *Id.* at 1137.

<sup>294</sup> *Id.* at 1138.

<sup>295</sup> Chris Guthrie, *Better Settle Than Sorry: The Regret Aversion Theory of Litigation Behavior*, 1999 U. ILL. L. REV. 43, 52.

<sup>296</sup> *Id.* at 55.

<sup>297</sup> *Id.*

<sup>298</sup> *Id.* See Korobkin & Ulen, *supra* note 290, at 1104–07 (explaining how frames affect decision making in the context of litigation).

outcome in terms of that frame.”<sup>299</sup>

Framing effects are a direct consequence of categories and heuristics. Jeremy Blumenthal applies Guthrie’s regret aversion theory to explain why defendants plea.<sup>300</sup> In this context, “litigants will choose settlement over trial to avoid feelings of regret associated with learning after trial that they should have settled.”<sup>301</sup> Important as it pertains to application of heuristics to plea decisions is recognition of the fact that, “[i]f, all else being equal, litigation decisions rely on anticipated regret, then inaccuracies in making such predictions may lead some people to avoid litigation that will in fact not make them feel as negative as they expect.”<sup>302</sup> Blumenthal rests his conclusions on experimental evidence that “lends support to the idea that individuals overestimate the amount of regret they themselves will feel in response to a variety of events.”<sup>303</sup> This is important for our purposes because it suggests that, contrary to rational actor models, human beings entertain a far more complex set of considerations when making decisions, including those that may not be in their own best interests. Articulating a similar cognitive process to considerations over whether to plea or to go to trial is Jeffrey Rachlinski. Rachlinski suggests that, much like our emphasis on categories and heuristics, litigation signifies a risk preference and decision frame.<sup>304</sup> Following Tversky and Kahneman, and consistent with Edmond and Dror above, Rachlinski proposes that “[w]hen people choose among potential gains, they tend to be risk-averse, but when they choose among potential losses, they tend to be risk-seeking. The nature of the decision, which Tversky and Kahneman refer to as the decision’s ‘frame,’ heavily influences people’s risk preferences.”<sup>305</sup>

In 1990, Herbert Simon published his articulation of bounded rationality.<sup>306</sup> In that article Simon expresses the notion of bounded

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<sup>299</sup> Guthrie, *supra* note 295, at 58. See Richard Birke, *Reconciling Loss Aversion and Guilty Pleas*, 1999 UTAH L. REV. 205, 209, 244–45 (explaining how framing a plea bargain can cause it to appear as a gain rather than a loss).

<sup>300</sup> Jeremy A. Blumenthal, *Law and the Emotions: The Problems of Affective Forecasting*, 80 IND. L.J. 155, 206 (2005).

<sup>301</sup> *Id.*

<sup>302</sup> *Id.* at 207.

<sup>303</sup> *Id.* at 208. See Marcel Zeelenberg & Rik Pieters, *A Theory of Regret Regulation 1.0*, 17 J. CONSUMER PSYCHOL. 3, 11–14 (2007) (proposing ways decision makers regulate their regret).

<sup>304</sup> See, e.g., Jeffrey J. Rachlinski, *Gains, Losses, and the Psychology of Litigation*, 70 S. CAL. L. REV. 113, 128 (1996).

<sup>305</sup> *Id.* at 123.

<sup>306</sup> Herbert A. Simon, *Invariants of Human Behavior*, 41 ANN. REV. PSYCHOL. 1, 6–7

rationality using the two blades of a pair of scissors.<sup>307</sup> One blade represents decision-making, the other blade represents the complexity of variables influencing decisions.<sup>308</sup> For our purposes, Simon's article introduces the notion of "satisficing," a method of decision-making based upon heuristics "using experience to construct an expectation of how good a solution we might reasonably achieve, and halting search as soon as a solution is reached that meets the expectation,"<sup>309</sup> what Edmond and Dror refer to above as the anchoring effect.<sup>310</sup> Most important as it pertains to plea bargaining is that by adopting satisficing as a decision-making process a subject "solves the common problem of making choices when alternatives are incommensurable, either because (a) they have numerous dimensions of value that cannot be compared, (b) they have uncertain outcomes that may be more or less favorable or unfavorable, or (c) they affect the values of more than one person."<sup>311</sup> Simon's bounded rationality is more thoroughly applied to criminal litigation by Jolls, Sunstein, and Thaler.

Jolls, Sunstein, and Thaler apply a critique of conventional jurisprudence reliance upon economic rationality and decision-making by focusing on the bounded nature of decision-making.<sup>312</sup> Specifically, they adopt Simon's consideration of bounded rationality and expand it to include bounded willpower, and bounded self-interest.<sup>313</sup> The notion of "bounded" refers to the fact that our decisions are constituted by unique political, economic, cultural, psychological, and neuropsychological contexts.<sup>314</sup> For example, bounded willpower "refers to the fact that human beings often take actions that they know to be in conflict with their own long-term interests."<sup>315</sup> Bounded rationality manifests "whenever

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(1990).

<sup>307</sup> *Id.* at 7.

<sup>308</sup> *See id.*

<sup>309</sup> *Id.* at 9.

<sup>310</sup> *See supra* notes 284–89 and accompanying text. Gerd Gigerenzer and Wolfgang Gaissmaier refer to this as the "fluency heuristic." Gerd Gigerenzer & Wolfgang Gaissmaier, *Heuristic Decision Making*, 62 ANN. REV. PSYCHOL. 451, 462 (2011). The fluency heuristic applies when "both alternatives are recognized but one is recognized faster, then infer that this alternative has the higher value with respect to the criterion." *Id.*

<sup>311</sup> Simon, *supra* note 306, at 10.

<sup>312</sup> *See* Jolls et al., *supra* note 283, at 1471, 1476–77.

<sup>313</sup> *See id.* at 1478, 1479.

<sup>314</sup> *See id.* at 1476–77; *see generally* Nancy J. Burke et al., *Theorizing Social Context: Rethinking Behavioral Theory*, 36 HEALTH EDUC. BEHAV. 55, 56, 61 (2009) (discussing common influences on behavior and decisions).

<sup>315</sup> Jolls et al., *supra* note 283, at 1479.

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actors in the legal system are called upon to assess the probability of an uncertain event.”<sup>316</sup> Because they offer a comprehensive deconstruction of the rational utility maximizing subject, we wish to fully reproduce Jolls, Sunstein, and Thaler’s summary.

A person might be deemed rational if her behavior (1) conforms to the axioms of expected utility theory; (2) is responsive to incentives, that is, if the actor changes her behavior when the costs and benefits are altered; (3) is internally consistent; (4) promotes her own welfare; or (5) is effective in achieving her goals, whatever the relationship between those goals and her actual welfare. We observe departures from most of these definitions; thus, with respect to (1), scholars have documented departures from expected utility theory for nearly fifty years, and prospect theory seems to predict behavior better. With respect to (4) and (5), *people’s decisions sometimes do not promote their welfare or help them to achieve their own goals*; and with respect to (3), *behavioral research shows that people sometimes behave in an inconsistent manner by, for example, indicating a preference for X over Y if asked to make a direct choice, but Y over X if asked to give their willingness to pay for each option*. Many of our examples will thus show that *people are frequently not rational if the term is understood to mean (1), (3), (4), or (5)*. As for (2), without some specification of what counts as a cost and a benefit, the idea of responsiveness to incentives is empty.<sup>317</sup>

What should be clear from this admittedly brief exposition of the cognitive psychology literature addressing heuristics, framing, and prospect theory is that, unlike the utility maximizing reasonable rational actor that presents as the essentialist subject under the law, human beings often make decisions that are contrary to their best interests when confronted with uncertainty. In short, they are not utility maximizers.

There is one final epistemological framework that we will apply to our assessment of mental competency and plea-bargaining, and it is the relatively new field of neurophenomenology. Neurophenomenology proves to be an efficient and effective theoretical tool for understanding the confluence of biological, sociological, and psychological factors influencing identity

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<sup>316</sup> *Id.* at 1480.

<sup>317</sup> *Id.* at 1488 (emphasis added).

construction and behavior,<sup>318</sup> and it is perfectly suited to Wilber's full spectrum consciousness model.

### *B. Neurophenomenology*

Neurophenomenology is a fusion of phenomenology and neuroscience.<sup>319</sup> It seeks a comprehensive understanding of human identity construction and consciousness through integration of the natural and social sciences, and phenomenology. Phenomenology is a philosophical epistemology that gives primacy to first person accounts of experience and is associated with Edmund Husserl, Martin Heidegger, and Jean-Paul Sartre. Adopting a phenomenological analysis of human consciousness requires “addressing the meaning things have in our experience, notably, the significance of objects, events, tools, the flow of time, the self, and others, as these things arise and are experienced in our ‘life-world.’”<sup>320</sup>

We are going to break the discussion about neurophenomenology into two sections. In the first section, which proceeds below, we draw attention to the biological aspect, the “neuro” in neurophenomenology. We do this by providing an overview of the brain, and related neurotransmitters. We reserve discussion of the phenomenological or interpretive aspect of the theory for Part VII where we include a lengthy discussion of what we perceive to be the most salient sociological influence upon identity construction—the massive essentialist turn in the United States toward neoliberalism—especially as it pertains to structurally induced individualization, isolation, and the social construction of human beings as “free agents” privately brokering contracts effecting virtually all human activities.

Methodologically approaching the problem of human consciousness through first and third person analysis (e.g., first person hermeneutic interpretation, and application of third person scientific method) is complimentary to Wilber's full spectrum consciousness model. We encourage readers to consider Wilber's

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<sup>318</sup> See, e.g., ADRIAN RAINE, *THE ANATOMY OF VIOLENCE: THE BIOLOGICAL ROOTS OF CRIME* 312, 313 (2013) (describing how biological and social factors can give rise to violence, and how neuropsychological factors are also taken into consideration); see *infra* notes 413–14 and accompanying text.

<sup>319</sup> See Robert Garfield McInerney, *Oz Never Did Give Nothing to the . . . Scarecrow: Neurophenomenology and Critical Pedagogy*, 4 *PHENOMENOLOGY & PRAC.* 68, 70 (2010).

<sup>320</sup> *Phenomenology*, STAN. ENCYCLOPEDIA OF PHIL. (last modified Dec. 16, 2013), <http://plato.stanford.edu/entries/phenomenology/>.



matrix and expression of full spectrum consciousness heuristically as a meta-theoretical construct where neurophenomenology exists as an epistemological tool that is capable of accommodating the substance of Wilber's four quadrants. We are not suggesting that Wilber's model should be viewed in an essentialistic way, thereby generating a hierarchy where the full-spectrum consciousness model sits privileged above other theoretical and epistemological models. Rather, we view neurophenomenology as a theoretical model that rests comfortably *within* the full-spectrum consciousness schemata (and may, as the theory develops, come to closely resemble each of the four quadrants espoused by Wilber). The acausal synchronicity<sup>321</sup> giving rise to the full spectrum consciousness model introduced by Wilber, and the neurophenomenological emphasis on consciousness arising from the confluence of complex neurons and their interaction with the environment, makes for a compelling, informative, and thought-provoking happy accident.

The term, "neurophenomenology", and the theoretical construct that defines it, was originally introduced by Francisco Varela in 1996.<sup>322</sup> According to Beaton, Pierce and Stuart: "Varela advocated a dual approach to consciousness studies, investigating structural parallels between Husserlian phenomenology . . . and neuroscience, and aiming thus to reconcile first- and third-person accounts of conscious experience."<sup>323</sup> Fritjof Capra explains that the "premise of neurophenomenology is that brain physiology and conscious experience should be treated as two interdependent domains of research with equal status."<sup>324</sup> It is Capra's conclusion that, "conscious experience is an expression of life, emerging from complex neural activity."<sup>325</sup> What appears to be common among neurophenomenologists, and that is especially significant as it pertains to our concerns with mental competency and plea-bargaining, is recognition that cognition and consciousness is a far more dynamic and nuanced process than what the courts have generally understood. Common among neurophenomenologists is the assumption that, "[c]onscious experience is not located in a

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<sup>321</sup> See C. G. JUNG, SYNCHRONICITY AN ACAUSAL CONNECTING PRINCIPLE 139, 141 (R. F. C. Hull trans., 1972).

<sup>322</sup> Michael Beaton et al., Editorial, *Neurophenomenology—A Special Issue*, 8 CONSTRUCTIVIST FOUND. 265, 265 (2013).

<sup>323</sup> *Id.*

<sup>324</sup> FRITJOF CAPRA, THE HIDDEN CONNECTIONS: INTEGRATING THE BIOLOGICAL, COGNITIVE, AND SOCIAL DIMENSIONS OF LIFE INTO A SCIENCE OF SUSTAINABILITY 46 (2002).

<sup>325</sup> *Id.* at 48.

specific part of the brain, nor can it be identified in terms of special neural structures. It is an emergent property of a particular cognitive process—the formation of transient functional clusters of neurons.”<sup>326</sup> For Varela, “each conscious experience is based on a specific cell assembly, in which many different neural activities—associated with sensory perception, emotions, memory, bodily movements, etc.—are unified into a transient but coherent ensemble of oscillating neurons.”<sup>327</sup> Consciousness thereby manifests as the confluence of a dynamic and emergent process combining neurological networks with subjective environmental experiences.

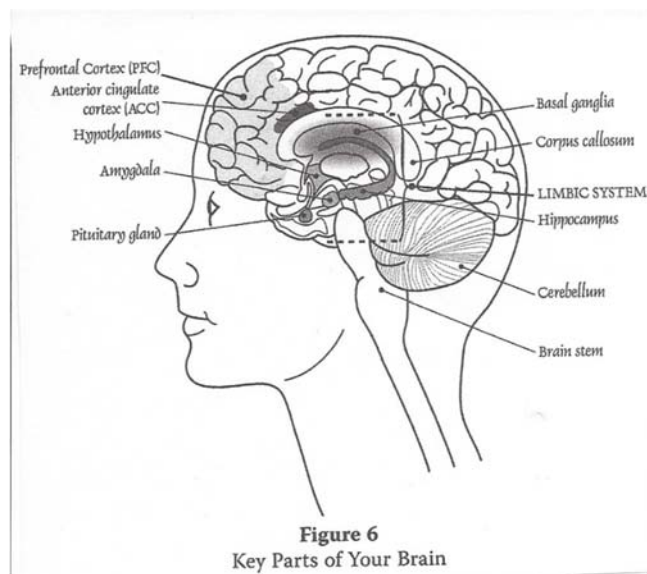


Figure 5<sup>328</sup>

### C. Brains

Since neither author of this article is a neuroscientist this part of our paper will provide an extremely rudimentary overview of brain science. Why? Because it is important to establish what is known about brain composition and chemistry in order to demonstrate the imprudence of using the “knowing and voluntary” criteria to establish mental competency to plea. The basic brain facts

<sup>326</sup> *Id.* at 49.

<sup>327</sup> *Id.* at 50.

<sup>328</sup> *Id.* at 54.

presented below are drawn directly from the work of Hanson and Mendius:<sup>329</sup>

- “Your brain is three pounds of tofu-like tissue containing 1.1 trillion cells, including 100 billion neurons. On average, each neuron receives about five thousand connections, called *synapses*, from other neurons.”<sup>330</sup>
- “At its receiving synapses, a neuron gets signals—usually as a burst of chemicals called *neurotransmitters*—from other neurons. Signals tell a neuron either to fire or not; whether it fires depends mainly on the combination of signals it receives each moment.”<sup>331</sup>
- “Each neural signal is a bit of information; your nervous system moves information around like your heart moves blood around.”<sup>332</sup>
- “The brain is the primary mover and shaper of the mind. It’s so busy that, even though it’s only 2 percent of the body’s weight, it uses 20–25 percent of its oxygen and glucose.”<sup>333</sup>
- “Conscious mental events are based on temporary coalitions of synapses that form and disperse—usually within seconds . . . . Neurons can also make lasting circuits, strengthening their connections to each other as a result of mental activity.”<sup>334</sup>
- **“The brain works as a whole system; thus, attributing some function—such as attention or emotion—to just one part of it is usually a simplification.”**<sup>335</sup>
- **“Your brain interacts with other systems in your body—which in turn interact with the world—plus it’s shaped by the mind as well. In the largest sense, your mind is made by your brain, body, natural world, and human**

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<sup>329</sup> See HANSON & MENDIUS, *supra* note 180, at 6–7.

<sup>330</sup> *Id.* at 6.

<sup>331</sup> *Id.*

<sup>332</sup> *Id.*

<sup>333</sup> *Id.* at 7.

<sup>334</sup> *Id.*

<sup>335</sup> *Id.*

**culture—as well as by the mind itself.”<sup>336</sup>**

- “The mind and brain interact with each other so profoundly that they’re best understood as a single, co-dependent, mind/brain system.”<sup>337</sup>

We are hopeful that given our lengthy presentation of the merits of integration readers will resist the temptation to sling barbs and arrows at us for making what might appear to be a too biologically deterministic argument. We’re not. However, we also cannot deny the powerful insights drawn from neuroscience with regard to a whole host of thoughts, beliefs, and actions that for those disabused of the impulse toward critical inquiry, or simply unfamiliar with neurophenomenology, might appear to be entirely of our own making. They are not. Lets consider a few examples that have bearing on our concerns regarding plea-bargaining, mental competency, and consciousness.

While brain science and the technology necessary to see with clarity into the furthest reaches of the brain is still in the development stages, neurologists do know a few things about the regions of the brain and their effects. Once again, we rely upon the work of Hanson and Mendius:<sup>338</sup>

- “Prefrontal cortex (PFC)—sets goals, makes plans, directs action; shapes emotions, in part by guiding and sometimes inhibiting the limbic system.”<sup>339</sup>
- “Anterior (frontal) cingulate cortex (ACC)—steadies attention and monitors plans; helps integrate thinking and feeling . . . ; a ‘cingulate’ is a curved bundle of nerve fibers.”<sup>340</sup>
- “Insula—senses the internal state of your body, including gut feelings; helps you be empathic; located on the inside of the temporal lobes on each side of your head.”<sup>341</sup>
- “Thalamus—the major relay station for sensory information.”<sup>342</sup>
- “Brain stem—sends neuromodulators such as

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<sup>336</sup> *Id.*

<sup>337</sup> *Id.*

<sup>338</sup> *See id.* at 53–55.

<sup>339</sup> *Id.* at 53.

<sup>340</sup> *Id.* (internal citation omitted).

<sup>341</sup> *Id.* at 54.

<sup>342</sup> *Id.*

serotonin and dopamine to the rest of the brain.”<sup>343</sup>

- “Corpus callosum—passes information between the two hemispheres of the brain.”<sup>344</sup>
- “Cerebellum—regulates movement.”<sup>345</sup>
- “Limbic system—central to emotion and motivation; includes the basal ganglia, hippocampus, amygdala, hypothalamus, and pituitary gland . . . .”<sup>346</sup>
  - “Basal ganglia—involved with rewards, stimulation seeking, and movement . . . .”<sup>347</sup>
  - “Hippocampus—forms new memories; detects threats.”<sup>348</sup>
  - “Amygdala—a kind of ‘alarm bell’ that responds particularly to emotionally charged or negative stimuli . . . .”<sup>349</sup>
  - “Hypothalamus—regulates primal drives such as hunger and sex; makes oxytocin; activates the pituitary gland.”<sup>350</sup>
  - “Pituitary gland—makes endorphins; triggers stress hormones; stores and releases oxytocin.”<sup>351</sup>

The final part of our brief and admittedly superficial foray into the structure of the brain requires a discussion of neurochemicals. Below is a list of primary neurotransmitters, neuromodulators, and neuropeptides. To properly understand how our brains process information we must gain some rudimentary understanding of how transmitters, modulators, and peptides interact with regions of the brain to generate and inhibit actions.

As with our two previous sections, this discussion is based upon the work of Hanson and Mendius.<sup>352</sup>

- The two primary neurotransmitters are glutamate, which stimulates receiving neurons, and GABA, which “inhibits receiving neurons.”<sup>353</sup>

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<sup>343</sup> *Id.*

<sup>344</sup> *Id.*

<sup>345</sup> *Id.*

<sup>346</sup> *Id.*

<sup>347</sup> *Id.* at 55.

<sup>348</sup> *Id.*

<sup>349</sup> *Id.* (internal citation omitted).

<sup>350</sup> *Id.* at 55.

<sup>351</sup> *Id.*

<sup>352</sup> *See id.* at 36–37.

<sup>353</sup> *Id.* at 36.

- Neuromodulators are extremely powerful substances that are widely distributed throughout the brain.<sup>354</sup>
  - “Serotonin—regulates mood, sleep, and digestion . . . .”<sup>355</sup>
  - “Dopamine—involved with rewards and attention; promotes approach behaviors.”<sup>356</sup>
  - “Norepinephrine—alerts and arouses.”<sup>357</sup>
  - “Acetylcholine—promotes wakefulness and learning.”<sup>358</sup>
- Neuropeptides
  - “Opioids—buffer stress, provide soothing and reduce pain, and produce pleasure; . . . these include endorphins.”<sup>359</sup>
  - “Oxytocin—promotes nurturing behaviors toward children and bonding in couples; associated with blissful closeness and love; women have more oxytocin than men.”<sup>360</sup>
  - “Vasopressin—supports pair bonding; in men it may promote aggressiveness toward sexual rivals.”<sup>361</sup>
- Other Neurochemicals
  - “Cortisol—released by the adrenal glands during the stress response; stimulates the amygdala and inhibits the hippocampus.”<sup>362</sup>
  - “Estrogen—the brains of both men and women contain estrogen receptors; affects libido, mood, and memory.”<sup>363</sup>

So what? What does all of this brain anatomy and chemistry have to do with plea-bargaining? Good question. Later we’ll cover the subject of free will assumptions in the law (the environmental part of neurophenomenology), but think about this for a moment. We expect citizens to be virtuous, to act in accordance with the

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<sup>354</sup> *Id.*

<sup>355</sup> *Id.*

<sup>356</sup> *Id.*

<sup>357</sup> *Id.*

<sup>358</sup> *Id.*

<sup>359</sup> *Id.* at 37.

<sup>360</sup> *Id.*

<sup>361</sup> *Id.*

<sup>362</sup> *Id.*

<sup>363</sup> *Id.*

moral and ethical mandates of the culture in which they live. Paramount is the requirement that we do not hurt each other, and we assume that with proper socialization to culturally acceptable ways to interact with others, a person who behaves in violation of those accepted norms must have freely, reasonably, and rationally *chosen* to do so. As a matter of common sense it should be obvious that a virtuous person would not intentionally hurt anyone in pursuit of their own advantage, or so goes the common belief. But where does virtue come from? Is it solely a character trait learned through exposure to cultural norms, or is it wrapped up in a far more complex neurophenomenological bond? Virtue, like all of our behaviors, originates as part of a complex circuitry that manifests at the confluence of the prefrontal cortex, the parasympathetic nervous system, and the limbic system.<sup>364</sup> Systemic failure in either location, or among the millions of neurons sending electrical impulses to the respective locations, will mean that a subject may be more or less virtuous than is normatively accepted by culture. This is because “[n]orm compliance generally, and cooperative behavior specifically, is diminished in individuals with vmPFC [(ventromedial prefrontal cortex)] damage, as is the level of guilt experienced for violating cooperation norms.”<sup>365</sup>

Neurological circuitry is always adapting to respond to internal cellular and external environmental changes. For example, in order to continuously adapt to new information being gathered by the body from the environment, “regions in the PFC [(prefrontal cortex)] that support consciousness are updated five to eight times a second . . . .”<sup>366</sup> The neuropeptide dopamine is released whenever one experiences an event that is linked to something pleasurable in the past, motivating a desire for more of that experience.<sup>367</sup> Norepinephrine and oxytocin are released whenever one actually experiences or anticipates a pleasurable outcome.<sup>368</sup> When these past, present, or future pleasurable experiences are called up in memory synapses connecting these neurotransmitters will begin “lighting up” together, thereby intensifying the release of those chemicals during future events creating subconscious habitual

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<sup>364</sup> *Id.* at 13.

<sup>365</sup> Joshua W. Buckholtz & René Marois, *The Roots of Modern Justice: Cognitive and Neural Foundations of Social Norms and Their Enforcement*, 15 *NATURE NEUROSCIENCE* 655, 656 (2012).

<sup>366</sup> HANSON & MENDIUS, *supra* note 180, at 33 (citation omitted).

<sup>367</sup> *Id.* at 37.

<sup>368</sup> *Id.* at 38.

grooves that provide shorthand and impulsive responses to future stimuli.<sup>369</sup> It is this subconscious habitually responding mind that is devoid of reason.<sup>370</sup> Lets linger here for a moment to consider the development of the subconscious mind.

Application of electroencephalography (EEG) to analysis of brain wave activity from youth through adults provides compelling insight into the development of both the subconscious and the conscious brain. From birth until around two years of age, the human brain demonstrates “the lowest EEG frequency, 0.5 to 4 cycles per second (Hz), known as *delta* waves.”<sup>371</sup> Brain wave activity increases between the ages of two and six with the onset of theta waves.<sup>372</sup> To better prepare for species survival, it appears that the brains of human infants from birth through six years old operate in such a way that the slower electrical activity enables them to more effectively absorb cultural stimuli.<sup>373</sup> As Lipton would have it, “[t]he ability to process this vast quantity of information is an important neurologic adaptation to facilitate this information-intensive process of enculturation.”<sup>374</sup> Here’s the rub:

[T]he fundamental behaviors, beliefs, and attitudes we observe in our parents become ‘hard-wired’ as synaptic pathways in our subconscious minds. Once programmed into the subconscious mind, they control our biology for the rest of our lives . . . unless we can figure out a way to reprogram them.<sup>375</sup>

From a neurophenomenological perspective it’s quite easy to see that the old debate about “nature” or “nurture” is really an outdated overly simplistic epistemology. What is clear from EEG research is that our most formative years (from birth to six) are constituted by a physiological adaptation among other things in the form of slower brainwave activity.<sup>376</sup> Slower brainwave activity is correlated with the capacity to more rapidly absorb cultural stimuli.<sup>377</sup> Our reactions to cultural stimuli are then encoded, hardwired into our

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<sup>369</sup> See, e.g., *id.*

<sup>370</sup> BRUCE H. LIPTON, *THE BIOLOGY OF BELIEF: UNLEASHING THE POWER OF CONSCIOUSNESS, MATTER & MIRACLES* 103 (2008).

<sup>371</sup> *Id.* at 132.

<sup>372</sup> *Id.* at 133.

<sup>373</sup> *Id.*

<sup>374</sup> *Id.*

<sup>375</sup> *Id.* at 134 (second alteration in original).

<sup>376</sup> *Id.* at 132–33.

<sup>377</sup> *Id.* at 132–33.



neuronal pathways.<sup>378</sup> In essence, then, our habitual responses as adults to cultural experiences are the product of this early neurophenomenological phase of development. As we age our brainwave activity increases dramatically producing an ability to bring focused attention to activities immediately engaged in (like driving a car, or reading a book).<sup>379</sup> But what's most fascinating is the fact that our subconscious mind is processing cultural stimuli far more quickly than our conscious mind.<sup>380</sup> According to Lipton, the subconscious mind processes "20,000,000 environmental stimuli per second v. 40 environmental stimuli interpreted by the conscious mind in the same second . . . ."<sup>381</sup> So before the conscious mind is capable of reaction to environmental threat, the subconscious mind has noticed the threat, and filtered that threat through hardwired learned behavior producing predictable, but not always culturally acceptable responses.<sup>382</sup> Want a brief demonstration of how this works in your own life? Think about how many times you've left work after a busy day, hopped into your car, and, deep in thought, drove home without really remembering the drive. The subconscious mind has absorbed the intellectual and physical coordination necessary to operate your vehicle—it's on "autopilot"—you really needn't "think" about it all. Once again Lipton is instructive, "[s]ubconscious programming takes over the moment your conscious mind is not paying attention."<sup>383</sup> But habitually hardwired responses to environmental stimuli may also lead to significant pain and suffering for the subject, and those around him. The power of the subconscious mind to influence our adult decision-making requires acknowledging that, "[t]he subconscious mind's behaviors when we are not paying attention may not be of our own creation because most of our fundamental behaviors were downloaded without question from observing other people."<sup>384</sup> Significantly, it's also been demonstrated that fetal development is significantly influenced by environmental stressors experienced by both the mother and the father.<sup>385</sup> When under significant stress a pregnant mother will activate the body's fight or flight response—

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<sup>378</sup> *Id.* at 134.

<sup>379</sup> *See id.* at 134–35.

<sup>380</sup> *See id.* at 136.

<sup>381</sup> *Id.*

<sup>382</sup> *See id.*

<sup>383</sup> *Id.* at 139.

<sup>384</sup> *Id.*

<sup>385</sup> *Id.* at 143.

the HPA axis (Hypothalamus, Pituitary, Adrenal Axis).<sup>386</sup> Whenever the HPA is activated it inhibits cellular growth by rerouting blood to the legs and arms, and away from the visceral organs required for “digestion, absorption, excretion, and other functions that provide for the growth of the cells and the production of the body’s energy reserves.”<sup>387</sup> Scholarship also reveals the many in utero physiological effects induced by the behaviors of mothers and fathers. These include: coronary artery disease, stroke, diabetes, obesity, osteoporosis, mood disorders, and psychoses.<sup>388</sup> The confluence of genes, neurons, and environment is what generates for each of us our unique and holistic human experience.<sup>389</sup> Recognition of this multivariate and complex constitution of consciousness and cognition is the foundation of full spectrum consciousness as expressed here through neurophenomenology. Application of neurophenomenology to human consciousness and cognition demonstrates that the jurisprudential emphasis on the primacy of reason and choice is woefully out of step with prevailing neuroscience and phenomenology. From birth to six years of age human beings are sponges, slowly and methodically absorbing cultural queues, and doing so more or less well depending upon the quality of our brains.<sup>390</sup> Those six years of learned behavior create deep grooves in our subconscious that provide us with a fundamental shorthand response to environmental stimuli. Our conscious brain begins to develop later in life, and appears to be the seat of our capacity to reason.<sup>391</sup> The problem is, our conscious brain is far slower to react to cultural stimuli than our subconscious brain, once again raising to prominence the relevance of early childhood development.<sup>392</sup>

One of the most intriguing aspects of brain research pertains to the brain’s proclivity to prioritize negative or threatening information over what might be more affirmative information or experiences.<sup>393</sup> This response has been linked to our species drive for self-preservation.<sup>394</sup> Negative information that is viewed as threatening is privileged because it is the negative event that would

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<sup>386</sup> *Id.* at 144.

<sup>387</sup> *Id.* at 118.

<sup>388</sup> *Id.* at 126.

<sup>389</sup> *See id.* at 127–28.

<sup>390</sup> *See id.* at 133.

<sup>391</sup> *See id.* at 136.

<sup>392</sup> *Id.*

<sup>393</sup> *See id.* at 117.

<sup>394</sup> *See id.* at 118.

have the most consequential deleterious effect upon our survival.<sup>395</sup> Here, it is the amygdala that plays a central role since its primary responsibility is preparation for fight or flight.<sup>396</sup> While this was an instinctually valuable response to threat in prehistoric times, and still has its place in contemporary culture though for different kinds of threat, an aroused amygdala has the effect of increasing hostility and aggression.<sup>397</sup> As human beings evolved over millennia so too has our prefrontal cortex, the evolutionarily youngest part of our brain.<sup>398</sup> The prefrontal cortex is the part of the brain that develops most slowly in the human body, with a fully formed prefrontal cortex not appearing until the mid-twenties.<sup>399</sup> In a slow and methodical way, the prefrontal cortex is responsible for balancing, processing, sifting, determining, and sending signals to the limbic system to “chill out.”<sup>400</sup> Scientific analysis of “bad brains“ suggests that damage to the prefrontal cortex may significantly impede communication with the limbic system (amygdala, hypothalamus, hippocampus, limbic cortex) such that the balancing function of the prefrontal cortex is aborted.<sup>401</sup> In human beings suffering from prefrontal cortex damage there is a strong correlation with explosive violence and suicide.<sup>402</sup>

Human beings make decisions through complex processes that incorporate biological, interpretive (hermeneutical), and structural contextual variables.<sup>403</sup> For the court, possessing the *capacity* for rational thought is deemed equivalent to the ability to make “good” decisions, but these two executive functions can be quite distinct from each other in the prefrontal cortex.<sup>404</sup> For example, a person may be able to exhibit normal (i.e., baseline) learning, attention, memory, and comprehension, while also exhibiting impaired

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<sup>395</sup> See *id.* at 116, 117.

<sup>396</sup> See D. Michael Bitz & Jean Seipp Bitz, Comment, *Incompetence in the Brain Injured Individual*, 12 ST. THOMAS L. REV. 205, 235, 238 n.237 (1999).

<sup>397</sup> See, e.g., RAINE, *supra* note 318, at 78.

<sup>398</sup> See James H. Fallon, *The Relationship Between Brain Development, Cognitive Functioning, and Accountability Under the Law: Neuroanatomical Background to Understanding the Brain of the Young Psychopath*, 3 OHIO ST. J. CRIM. L. 341, 350 (2006).

<sup>399</sup> The slow developing pre-frontal cortex is correlated with youth risk behaviors since its primary function is deliberation. Paul Arshagouni, *Introduction*, 9 J. HEALTH CARE L. & POL'Y 315, 350–51 (2007). The brains of youth really are quite different from those of adults. See LIPTON, *supra* note 370, at 132.

<sup>400</sup> See RAINE, *supra* note 318, at 67.

<sup>401</sup> See *id.*

<sup>402</sup> See *id.* at 67, 68.

<sup>403</sup> See, e.g., Bitz & Bitz, *supra* note 396, at 207.

<sup>404</sup> See, e.g., Conservatorship of Burton, 88 Cal. Rptr. 3d 524, 529 (Cal. Ct. App. 2009).

decision-making abilities.<sup>405</sup> In fact, new neuroscience scholarship suggests that decision-making is largely an unconscious activity, one that takes place up to seven seconds prior to manifestation of an act.<sup>406</sup> What specifically prepares the brain to unconsciously decide on a course of action prior to the subject actively deciding is still unknown.<sup>407</sup> Even the United States Supreme Court acknowledges the centrality of brain development and its role in cognition.<sup>408</sup> In addition, how a defendant processes cultural codes (e.g., the meaning of the contents of a plea agreement), is determined in part by her constitution within a unique cultural milieu that is also embedded within a larger structural and super-structural arrangement. What the Court lacks and desperately needs is an integrated assessment of the meaning of “knowing and voluntary” that is consistent with the insights drawn from biology, sociology, and psychology.

#### VI. NEUROPSYCHOLOGY AND DECISION-MAKING: THE “FREE WILL” PROBLEM

Rational actor models of human behavior assume that human beings possess free will.<sup>409</sup> To establish criminal intent, prosecutors must convince a judge or jury that a defendant possesses *mens rea*, or guilty mind.<sup>410</sup> That is, jurors must be convinced that a defendant acted with criminal intent, and that he or she knew right from wrong and *decided* to act against moral and legal codes.<sup>411</sup> We will not venture into the rich literature debating the efficacy of free will. Rather, we will take the position that free will is a concept that if adopted is like all other signifiers, it is bounded. Human beings “are embedded in a complex web of associations” that are interpreted and acted upon through political, economic, cultural,

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<sup>405</sup> Antoine Bechara et al., *Emotion, Decision Making and the Orbitofrontal Cortex*, 10 CEREBRAL CORTEX 295, 300, 301 (2000).

<sup>406</sup> Max Planck-Gesellschaft, *Decision-Making May Be Surprisingly Unconscious Activity*, SCI. DAILY (Apr. 15, 2008), <http://www.sciencedaily.com/releases/2008/04/080414145705.htm>.

<sup>407</sup> While there is no uniformity of opinion among neuroscientists as to how the brain is conditioned to respond to normative activity, social scientists would suggest it is due to the complex integration of subjective, cultural, physiological, and macro-structural embeddedness.

<sup>408</sup> *See, e.g.*, *Roper v. Simmons*, 543 U.S. 551, 569 (2005) (quoting *Johnson v. Texas*, 509 U.S. 350, 367 (1993)).

<sup>409</sup> ROGER HOPKINS BURKE, AN INTRODUCTION TO CRIMINOLOGICAL THEORY 41, 80 (4th ed. 2014).

<sup>410</sup> *Commonwealth v. Andre*, 17 A.3d 951, 958 (Pa. Super. Ct. 2011).

<sup>411</sup> *See State v. Singleton*, 48 A.3d 285, 293 (N.J. 2012).

psychological, and neuropsychological processes.<sup>412</sup> To the extent that some notion of free will exists it does so on a continuum that manifests through a complex sifting and interpreting process where subject and group identity is constituted by their position relative to political, economic, cultural, psychological, and neuropsychological factors.<sup>413</sup> Eagleman express the point this way: “[t]he complex interactions of genes and environment mean that all citizens—equal before the law—possess different perspectives, dissimilar personalities, and varied capacities for decision-making. The unique patterns of neurobiology inside each of our heads cannot qualify as *choices*; these are the cards we’re dealt.”<sup>414</sup>

To our knowledge, there has been no scientific data generated identifying the existence of a free will gene.<sup>415</sup> Of course it’s quite possible that over time and with more sophisticated instrumentation neuroscience may well identify a free will gene. Regardless, given the complexity of human consciousness as constituted by biological, sociological, and psychological factors that were presented in the previous section, if there is a free will gene it will likely represent an insignificant part of the whole. Specifically, “if free will does exist, it has little room in which to operate. It can at best be a small factor riding on top of vast neural networks shaped by genes and environment.”<sup>416</sup> So while there is as yet no scientifically valid proof of the existence of free will, there is quite compelling evidence that the brain stimulates thoughts and actions milliseconds before a subject consciously “decides” to act upon those thoughts and actions, thereby claiming ownership over them.<sup>417</sup> Consider, for example, the now classic Libet, Gleason, Wright, and Pearl 1983 study where subject cerebral activity was measured against subject reporting time for the appearance of what was experienced as a voluntary act.<sup>418</sup> They report “[t]he onset of cerebral activity clearly preceded by at least several hundred milliseconds the reported time of conscious intention to act.”<sup>419</sup>

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<sup>412</sup> See David Robertson Cameron, *An Evolutionary Story*, in *UNEASY PARTNERS: MULTICULTURALISM AND RIGHTS IN CANADA* 71, 90 (2007).

<sup>413</sup> See, e.g., RAINE, *supra* note 318, at 312.

<sup>414</sup> David Eagleman, *The Brain on Trial*, ATLANTIC, July/August, 2011 at 116.

<sup>415</sup> See MATTHEW NELSON HILL, *EVOLUTION AND HOLINESS: SOCIOBIOLOGY, ALTRUISM AND THE QUEST FOR WESLEYAN PERFECTION* 109 (2016).

<sup>416</sup> Eagleman, *supra* note 414, at 118.

<sup>417</sup> See, e.g., SAM HARRIS, *FREE WILL* 8 (2012).

<sup>418</sup> Benjamin Libet et al., *Time of Conscious Intention to Act in Relation to Onset of Cerebral Activity (Readiness-Potential): The Unconscious Initiation of a Freely Voluntary Act*, 106 *BRAIN* 623, 624 (1983).

<sup>419</sup> *Id.* at 623.

More recent scholarship pertaining to what neurologists refer to as “choice bias,” provides additional support for Libet’s early findings. For example, in their 2010 study, Hedgcock, Crowe, Leuthold, and Georgopoulos provide startling evidence of the subconscious brain’s decision-making process taking place well in advance of conscious reasoned comprehension of it.<sup>420</sup> Making use of the most sophisticated technology—magnetoencephalography—Hedgcock Crowe, Leuthold, and Georgopoulos were interested in the extent to which the presence of a decoy when selecting from a set of housing options affects decision-making.<sup>421</sup> Subjects were presented with three options for renting a house: 1) low crime, high rent; 2) high crime, low rent; and 3) high crime, high rent (the decoy).<sup>422</sup> There are two significant findings presented as a result of this research. First, decision-making was recorded using magnetoencephalography by measuring decision-making structures in the brain.<sup>423</sup> What they found was that on average the brain had already made a decision about which option to choose up to three seconds before the test subjects registered conscious awareness of their selection.<sup>424</sup> Soon, Brass, Heinze, and Haynes (2008) has generated similar findings suggesting that, “activity in the brain can predict decisions up to ten seconds before they enter the subject’s conscious awareness.”<sup>425</sup> Most important, for our purposes, they suggest that, “[h]igh-level control areas can begin to shape an upcoming decision long before it enters awareness.”<sup>426</sup> What’s unique in the Hedgcock Crowe, Leuthold, and Georgopoulos article is the addition of the decoy effect.<sup>427</sup> What they demonstrate is that when there’s a decoy present among the options available to subjects for selection, the brain will select its option one second after the decoy stimulus has been presented.<sup>428</sup> These results are akin to the anchoring effect discussed above in that once the brain

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<sup>420</sup> William M. Hedgcock et al., *A Magnetoencephalography Study of Choice Bias*, 202 EXPERIMENTAL BRAIN RES. 121, 126 (2010) (“[I]t is possible that the decoy begins to bias information processing even before the decision is made and that this bias could be outside of the subject’s awareness.”).

<sup>421</sup> *See id.* at 122 (explaining the use of magnetoencephalography [MEG] to study the neural activity of human subjects when presented with various options during the human decision making process).

<sup>422</sup> *Id.* at 122 tbl.1.

<sup>423</sup> *See id.* at 122, 126.

<sup>424</sup> *See id.* at 126.

<sup>425</sup> *See id.*

<sup>426</sup> *See id.*

<sup>427</sup> *See id.* at 122.

<sup>428</sup> *See id.* at 122, 126.

has selected its choice, and it appears to do so seconds prior to consciousness, it tends to commit to that decision.<sup>429</sup> We believe that this research has significant implications for plea-bargaining, especially in the area of charge stacking. For example, when defendants are presented with additional charges beyond those that the prosecutor would likely be able to establish beyond a reasonable doubt at trial in order to induce a plea to lesser charges, the additional charges in the charge-stacking scenario would be comparable to a decoy in the Hedgcock study. As such, with the presence of the decoy the defendant will fixate on one of the other options being presented as part of the plea and will hypothetically anchor his decision from then on. So to summarize, application of magnetoencephalography to the study of neurons and the processing of information in the brain establishes that the brain makes decisions when presented with stimuli well before a subject has conscious awareness of the decision.<sup>430</sup> When a decoy is presented among a set of options, brains will settle on the selection of a specific option one second prior to conscious awareness of the choice, and will anchor that decision.<sup>431</sup> This has obvious implications for the efficacy of rational actor models guiding plea-bargaining as neuroscience virtually eliminates the rational cost-calculating defendant. Put succinctly, “[f]ree will *is* an illusion. Our wills are simply not of our own making. Thoughts and intentions emerge from background causes of which we are unaware and over which we exert no conscious control. We do not have the freedom we think we have.”<sup>432</sup>

Certainly human beings have the capacity to make choices from among existing options. But social scientific scholarship has well established that those options, and even the capacity to choose, are bounded by a dialectical interplay of biological, sociological, and psychological characteristics. As Karl Marx has famously written, “[i]t is not the consciousness of men that determines their existence, but, on the contrary, their social existence determines their consciousness.”<sup>433</sup> By way of contrast, by and large American jurisprudence assumes that human beings are actors who,

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<sup>429</sup> See *id.* at 122; see *supra* note 284 and accompanying text.

<sup>430</sup> See *supra* notes 423–24 and accompanying text.

<sup>431</sup> See *supra* notes 428–29 and accompanying text.

<sup>432</sup> HARRIS, *supra* note 417, at 5.

<sup>433</sup> KARL MARX, A CONTRIBUTION TO THE CRITIQUE OF POLITICAL ECONOMY 11–12 (N. I. Stone trans., 1904).

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constituted by free will, rationally choose their course of action.<sup>434</sup> But is it true that *all* subjects are gifted with the same capacity to properly discern from among competing alternatives precisely what is the most reasoned choice? By what criteria is it determined that the most reasoned choice is so? Or said differently, what are the benchmarks for reasoned choices? Who decides? Are the deciders fitted with some sort of Platonic insight capable of greater wisdom than the ignorant masses destined to a life of choosing unwisely? If so, where did that wisdom come from? If all subjects who are bound by a system of laws are expected to be rational actors, actors possessing of free will and capable of making prudent reasoned decisions when confronted with options, how are they supposed to acquire that skill? Or is it innate? While there is no support for the presence of a free will gene, there is considerable evidence that brains have evolved to assist us with decision-making based on interaction with environmental stimuli. If free will is not innate to human beings, then is it learned? If so, how? Might it be that, while all human beings are decision-makers, we might make decisions that are not in our best interest? Why would we do that? Could it be due to political, economic, and cultural conditioning? Could it be due to bad brains? Could it be due to cognitive decision-making that places greater emphasis on risk aversion than maximizing pleasure? The answer is, yes, it could be due to each of these circumstances. The remainder of this section will focus on generating a counter-narrative to free will. It will do so by presenting a brief overview of insights drawn from neuropsychology and cognitive psychology. When combined, these substantive theoretical and conceptual literatures provide a powerful critique of the free will presumptions constituting contemporary legal theory and practice. Most important for our purposes, a comprehensive understanding of how human beings are constituted, and the complex ways that their subject constitution affects their decision-making processes, raises serious concerns about the failed jurisprudential application of mental competency to rationalize plea bargaining.

In this final section of our article addressing human cognition we focus our attention on the scholarship of neuropsychology. In doing so we conclude our exposition of human cognition, and raise our final objection in this article to the prominence of reason as manifest in law.

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<sup>434</sup> See, e.g., Eagleman, *supra* note 414, at 116.



*A. Neuropsychology and Rationality*

The assumptions made in *Brady* to rationalize the constitutionality of plea-bargaining are problematic in that they are not supported by current psychological research. While the idea of a “rational choice” seems axiomatic to us (we probably can rationalize every decision we make throughout the day, if prompted to), decision-making appears to be determined by a number of internal and external cues that we may or may not be conscious or aware of, seriously calling into question the “voluntariness” and “mutuality of advantage” as outlined in *Brady* in regards to plea-bargaining.<sup>435</sup> As psychological research on the topic of decision-making becomes more prevalent, it is becoming clearer that reducing choice to rational and objective principles obscures the fact that “rationality” is determined by both the external situation and the internal state of the individual, thus making it highly subjective and variegated between individuals and situations. The implication that individuals are acting as either rational or emotional presents a false dichotomy not supported by our knowledge of the neurological underpinnings of decision making; both rational reasoning skills and emotional processing play a large role in deciding behavior, therefore abnormalities in either type of processing (or both) can impair an individual’s ability to make decisions that maximize advantage for themselves.

The idea that humans are able to distinguish between choices that will produce favorable outcomes for themselves and choices that will produce unfavorable outcomes using rationality alone is encapsulated in the framework for determining the constitutionality of plea-bargaining and this framework is not supported by psychological research. In the following sections we will review the neuronal processes by which an individual chooses to act on a decision via internal and external cues, and the essential role of emotion in decision-making and decision impairment arising from emotional impairment not addressed in *Brady*. Additionally, we will describe how the process of decision-making is dependent upon unconscious bio-regulatory cues rather than conscious conceptual awareness of the risks and benefits of each option.

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<sup>435</sup> See *Brady v. United States*, 397 U.S. 742, 752, 758 (1970); BRYAN KOLB & IAN Q. WHISHAW, *FUNDAMENTALS OF HUMAN NEUROPSYCHOLOGY* 396 (5th ed. 2003).

*B. Neuropsychology and Choice: Frontal Lobe Functioning*

Like every behavior humans exhibit, “deciding” behavior is accompanied by physiological correlates, in this case primarily in the frontal lobe. The frontal lobe consists of the motor cortex (executing movements), the premotor cortex (selecting movements) and the prefrontal cortex (selecting appropriate movements via analysis of internal and external cues).<sup>436</sup> Lesions or damage to the frontal lobe would produce deficiencies in what is colloquially known as our “executive functions” and would be apparent in behaviors such as planning in advance, selecting a plan from many potential options, focusing on the tasks at hand while ignoring irrelevant information, and keeping track of what has already been accomplished in executing that plan.<sup>437</sup> The prefrontal cortex in particular is implicated in the selection of the most appropriate behavior on the bases of internal (temporal memory, or the ability to remember recent events that have not yet been encoded into long term memory attributed to the dorsolateral prefrontal cortex), external (environmental, including associative learning; reward/punishment), context (particularly social behavior), and auto-noetic awareness (self-concept).<sup>438</sup>

A person with frontal lobe damage may experience motor difficulties, deficiencies in temporal memory, a loss of divergent thinking, difficulty inhibiting responses to external cues, impaired/abnormal social interaction and inflexible behavior.<sup>439</sup> To illustrate what these deficiencies might look like in the context of behavior we will describe the neuropsychological tests commonly used to assess such behavior: the Stroop test, the Wisconsin card sorting task and the Tower of London.

In the Stroop test, a subject is presented with a series of color-words (e.g., “red”, “blue”) written in different colors of ink and is instructed to name the ink color.<sup>440</sup> Subjects with frontal lobe damage may have more difficulty identifying a color whose text does

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<sup>436</sup> *Id.* at 392, 393, 395, 396.

<sup>437</sup> *See id.* at 395.

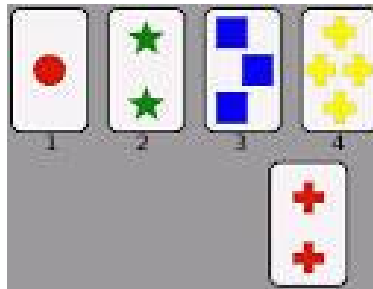
<sup>438</sup> *See id.* at 396–98.

<sup>439</sup> *See id.* at 422. For a full list of behaviors associated with frontal lobe impairment see Richard E. Redding, *The Brain-Disordered Defendant: Neuroscience and Legal Insanity in the Twenty-First Century*, 56 AM. U. L. REV. 51, 59–60 tbl.1 (2006) (citing Harold V. Hall, *Criminal-Forensic Neuropsychology of Disorders of Executive Functions*, in DISORDERS OF EXECUTIVE FUNCTIONS: CIVIL AND CRIMINAL LAW APPLICATIONS 37, 62 tbl.3 (Harold V. Hall & Robert J. Sbordone eds., 1998)).

<sup>440</sup> J. Ridley Stroop, *Studies of Interference in Serial Verbal Reactions*, 121 J. EXPERIMENTAL PSYCH. 15, 16 (1992).

not match the ink (for example, “red” written in green ink) than what is typically expected.<sup>441</sup> This demonstrates the frontal lobe patient’s difficulty in inhibiting input of one type (ink color) when instructed to read the word only.<sup>442</sup>

The Wisconsin card-sorting task presents participants with four cards that differ in color, shape and number of objects.<sup>443</sup> They are then given a 5th card and instructed to place it with the most “appropriate” of the presented cards based on the category of color, shape, or number of objects.<sup>444</sup> The correct category (i.e., color) will change spontaneously once the correct category has been realized by the subject, and may become either a shape or a number of objects.<sup>445</sup>



Subjects with frontal lobe damage have extreme difficulty in shifting from one strategy to the other in this task;<sup>446</sup> they may even persist in the same strategy throughout the whole test while at the same time vocalizing that the strategy must have changed,<sup>447</sup> demonstrating a frontal lobe patient’s lack of flexibility in choosing appropriate solutions when problem solving.

The Tower of London task is designed to evaluate planning deficits seen with certain types of frontal lobe damage.<sup>448</sup> Subjects are presented with several disks of different sizes on three pegs, and must move the disks to different pegs according to various rules (i.e., a larger disk may never be placed on a smaller disk).<sup>449</sup>

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<sup>441</sup> See E. Perret, *The Left Frontal Lobe of Man and the Suppression of Habitual Responses in Verbal Categorical Behaviour*, 12 NEUROPSYCHOLOGIA 323, 324, 325 (1974).

<sup>442</sup> See *id.* at 329.

<sup>443</sup> See Brenda Milner, *Effects of Different Brain Lesions on Card Sorting: The Role of the Frontal Lobes*, 9 ARCHIVES OF NEUROLOGY 90, 91 (1963).

<sup>444</sup> See *id.*

<sup>445</sup> See *id.*

<sup>446</sup> See *id.* at 90, 94, 96.

<sup>447</sup> See KOLB & WHISHAW, *supra* note 435, at 408.

<sup>448</sup> See *id.* at 419.

<sup>449</sup> *Id.*

Individuals with damage to the prefrontal cortex have impaired responses to this test.<sup>450</sup>

The effects of frontal lobe damage may be subtle and only discernible with tests carefully designed to detect specific abnormalities; overall intelligence tests may not be sensitive enough to pick up on them. Neuropsychological tests such as these demonstrate that an individual can have clinical impairment in several processes that relate directly to decision-making (flexibility, response inhibition, and planning) that are not taken into consideration when determining if a guilty plea is entered constitutionally.<sup>451</sup>

When a defendant enters a guilty plea, they are engaging in a strategic act; they waive numerous constitutionally protected rights specifically designed for fairness in the adversarial system.<sup>452</sup> It is troubling to say the least that under the current knowing and voluntary standards a defendant may present with average intelligence, and adequate communication skills, and yet possess a *clinically significant* cognitive deficit that affects their ability to switch between multiple strategies, inhibit their response to irrelevant external stimuli making them vulnerable to coercion, or plan a sequence of events to reach an end-goal, all of which are abilities necessary when deciding if pleading guilty or going to trial will be the most advantageous for the defendant.

### C. Neuropsychology and Choice: Emotional Processing

In addition to the frontal lobes, the limbic system has been heavily implicated in decision-making; in particular the amygdala and the connections between the amygdala and the prefrontal cortex.<sup>453</sup> “Emotion“ is a subjective, internal behavioral state we assess via a subject’s physiology (changes in the nervous system), certain types of motor behavior such as posture, facial expression or tone of voice, the subject’s self-reported state (depressed, angry), and a subject’s unconscious behavior (hunches or intuition that they fail to articulate a reason for).<sup>454</sup> Both the amygdala and the prefrontal cortex receive an abundance of cross modal sensory

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<sup>450</sup> *Id.*

<sup>451</sup> See *infra* notes 478–80 and accompanying discussion.

<sup>452</sup> See, e.g., *Parke v. Raley*, 506 U.S. 20, 28 (1992) (citing *Boykin v. Alabama*, 395 U.S. 238, 243 (1969)).

<sup>453</sup> See KOLB & WHISHAW, *supra* note 435, at 526, 527.

<sup>454</sup> See *id.* at 518–19.

information that creates a rich understanding of our environment.<sup>455</sup> It is the prefrontal cortex's interpretation of these sensations, along with memory (context) input from the hippocampus that allow us to "experience" emotion physiologically through hormone release (pituitary gland), autonomic nervous system activation (brainstem), and changes in attention and arousal (basal forebrain).<sup>456</sup>

While in the past philosophers sometimes equated emotions with instinct<sup>457</sup> and failed to consider them as an executive function, neuroscientists have explored the significant effect of emotion on behavior. Take for example the case study of J.P., a man born without frontal lobes who appeared to exhibit/recognize no emotion; far from being the perfect utilitarian cost-benefit calculator we might expect of humans without the interference of emotion, J.P. was unable to maintain close relationships or a career and, despite the fact that J.P. usually appeared entirely rational and had an average IQ, he would act irrationally when making important personal and social decisions,<sup>458</sup> which is characteristic of subjects with emotional deficits.<sup>459</sup>

This suggests that, far from hindering our ability to make advantageous decisions, emotion may actually be the process by which we are able to make those decisions with the greatest personal benefit,<sup>460</sup> such that damage to that process may greatly disadvantage a defendant who appears otherwise rational. Researchers have demonstrated via a simulated gambling game that subjects with damage to their ventral medial prefrontal cortex<sup>461</sup> (in addition to subjects with a history of cocaine or marijuana use)<sup>462</sup> are unable to choose options with the greatest long term benefit and lowest long term loss over the options that pose the highest short term benefits but highest long term loss.<sup>463</sup>

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<sup>455</sup> See *id.* at 533, 534.

<sup>456</sup> See *id.* at 532 fig.20.6.

<sup>457</sup> See *id.* at 517.

<sup>458</sup> See S. Spafford Ackerly, *A Case of Paranatal Bilateral Frontal Lobe Defect Observed for Thirty Years*, in *THE FRONTAL GRANULAR CORTEX AND BEHAVIOR* 192, 193, 194, 195, 198–99 (J. M. Warren & K. Akert eds., 1964).

<sup>459</sup> KOLB & WHISHAW, *supra* note 435, at 517.

<sup>460</sup> See Antoine Bechara et al., *Deciding Advantageously Before Knowing the Advantageous Strategy*, 275 *SCIENCE* 1293, 1294 (1997). "Without the help of such [emotion-driven] biases, overt knowledge may be insufficient to ensure advantageous behavior." *Id.* at 1293.

<sup>461</sup> From here on ventral medial prefrontal cortex will be abbreviated "VMPFC."

<sup>462</sup> See Antonio Verdejo-Garcia et al., *The Differential Relationship Between Cocaine Use and Marijuana Use on Decision-Making Performance Over Repeat Testing with the Iowa Gambling Task*, 90 *DRUG & ALCOHOL DEPENDENCE* 2, 4, 8 (2007).

<sup>463</sup> See Bechara et al., *supra* note 460, at 1293. Participants were given \$2,000 of fake

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This is contrasted to the normal subjects, who began to prefer the advantageous options by choosing them more frequently by round 50, and were able to articulate which options yielded the highest benefit by round 80 (ultimately, several of the VMPFC patients were able to articulate which options yielded the highest benefit, yet this was never reflected in their behavior as they continued to choose the disadvantageous options).<sup>464</sup>

In the same task researchers also found that participants in the control group began to have “anticipatory skin conductance responses” to the disadvantageous options, anticipating a high loss that corresponded to an unconscious switch from the high loss options to the advantageous options, whereas for the VMPFC subjects such an anticipatory skin response never occurred, and neither did a switch to the more advantageous decks.<sup>465</sup> Given the VMPFC patient’s ability to communicate the advantageous and disadvantageous options (indicating their conscious conceptual knowledge of the loss and rewards), their lack of integrating that knowledge into their behavior by choosing the advantageous options, and their absence of anticipatory skin responses seen in the controls, decision making appears to rely on unconscious bioregulatory processes, *not* conscious knowledge regarding the options.<sup>466</sup> This is further evidenced by the control group’s unconscious switch to the advantageous options up to 30 rounds *before* conscious awareness of which options were actually advantageous.<sup>467</sup> This corresponded to the start of anticipatory skin responses to the disadvantageous options, indicating it is the unconscious biological response, not the conscious conceptual knowledge, that mediated (or in the VMPFC patient’s case, failed to mediate) the behavioral change from the disadvantageous options to the advantageous ones.<sup>468</sup> Poor decision making associated with the VMPFC has also been replicated in the Ultimatum game, an experimental paradigm thought to reflect rational decision making, where individuals with VMPFC deficits are more likely to behave

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credit and presented with four decks of cards (A, B, C, and D). *Id.* Participants were instructed to turn over a card: Decks A and B carried \$100 rewards yet yielded sporadic high losses. Decks C and D carried \$50 rewards and yielded occasional low losses such that over time, decks C and D lead to the highest overall monetary gain. *Id.*

<sup>464</sup> *See id.* Moreover, the VMPFC cortex patients “failed to act according to their correct conceptual knowledge.” *Id.* at 1294.

<sup>465</sup> *Id.* at 1293.

<sup>466</sup> *See id.*

<sup>467</sup> *See id.*

<sup>468</sup> *See id.*

economically irrationally by more frequently rejecting highest utility offers if they perceive the offer as unfair.<sup>469</sup>

Far from application to just the occasional defendant, deficits in the prefrontal cortex and in emotional regulation are likely to affect a large number of individuals who find themselves in the criminal justice system, including those who negotiate a plea bargain. A low-resting heart rate and prefrontal deficits are significantly associated with antisocial and violent behavior throughout the lifespan and independent of other psycho-social factors.<sup>470</sup> Similar to the VMPFC damage and lack of anticipatory skin responses that indicate a poorer performance on the gambling task, people exhibiting antisocial personality traits have significantly reduced prefrontal cortex volume as measured by structural MRI and show reduced autonomic arousal in response to a stressful situation (preparing and giving a speech), compared to varying<sup>471</sup> control groups.<sup>472</sup> It should come as no surprise then that adults with anti-social personality traits also show impaired performance on the gambling task.<sup>473</sup> Though the causes of the prefrontal abnormalities leading to deficits in decision-making are difficult to discern, malnutrition may play a partial role. In a large longitudinal study, malnutrition at age three significantly predicted degree of conduct disorder at age seventeen independently of psycho-social factors and not moderated by gender.<sup>474</sup> This suggests that early malnutrition leads to neurocognitive deficits that manifest in greater incidence of conduct disorder,<sup>475</sup> indicating that socioeconomic status may be an important factor in the development of “normal” decision making.

These findings, along with others,<sup>476</sup> support Damasio’s Somatic

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<sup>469</sup> See Ernst Fehr & Ian Krajbich, *Social Preferences and the Brain*, in *NEUROECONOMICS: DECISION MAKING AND THE BRAIN* 193, 206 (Paul W. Glimcher & Ernst Fehr eds., 2d ed. 2014).

<sup>470</sup> See Adrian Raine, *The Role of Prefrontal Deficits, Low Autonomic Arousal, and Early Health Factors in the Development of Antisocial and Aggressive Behavior in Children*, 43 *J. CHILD PSYCHOL. & PSYCHIATRY* 417, 421, 423 (2002).

<sup>471</sup> Adrian Raine et al., *Reduced Prefrontal Gray Matter Volume and Reduced Autonomic Activity in Antisocial Personality Disorder*, 57 *ARCHIVES GEN. PSYCHIATRY* 119, 119 (2000), (stating that control groups consisted of healthy controls, psychiatric controls, and controls with a history of substance abuse).

<sup>472</sup> *Id.*

<sup>473</sup> See Robert Miranda, Jr. et al., *Influence of Antisocial and Psychopathic Traits on Decision-Making Biases in Alcoholics*, 33 *ALCOHOLISM: CLINICAL & EXPERIMENTAL RES.* 817, at \*9 (2009), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2846168/pdf/nihms182234.pdf>.

<sup>474</sup> Jianghong Liu et al., *Malnutrition at Age 3 Years and Externalizing Behavior Problems at Ages 8, 11, and 17 Years*, 161 *AM. J. PSYCHIATRY* 2005, at \*7 (2004), <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1570126/pdf/nihms-12067.pdf>.

<sup>475</sup> *Id.*

<sup>476</sup> See Antoine Bechara, *The Role of Emotion in Decision-Making: Evidence from*

Marker hypothesis of decision making, which states that emotional processing elicits physiological changes in the body highly adaptive for advantageous decision making, processes that when damaged or altered (e.g., via lesion, drug use, clinical mania, anxiety or depression) impede the way we make rational decisions by proxy.<sup>477</sup>

#### *D. Neuropsychology and Choice: Implications*

This theory of decision-making has several very important implications when applied to competency standards and plea-bargaining. First, executive functions such as intelligence and memory are distinct from emotional processing; as such, one ability can be impaired while the others remain intact.<sup>478</sup> This means that our current threshold for competency<sup>479</sup> for guilty pleas neither includes nor acknowledges deficits in decision-making, despite *Brady's* reliance on the assumption of equitable bargaining power for the state and the defendant for defending the constitutionality of pleas.<sup>480</sup> Second, decision making cannot be accurately viewed as the objective cost-benefit analysis as *Brady* implies; rather we know it to be a physical and largely unconscious process easily significantly altered by minor frontal lobe injury, and substance use or global mood disorders (as explicitly illustrated in *Moran*),<sup>481</sup> thereby demonstrating that rationality as we know it is not separate from emotion but entirely dependent upon it, changing it from a fixed concept to one that is very much state-dependent.

### VII. NEOLIBERALISM, SUBJECT CONSTITUTION, AND PLEA-BARGAINING

It is our contention that “knowing and voluntary” are empty signifiers that must be “filled” with meaning. They are political and ideological categories that help judicial actors linguistically and conceptually frame people and behaviors as a way of determining factual basis, and reference group. This section will discuss the

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*Neurological Patients with Orbitofrontal Damage*, 55 *BRAIN & COGNITION* 30, 37 (2004).

<sup>477</sup> KOLB & WHISHAW, *supra* note 435, at 530–31.

<sup>478</sup> See Bechara et al., *supra* note 405, at 301.

<sup>479</sup> See, e.g., *Dusky v. United States*, 362 U.S. 402, 402 (1960) (establishing that competency to stand trial requires that the defendant have the ability to consult with his lawyer with a reasonable degree of rational understanding and that the defendant have a rational and factual understanding of the proceedings against him).

<sup>480</sup> See *Brady v. United States*, 397 U.S. 742, 752–53 (1970).

<sup>481</sup> See *Godinez v. Moran*, 509 U.S. 389, 410 (1993) (involving a guilty plea where the defendant was found to be clinically depressed after psychiatric evaluation).



paradigm of thinking present in competency and plea-bargaining laws such as rational choice theory and *homo economicus*. Where the previous section of this article was devoted to neurological research and the composition of our subconscious and conscious brain, this final section of the article addresses subject constitution as actors living in the world. Here we locate subjects within lifeworlds to complete our epistemological adaptation of neurophenomenology to plea-bargaining.

A. *How Decision-Making Relates to Voluntariness Assumptions*

By way of refresher, let us return for a moment to the primacy of competency determinations regarding the plea. A defendant's competency is an important part of the constitutionality of plea-bargaining because competency in part determines whether a plea is entered knowingly and voluntarily.<sup>482</sup> In *Masthers*, a plea is referred to as "an intentional relinquishment [. . .] of a known right or privilege," therefore a valid plea must be made by a defendant whom retains the mental competence for directed action.<sup>483</sup> The use of the word "intentional" suggests that the decision to plead guilty is a self-interested goal-oriented action with a specific purpose and not just a *reaction* to specific circumstances.<sup>484</sup> A defendant's mental competency also determines whether or not a plea satisfies the "mutuality of advantage" for both the state and the defendant.<sup>485</sup> According to *Brady*, the constitutionality of plea-bargaining arises out of the fact that plea-bargaining has advantages for both parties involved, and the decision to plea is based on a contractual agreement between the defendant and the state that is entered knowingly and voluntarily.<sup>486</sup> In the *Brady* opinion the Supreme Court reasons that this mutuality of advantage will likely entice defendants with considerable evidence against them to plead guilty and only cases where there is "a substantial issue of the defendant's guilt" will be litigated.<sup>487</sup> In sum, following the Supreme Court's reasoning, a plea is constitutional because the defendant is making a voluntary, reasonable, rational, intentional decision to procure a self-interested deal from an equally situated prosecutor who is

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<sup>482</sup> See *Brady*, 397 U.S. at 758.

<sup>483</sup> *United States v. Masthers*, 539 F.2d 721, 725 (D.C. Cir. 1976) (quoting *Johnson v. Zerbst*, 304 U.S. 458, 464 (1938)).

<sup>484</sup> See *Masthers*, 539 F.2d at 725 (quoting *Johnson*, 304 U.S. at 464).

<sup>485</sup> *Brady*, 397 U.S. at 752.

<sup>486</sup> *Id.* at 752–753.

<sup>487</sup> *Id.* at 752.

balancing the interests of the victim, police officers, the community, and the resource and litigation priorities of the county attorney's office.

The assumption that the Supreme Court of the United States makes in regard to plea-bargaining as illustrated in *Brady* is that human decision-making is based upon strict considerations of costs and benefits, and that the accused will make the decision that benefits them the most.<sup>488</sup> Following utilitarian philosophical theory, it is believed that all human beings seek to maximize pleasure and minimize pain.<sup>489</sup> This "optimizing principle" is derived from early utilitarian economic theories involving *homo economicus*,<sup>490</sup> and later rational choice theory.<sup>491</sup> These theories were crafted to explain human behavior with regard to the allocation of scarce resources, and were later applied to other fields in the social sciences such as political science, sociology and criminology, as well as the legal field.<sup>492</sup>

### B. *Homo Economicus and Neoliberalism*

Discussion of neoliberalism in a paper on plea-bargaining may seem superfluous, perhaps even indulgent. However, it is our contention that the hegemonic influence of neoliberal values, especially and most importantly the law's construction of the category *homo economicus*—the reasonable, rational, self-interested individual—is what has permitted the Supreme Court and members of Congress to perpetrate the myth that equitable contract is a constitutionally permissible way to rationalize the accused's

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<sup>488</sup> See *id.* at 752–53.

<sup>489</sup> Jeremy Bentham, *An Introduction to the Principles of Morals and Legislation*, LIBRARY OF ECON. & LIBERTY, <http://www.econlib.org/library/Bentham/bnthPML1.html> (last visited Sept. 5, 2016) ("Nature has placed mankind under the governance of two sovereign masters, *pain* and *pleasure*. It is for them alone to point out what we ought to do, as well as to determine what we shall do. On the one hand the standard of right and wrong, on the other the chain of causes and effects, are fastened to their throne. . . . The *principle of utility* recognizes this subjection, and assumes it for the foundation of that system, the object of which is to rear the fabric of felicity by the hands of reason and of law. Systems which attempt to question it, deal in sounds instead of sense, in caprice instead of reason, in darkness instead of light.").

<sup>490</sup> See Mario J. Rizzo, *The Problem of Moral Dirigisme: A New Argument Against Moralistic Legislation*, 1 N.Y.U. J.L. & LIBERTY 789, 832 (2005); Ward Edwards, *The Theory of Decision Making*, 51 PYSCH. BULLETIN 380, 381 (1954), [http://worthylib.tamu.edu/courses\\_files/01\\_edwards\\_1954.pdf](http://worthylib.tamu.edu/courses_files/01_edwards_1954.pdf).

<sup>491</sup> See JOHN VON NEUMANN & OSKAR MORGENSTERN, *THEORY OF GAMES AND ECONOMIC BEHAVIOR* 32, 32 n.1 (4th ed. 2007); Thomas S. Ulen, *Rational Choice Theory in Law and Economics* 791, 794, 808, <http://encyclo.findlaw.com/0710book.pdf> (last visited Sept. 5, 2016).

<sup>492</sup> *Id.*

abdication of Fifth and Sixth Amendment rights in plea contexts. This final section of our article seeks to locate subjects within life-worlds that are constituted by an individualizing narrative premised on neoliberal values.

In 1898, Justice Harlan declared that it was unconstitutional for a defendant to waive his or her right to a jury trial,<sup>493</sup> thereby emphasizing the early Court's concern over a) the fact that rights are not the sole possession of individuals, but rather, they are cultural artifacts that must be preserved in order to firmly realize freedom, and b) the inalienability of rights means that they cannot be given away.<sup>494</sup> Plea jurisprudence changed in 1930 with the Supreme Court's opinion in *Patton v. United States*,<sup>495</sup> when Justice Sutherland upset Justice Harlan's reasoning by making rights waivers constitutional.<sup>496</sup> Plea jurisprudence lay dormant for forty years until, in 1970, the Supreme Court attempted to rationalize the constitutionality and inevitability of pleas in *Brady v. United States*.<sup>497</sup>

Law and jurisprudence are cultural artifacts that must be properly situated within temporal and spatial political, economic, and cultural context. Philosophical articulation of *homo economicus* predates the twentieth-century, but it was in the twentieth-century that classical liberalism consolidated its philosophical and political narrative to have what we believe to be a significant impact on law and legal interpretation.<sup>498</sup>

*Homo economicus*—economic man—of classical economic theory is said to possess the following characteristics: “(1) maximizing (optimizing) behavior; (2) the cognitive ability to exercise rational choice; and (3) individualistic behavior and independent tastes and preferences.”<sup>499</sup> A less charitable description of *homo economicus* might frame him as being “cold and calculating, worries only about himself, and pursues whatever course brings him the greatest material advantage.”<sup>500</sup> “*Homo economicus* is a single-minded,

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<sup>493</sup> *Thompson v. Utah*, 170 U.S. 343, 353 (1898).

<sup>494</sup> See generally *id.* at 353, 355 (holding that the constitutional right to a jury trial in felony cases could not be waived even by the defendant).

<sup>495</sup> *Patton v. United States*, 281 U.S. 276 (1930).

<sup>496</sup> *Id.* at 298–99.

<sup>497</sup> See *Brady v. United States*, 397 U.S. 742, 752–53 (1970).

<sup>498</sup> See Richard Wilson, *What is the Homo Economicus?* INVESTOPEDIA, <http://www.investopedia.com/ask/answers/08/homo-economicus.asp> (last visited Sept. 5, 2016) (describing the history of the concept of *homo economicus*).

<sup>499</sup> Chris Doucouliagos, *A Note on the Evolution of Homo Economicus*, 28 J. ECON. ISSUES 877, 877 (1994).

<sup>500</sup> Ronald J. Colombo, *Exposing the Myth of Homo Economicus*, 32 HARV. J.L. & PUB. POL.

wealth-maximizing automaton, who does not take into account ‘morality, ethics, or other people.’”<sup>501</sup> Important for our purposes, the adoption of the ideological rationalization of human beings as *homo economicus* leads to confronting juridical problems through application of cost-benefit analysis, where solutions are framed as incentives and disincentives.<sup>502</sup> The framing of *homme juridique* as *homo economicus* provides the jurisprudential legitimization for plea-bargaining.<sup>503</sup> It does this by structuring agreements (contracts) between defendants and prosecutors using cost-benefit analysis.<sup>504</sup> Defendant as *homo economicus* is imbued with rational choice, and will predictably select the offer that maximizes his interests.<sup>505</sup> How was it that *homo economicus* supplanted *homme juridique* with regard to application of Fifth and Sixth Amendment rights and the U.S. Supreme Court’s constitutionalization of plea bargains? Let us consider just a few significant historical events that provide political, economic, and cultural context.

In 1947, Austrian born economist Friedrich Hayek invited thirty-six scholars to Mont Pelerin, Switzerland to discuss the state of liberalism.<sup>506</sup> This meeting was an organized effort to explore and assert the virtues of classical liberalism.<sup>507</sup> Hayek’s most compelling and influential publication was, *The Road to Serfdom*, a powerful critique of socialism.<sup>508</sup> And while he held prestigious teaching positions at the London School of Economics, and the University of Chicago, Hayek’s early influence was limited to a relatively small group of distinguished economists and scientists like Karl Popper, Frank H. Knight, Milton Friedman and George Stigler.<sup>509</sup> Hayek was awarded the Nobel Prize for Economics in 1974.<sup>510</sup> By way of contrast to Hayek’s alarmist rhetoric and fetishism of market-based principles for guiding the economy, Karl

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737, 739 (2009) (reviewing PAUL J. ZAK, MORAL MARKETS: THE CRITICAL ROLE OF VALUES IN THE ECONOMY).

<sup>501</sup> *Id.*

<sup>502</sup> *Id.*

<sup>503</sup> See Robert E. Scott & William J. Stuntz, *Plea Bargaining as Contract*, 101 YALE L.J. 1909, 1926 (1992).

<sup>504</sup> *Id.* at 1909, 1910.

<sup>505</sup> See LYNN A. STOUT, CULTIVATING CONSCIENCE: HOW GOOD LAWS MAKE GOOD PEOPLE 161 (2011).

<sup>506</sup> *About MPS: A Short History of the Mont Pelerin Society*, MONT PELERIN SOC’Y, <http://www.montpelerin.org/about-mps/> (last visited Feb. 22, 2016); *F.A. Hayek, THE MONT PELERIN SOC’Y*, <http://www.montpelerin.org/f-a-hayek/> (last visited Feb. 22, 2016).

<sup>507</sup> See *About MPS: A Short History of the Mont Pelerin Society*, *supra* note 506.

<sup>508</sup> *F.A. Hayek*, *supra* note 506.

<sup>509</sup> See *id.*

<sup>510</sup> *Id.*

Polanyi wrote in 1944 that, “[t]o allow the market mechanism to be sole director of the fate of human beings and their natural environment . . . would result in the demolition of society.”<sup>511</sup> It seems that Polanyi assumed the role of Pangloss.<sup>512</sup> Neoliberalism’s vulgate, its normative authority, drew from the assumption that economic market forces would dictate political, economic, and cultural relations.<sup>513</sup> One of the explanations given for the growth of neoliberal thought is the enthusiastic commitment of its followers to promulgate their ideas.<sup>514</sup>

The mid-twentieth century ideas generated by the classical liberal economic school of thought percolated in universities and organizations like the Mont Pelerin Society, and in the early 1970s started making their way into political prominence.<sup>515</sup> Just a few months before being seated as a United States Supreme Court Justice, Lewis Powell wrote to his friend Eugene Sydnor, Jr., Director of the U.S. Chamber of Commerce.<sup>516</sup> That letter, which was leaked to the public after Powell was sworn in as Supreme Court Justice, is now known as the Powell Memo.<sup>517</sup> Speaking on behalf of free market corporate interests, the Memo is credited with inspiring the creation of the Cato Institute, the Heritage Foundation, the Manhattan Institute, Citizens for a Sound Economy, and Accuracy in Academe.<sup>518</sup> Powell’s memo sounds a familiar Hayek-inspired alarm—the U.S. economic system is under attack from “statism” and “socialism.”<sup>519</sup> Powell names “college

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<sup>511</sup> Susan George, A Short History of Neoliberalism, Remarks at the Conference of Economic Sovereignty in a Globalising World (Mar. 24, 1999) (transcript available at <https://www.tni.org/en/article/short-history-neoliberalism>).

<sup>512</sup> See generally Craig LaChance, Note, *Nature v. Nurture: Evolution, Path Dependence and Corporate Governance*, 18 ARIZ. J. INT’L & COMP. L. 279, 279 (2001) (“In Voltaire’s *Candide*, the philosopher Dr. Pangloss . . . tells *Candide* that . . . [w]e have feet, for instance, so that we may wear shoes. Since all things in existence have a distinct functional presence, we must live in the best of all possible worlds. Everything is in its place and operating as should be. In proving such, Pangloss famously validated the status quo.”).

<sup>513</sup> See Candace Smith, *A Brief Examination of Neoliberalism and Its Consequences*, SOC’Y PAGES: SOC. LENS (Oct. 2, 2012), <https://thesocietypages.org/sociologylens/2012/10/02/a-brief-examination-of-neoliberalism-and-its-consequences/>.

<sup>514</sup> See George, *supra* note 511 (noting that neoliberalism’s success is largely due to its followers financial contributions, which have developed international foundations, institutes, and research centers dedicated to spreading their message).

<sup>515</sup> *About MPS: A Short History of the Mont Pelerin Society*, *supra* note 506; F.A. Hayek, *supra* note 506.

<sup>516</sup> *The Powell Memo*, RECLAIM DEMOCRACY, [http://reclaimdemocracy.org/powell\\_memo\\_lewis/](http://reclaimdemocracy.org/powell_memo_lewis/) (last visited Feb. 22, 2016).

<sup>517</sup> *Id.*

<sup>518</sup> *Id.*

<sup>519</sup> See *id.*

campus[es], the pulpit, the media, the intellectual and literary journals, the arts and sciences, and . . . politicians” as those “attackers” of free enterprise.<sup>520</sup> The remedy for what is perceived by Powell as an urgent attack on corporate interests is to generate “organization, in careful long-range planning and implementation, in consistency of action over an indefinite period of years, in the scale of financing available only through joint effort, and in the political power available only through united action and national organizations.”<sup>521</sup> Respect for corporate independence, while laudable under ideal conditions, would lead to the diminution of corporate power.<sup>522</sup> The answer was to consolidate corporate power and influence by sharing information, and their vast financial resources to overwhelm the adversaries of capital growth.

Universities were also viewed as a significant problem, and locus of potential influence. Departments of Economics and Philosophy must be staffed with classical liberal economists whose ideas would counter those perceived by Powell as too “Marxist.” Powell’s recommendations included having the Chamber of Commerce establish a stable of scholars who “believe in the system,” create a staff of speakers (including scholars), create a speaker’s bureau that would coalesce politically and ideologically like-minded scholars and Chamber advocates, create an organized review of textbooks (according to Powell, labor unions and the Civil Rights movement had re-written textbooks to assure that they were fair), establish equal time on college campuses for speakers favorable to classical liberal ideas, and balancing faculties to assure the presence of classical liberal social scientists.<sup>523</sup> Powell goes on to address the need to change the media and to more concertedly engage in politics.<sup>524</sup>

For our purposes, it’s important to acknowledge Powell’s entreaty to use corporate authority to influence the Courts. Specifically, “[u]nder our constitutional system, especially with an activist-minded Supreme Court, the judiciary may be the most important instrument for social, economic and political change.”<sup>525</sup> And, “[t]his is a vast area of opportunity for the Chamber, if it is willing to undertake the role of spokesman for American business and if, in

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<sup>520</sup> *Id.*

<sup>521</sup> *Id.*

<sup>522</sup> *See id.*

<sup>523</sup> *See id.*

<sup>524</sup> *Id.*

<sup>525</sup> *Id.*

turn, business is willing to provide the funds.”<sup>526</sup> Justice Lewis Powell, advocate for using the Supreme Court as a vehicle for corporate political influence, was appointed by President Nixon in 1971, and was sworn in on January 7, 1972.<sup>527</sup> He served on the bench until he retired in 1987.<sup>528</sup>

### C. Neoliberalism

As an ideologically hegemonic force, the Powell Memo signified a coming to consciousness of the forces of economic dominance in the United States and across Europe and Asia, and a clear indication that neoliberal ideas had begun to flower. The economic theory that gave rise to neoliberalism assumes an essentialist rationality where “the economic world is a pure and perfect order, implacably unrolling the logic of its predictable consequences . . . .”<sup>529</sup> And where, “in the name of a narrow and strict conception of rationality as individual rationality, it brackets the economic and social conditions of rational orientations and the economic and social structures that are the condition of their application.”<sup>530</sup> According to David Harvey, neoliberalism is “a theory of political economic practices that proposes that human well-being can best be advanced by liberating individual entrepreneurial freedoms and skills within an institutional framework characterized by strong private property rights, free markets, and free trade.”<sup>531</sup> Most important for our purposes, neoliberalism “emphasizes the significance of contractual relations in the marketplace.”<sup>532</sup> An essentialist and deeply ideological rationalism fetishizes the individual engaged in a contract, thereby supplanting institutions and identities grounded in the collective.<sup>533</sup> Dialectical juxtaposition constructs a new vulgate based upon the unity of opposites. For example, “economic disinvestment by the state and reinforcement of its police and penal components, deregulation of financial flows and relaxation of

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<sup>526</sup> *Id.*

<sup>527</sup> Joan Biskupic & Fred Barbash, *Retired Justice Lewis Powell Dies at 90*, WASH. POST (Aug. 26, 1998), <http://www.washingtonpost.com/wpsrv/national/longterm/supcourt/stories/powell082698.htm>; *Lewis F. Powell Jr.*, BIOGRAPHY.COM, <http://www.biography.com/people/lewis-f-powell-jr-38967> (last visited Sept. 13, 2016).

<sup>528</sup> Biskupic & Barbash, *supra* note 527.

<sup>529</sup> Pierre Bourdieu, *The Essence of Neoliberalism*, LE MONDE DIPLOMATIQUE (Dec. 1998), <http://mondediplo.com/1998/12/08bourdieu>.

<sup>530</sup> *Id.*

<sup>531</sup> DAVID HARVEY, A BRIEF HISTORY OF NEOLIBERALISM 2 (2005).

<sup>532</sup> *Id.* at 3.

<sup>533</sup> *See id.* at 64.

administrative controls on the employment market, reduction of social protection and moralizing celebration of ‘individual responsibility.’”<sup>534</sup> Neoliberal policies are Darwinistic, in that they

privilege[] personal responsibility over larger social forces, reinforce[] the gap between the rich and poor by redistributing wealth to the most powerful and wealthy individuals and groups, and it foster[] a mode of public pedagogy that privileges the entrepreneurial subject while encouraging a value system that promotes self-interest, if not an unchecked selfishness.<sup>535</sup>

One manifestation of neoliberalism is that “social problems are increasingly criminalized while social protections are either eliminated or fatally weakened.”<sup>536</sup>

The concept of freedom and liberty as defined by neoliberalism is a lonely one. That free thinking, freely acting, reasonable, rational person under the law confronts the world as a solitary being engaged in a “morality of personal, but not social, responsibility.”<sup>537</sup> And most important as it pertains to the ideological rationale for plea bargaining, “we alone become responsible for the problems we confront when we can no longer conceive how larger forces control or constrain our choices and the lives we are destined to lead.”<sup>538</sup> Neoliberal ideology has as its centerpiece an interest in “shap[ing] identities, desires, and modes of subjectivity in accordance with market values, needs, and relations.”<sup>539</sup> A hallmark of the most recent incarnation of the Belle Époque or Gilded Age<sup>540</sup> is a concomitant growth of what Giroux calls the “politics of disposability.”<sup>541</sup> Neoliberal marginalization of undesirables by race/ethnicity, class, gender, sexual orientation, immigration status, and intellectual ability manifests in orchestrated policies designed to punish.<sup>542</sup> Investigative journalist, Matt Taibbi, artfully exposes the influence of neoliberal policies on decisions to punish those who have committed crimes.<sup>543</sup> On December 11, 2012 the Hong Kong

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<sup>534</sup> Pierre Bourdieu & Loic Wacquant, *NewLiberalSpeak: Notes on the New Planetary Vulgate*, 105 *RADICAL PHIL.* 2, 4 (2001).

<sup>535</sup> HENRY A. GIROUX, NEOLIBERALISM’S WAR ON HIGHER EDUCATION 1 (2014).

<sup>536</sup> *Id.* at 2.

<sup>537</sup> *Id.* at 3.

<sup>538</sup> *Id.*

<sup>539</sup> *Id.* at 15.

<sup>540</sup> THOMAS PIKETTY, *CAPITAL IN THE TWENTY-FIRST CENTURY* 106 (Arthur Goldhammer trans., 2014).

<sup>541</sup> GIROUX, *supra* note 535, at 15.

<sup>542</sup> *Id.*

<sup>543</sup> *See generally* MATT TAIBBI, *THE DIVIDE: AMERICAN INJUSTICE IN THE AGE OF THE*



and Shanghai Banking Corporation, or HSBC, received the largest fine in banking history—\$1.92 billion—and they had to apologize for their misdeeds.<sup>544</sup> What had employees of HSBC done to generate such an extreme penalty?

The bank admitted to laundering billions of dollars for drug cartels in Mexico and Colombia, washing money for terrorist-connected organizations in the Middle East, allowing rogue states under formal sanctions by the U.S. government to move money freely by the tens of billions through its American subsidiary, letting Russian mobsters wash money on a grand scale using a see-no-evil traveler's checks program, and helping tax cheats and other crooks from Miami to Los Angeles to Peru hide hundreds of millions of dollars in nearly anonymous "bearer share" accounts.<sup>545</sup>

HSBC admitted to laundering up to \$7 billion in drug cartel money, yet no one went to prison.<sup>546</sup> HSBC *agreed to* a \$1.92 billion settlement with the U.S. Department of Justice.<sup>547</sup> How could this have happened? The Department of Justice came to its decision to charge HSBC civilly based upon the substance of a document generated by former Assistant U.S. Attorney General, Eric Holder.<sup>548</sup> That document has come to be known as the Holder Memo.<sup>549</sup> Specifically, before charging corporations government attorneys must consider the collateral consequences that may befall the corporation, its employees, and the economy more generally.<sup>550</sup> In 2012 at a press conference held to explain the DOJ's decision to charge HSBC civilly and not criminally, now former U.S. Attorney General Holder indicated that before bringing charges the DOJ should "reach out to experts outside of the Justice Department to talk about what are the consequences of actions that we might take . . . [and] what would be the impact of those actions if we wanted to make a particular prosecutive [sic] decision or

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WEALTH GAP xxii (2014) (examining the influence of neoliberalism on the criminal justice system).

<sup>544</sup> Stephanie Tong, *HSBC to Apologize at Hearing on Money Laundering, Memo Shows*, BLOOMBERG (July 10, 2012, 11:41 PM), <http://www.bloomberg.com/news/2012-07-11/hsbc-s-gulliver-to-apologize-at-senate-hearing-memo-says-1-.html>; Aruna Viswanatha & Brett Wolf, *HSBC to Pay \$1.9 Billion U.S. Fine in Money-Laundering Case*, REUTERS (Dec. 11, 2012, 6:15 PM), <http://www.reuters.com/article/us-hsbc-probe-idUSBRE8BA05M20121211>.

<sup>545</sup> TAIBBI, *supra* note 543, at 59.

<sup>546</sup> *Id.*; Viswanatha & Wolf, *supra* note 545.

<sup>547</sup> TAIBBI, *supra* note 543, at 59.

<sup>548</sup> *See id.* at 66–67.

<sup>549</sup> *Id.* at 67.

<sup>550</sup> *Id.* at 68.

determination with regard to a particular institution.”<sup>551</sup> The Attorney General publicly admitted that the DOJ would seek input from corporations before prosecuting HSBC.<sup>552</sup>

By way of juxtaposition, Taibbi documents a story unfolding in the shadows of Wall Street in the Manhattan Public Defender’s office. On August 9<sup>th</sup>, 2012, Tory Marone was stopped by police as part of New York City’s now unconstitutional stop and frisk program.<sup>553</sup> Marone was stopped for being homeless and looking stoned.<sup>554</sup> When told by officers to empty his pockets, Marone revealed half a joint.<sup>555</sup> He was arrested and charged for “knowingly or unlawfully possessing marijuana and such is burning or open in public view.”<sup>556</sup> Private possession of less than twenty-five grams of marijuana was made legal in New York City in 1977.<sup>557</sup> If Marone had kept his half-smoked joint in his pocket, and thereby private, he would not have been in violation of the law.<sup>558</sup> But when officers ordered him to empty his pockets and he complied, the half-smoked joint was then no longer “private,” as it was publicly exposed, so he was in violation of the law and could be arrested.<sup>559</sup> Marone was convicted and ordered to pay a bail fine of \$1,500.00 for resisting arrest<sup>560</sup> and \$1,000.00 for possessing marijuana.<sup>561</sup> He was then ordered to spend forty days at Rikers Island prison.<sup>562</sup> The politics of disposability. How else can the juxtaposition of these two stories—the tip of the iceberg—be explained except in terms of disposability and marginalization? At what point does the U.S. Attorney General find it necessary to consult with run-of-the-mill defendants to discern “collateral

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<sup>551</sup> *Id.* at 67.

<sup>552</sup> *See id.*

<sup>553</sup> *See id.* at 54; Bernard Vaughan, *NYPD’s ‘Stop-and-Frisk’ Practice Unconstitutional, Judge Rules*, REUTERS (Aug. 12, 2013, 4:48 PM), <http://www.reuters.com/article/2013/08/12/us-usa-newyork-police-idUSBRE97B0FK20130812>.

<sup>554</sup> *See* TAIBBI, *supra* note 543, at 56.

<sup>555</sup> *Id.* at 57.

<sup>556</sup> *Id.*

<sup>557</sup> *Id.*

<sup>558</sup> *Id.*

<sup>559</sup> *See id.*

<sup>560</sup> *Id.* at 58. Marone had been previously seized by police for being homeless and sleeping in a public park. *See id.* at 54–55. When he attempted to leave by pleading with them not to arrest him and that he would walk out of the park, they grabbed him. *See id.* at 55. Marone screamed and swore at the officers. *Id.* at 56. He was arraigned and released on his own recognizance but failed to show up for his scheduled court appearance. *Id.* When he was stopped at the ensuing incident above, officers returned the resisting arrest charges. *See id.* at 58.

<sup>561</sup> *Id.*

<sup>562</sup> *Id.*

consequences” before charging them? How is it just that HSBC engaged in drug money laundering, among other violations of the law, and no one was sent to prison? And yet, possession of a half a joint can land you in Rikers.

Taibbi is onto something when he acknowledges that a pernicious and pervasive ideological shift is afoot, one that demonstrates “a profound hatred of the weak and the poor, and a corresponding groveling terror before the rich and successful . . . .”<sup>563</sup> The result is consistent with neoliberal manifestations of economic Darwinism, “in which the rule of law has slowly been replaced by giant idiosyncratic bureaucracies that are designed to criminalize failure, poverty, and weakness on the one hand, and to immunize strength, wealth, and success on the other.”<sup>564</sup> Part and parcel of a neoliberal model of social control is “undermining civil liberties, criminalizing a range of social behaviors related to concrete social problems, and intensifying the legacy of Jim Crow against poor people of color.”<sup>565</sup>

What should be clear from the preceding examples is that neoliberalism is far more than a form of economic rationality: it is also a form of political rationality.<sup>566</sup> This is important because as a mechanism of “cultural imperialism,” neoliberal rationality influencing all facets of human life manifests as symbolic violence.<sup>567</sup> Here, “the state itself must construct and construe itself in market terms, as well as develop policies and promulgate a political culture that figures citizens exhaustively as rational economic actors in every sphere of life.”<sup>568</sup> In addition to the ideological constitution of citizens as possessing “moral autonomy,” “neoliberal political rationality produces governance criteria along the same lines, that is, criteria of productivity and profitability, with the consequence that governance talk increasingly becomes market-speak, businesspersons replace lawyers as the governing class in liberal democracies, and *business norms replace juridical principles*.”<sup>569</sup>

How does the Supreme Court rationalize usurpation of constitutional rights protections for defendants facing felony conviction via plea-bargaining? Avoid application of criminal justice

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<sup>563</sup> *Id.* at xx.

<sup>564</sup> *Id.* at xxii.

<sup>565</sup> GIROUX, *supra* note 535, at 26.

<sup>566</sup> See Wendy Brown, *American Nightmare: Neoliberalism, Neoconservatism, and De-Democratization*, 34 POL. THEORY 690, 693 (2006).

<sup>567</sup> See Bourdieu & Wacquant, *supra* note 534, at 2.

<sup>568</sup> See Brown, *supra* note 566, at 694.

<sup>569</sup> *Id.* (emphasis added).

and shift the focus to contract law. How is it that doing so garners legal and scholarly legitimization? Because the hegemonic influence of neoliberalism makes what to most would appear to be juridical sleight of hand appear perfectly reasonable. As Brown makes clear:

Civic and legal principles securing the political (as opposed to private) autonomy of citizens, such as those enumerated in the First Amendment of the U.S. Constitution [and, we contend, the Fifth and Sixth Amendments], have no place in a neoliberal schema, which means that neoliberal political rationality features no intrinsic commitment to political liberty.<sup>570</sup>

Here, law becomes instrumentalized, “producing the conditions for [law’s] routine suspension or abrogation, and paving ground for . . . sovereignty in the form of a permanent ‘state of exception.’”<sup>571</sup> Defendants confronting preparation for trial may invoke their Fifth and Sixth Amendment rights.<sup>572</sup> But culturally hegemonic neoliberal ideology provides a juridical rationalization for the abrogation of constitutionally protected rights when prosecutors, defense attorneys, and judges perceive plea-bargaining as the most efficient way to dispose of ever-increasing caseloads.<sup>573</sup> Defendants confront prosecutors as “free agents” negotiating a contract. These defendants are perceived to be synonymous with *homo economicus* and are politically positioned as such. They are in essence “free” to choose a proffered plea offer or risk their fortune at trial.<sup>574</sup> In this way, a “state of exception” is imposed to generate a market-rationalized use-value for formal rights protections.<sup>575</sup> This is a type of power relation that Foucault referred to as “strategic games between liberties.”<sup>576</sup> Lemke interprets strategic games as “structuring the possible field of action of others.”<sup>577</sup> This could mean “empowering” individuals as positioned against the interests of the state, with the capacity for “free” decision-making. What

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<sup>570</sup> *Id.* at 695.

<sup>571</sup> *Id.*

<sup>572</sup> See Angela Henson, *Now You Have it, Now You Don't: The Sixth Amendment Right to Counsel After Texas v. Cobb*, 51 CATH. U. L. REV. 1359, 1363, 1364 (2002).

<sup>573</sup> See Brown, *supra* note 566, at 705; Robert J. Norris & Allison D. Redlich, *Seeking Justice, Compromising Truth? Criminal Admissions and the Prisoner's Dilemma*, 77 ALB. L. REV. 1005, 1013 (2014).

<sup>574</sup> Scott & Stuntz, *supra* note 503, at 1935.

<sup>575</sup> See Brown, *supra* note 566, at 693, 694, 695.

<sup>576</sup> THOMAS LEMKE, *FOUCAULT, GOVERNMENTALITY, AND CRITIQUE* 5 (2000), presented at Rethinking Marxism Conference, University of Amherst (MA), Sept. 21-24, 2000.

<sup>577</sup> *Id.* at 5.

makes this form of political rationality and governmentality so important is “how it functions as a ‘politics of truth’, [sic] producing new forms of knowledge, inventing new notions and concepts that contribute to the ‘government’ of new domains of regulation and intervention.”<sup>578</sup> Normative relinquishing of political rights for defendants confronted with plea bargains under a neoliberal jurisprudence gains its ubiquity through articulation of a “politics of truth” (caseload and resource pressures), thereby rationally adjudicating heavy caseloads in the name of more efficient governmentality. As a technology of control, governmentality as signified by neoliberalism “entails shifting the responsibility for social risks such as illness, unemployment, poverty, [cognitive decision making and neuropsychological damage,] etc.[,] and for life in society into the domain for which the individual is responsible and transforming it into a problem of ‘self-care’.”<sup>579</sup> Reasonable, rational individuals are confronted with the capacity to discern from among competing options the proper path. The neoliberal ideology assumes that all action is the product of free will, and as such, individuals must confront the consequences of their actions alone.<sup>580</sup> Neoliberal ideology ignores the constitution of the self as influenced by the confluence of a neurophenomenology that is politically, economically, and culturally embedded. It has no place for explanations for human behavior that might fall outside the bounds of what would seem to be in accordance with a subject’s self-interest.

### VIII. CONCLUSION

On May 27<sup>th</sup>, 2014, the United States Supreme Court delivered its opinion in *Hall v. Florida*,<sup>581</sup> a Florida death penalty case where at issue was the state’s threshold mental competency determination.<sup>582</sup> Florida, like eight other states,<sup>583</sup> set a strict threshold capacity for determining mental competency at an IQ score of 70 or below.<sup>584</sup> Defendant Hall was tested at an IQ of 71 and, according to Florida’s strict interpretation of the law, was deemed competent and should

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<sup>578</sup> *Id.* at 8.

<sup>579</sup> *Id.* at 12.

<sup>580</sup> *See id.*

<sup>581</sup> *Hall v. Florida*, 134 S. Ct. 1986 (2014).

<sup>582</sup> *Id.* at 1991–92.

<sup>583</sup> In addition to Florida, Kentucky, Virginia, Alabama, Arizona, Delaware, Kansas, North Carolina, and Washington each apply the strict fixed score IQ cutoff. *Id.* at 1996, 1997.

<sup>584</sup> *See id.*

be executed.<sup>585</sup> No additional cognitive testing was required.<sup>586</sup> So for those who may have an IQ score of between 70 and 75, the standard of error in IQ testing, the question was whether the IQ score alone should determine a defendant's fate.<sup>587</sup> In a 5-4 opinion the Court, grounding its opinion in *Atkins* and *Roper*, ruled that strict adherence to a fixed score IQ cutoff failed to serve the interests of justice when the ultimate penalty was at issue.<sup>588</sup> The majority opinion focused primarily on the improper interpretation of IQ data and the five-point standard deviation, a concern that it had previously addressed in *Atkins*.<sup>589</sup> But it also cited to the *Atkins* Court to reiterate its definition of intellectual disability. Specifically, "by definition [the intellectually disabled] have diminished capacities to understand and process information, to communicate, to abstract from mistakes and learn from experience, to engage in logical reasoning, to control impulses, and to understand the reactions of others."<sup>590</sup> The majority then suggests that the Eighth Amendment protection against cruel and unusual punishment and the protection of human dignity mandate that states not be allowed to "define intellectual disability as they wished,"<sup>591</sup> since by doing so those states would nullify the Court's *Atkins* decision. The majority cites to amicus submitted jointly by the American Psychological Association, American Psychiatric Association, American Academy of Psychiatry and the Law, Florida Psychological Association, National Association of Social Workers, and National Association of Social Workers Florida Chapter.<sup>592</sup> The majority emphasizes that while the Court is not bound by such authorities, it may "inform" legal determinations.<sup>593</sup> Important, the Court makes clear that while there are differences between legal and medical determinations of intellectual disability, it is the medical community that informs legal determinations:

*Atkins* itself points to the diagnostic criteria employed by psychiatric professionals. And the professional community's teachings are of particular help in this case, where no other

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<sup>585</sup> *Id.* at 1991–92.

<sup>586</sup> *See id.* at 1994 (citing *Cherry v. State*, 959 So. 2d 702, 712–13 (Fla. 2007)).

<sup>587</sup> *Hall*, 134 S. Ct. at 1994, 1995, 1996 (citing *Cherry*, 959 So. 2d at 712–13).

<sup>588</sup> *See Hall*, 134 S. Ct. at 1992–93, 2001.

<sup>589</sup> *See Hall*, 134 S. Ct. at 1995, 2001 (quoting *Atkins*, 536 U.S. at 308 n.3); *Atkins*, 536 U.S. at 318 n.5.

<sup>590</sup> *Hall*, 134 S. Ct. at 1999 (citing *Atkins*, 536 U.S. at 318).

<sup>591</sup> *Hall*, 134 S. Ct. at 1999.

<sup>592</sup> *See id.* at 1994.

<sup>593</sup> *See id.* at 2000 (citing *Kansas v. Crane*, 534 U.S. 407, 413 (2002)).

alternative definition of intellectual disability is presented and where this Court and the States have placed substantial reliance on the expertise of the medical profession.<sup>594</sup>

In reversing the lower court in *Hall*, the Court affirms two significant principles that apply to the argument we present in this paper—fundamental human dignity, and comity with the natural and social sciences. When it comes to procedural matters we are often told that *death is different*, it is final, and at every level of due process it requires a higher level of scrutiny and caution. And sometimes, as with *Hall*, *Atkins*, and *Roper*, death penalty cases garner greater protection from the Courts. What is most puzzling is why that should be the case. Imprisoning a human being for any amount of time directly affects human dignity, and as we have already demonstrated, most defendants are being convicted through guilty pleas. The Court’s rationale for enhanced intellectual disability protections in *Hall* directly reference three goals of punishment: “rehabilitation, deterrence, and retribution.”<sup>595</sup> The Court proceeds to dismiss the efficacy of deterrence and retribution (for obvious reasons rehabilitation does not apply in capital cases) because of the defendant’s “‘diminished ability’ to ‘process information, to learn from experience, to engage in logical reasoning, or to control impulses . . . [which] make[s] it less likely that they can process the information of the possibility of execution as a penalty and, as a result, control their conduct based upon that information.’”<sup>596</sup> We whole-heartedly agree. Simply removing reference to “execution” from that last Court quotation and replacing it with any other sentence resulting from a plea, but where there has been a far less rigorous determination of mental competency than is afforded to those under the sentence of death, and one would find that the same rationale, based as it is on the prevailing social science, would apply.

*Death may not be different* after all. In *Graham v. Florida*,<sup>597</sup> a non-capital case, the Supreme Court held that sentencing a juvenile to life without parole violated the Eighth Amendment.<sup>598</sup> *Graham* signifies a way forward for the Court with regard to applying the same principle used in *Hall* with regard to the application of social science to determination of mental competency, to determination of

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<sup>594</sup> *Hall*, 134 S. Ct. at 2000.

<sup>595</sup> *Id.* at 1992 (citing *Kennedy v. Louisiana*, 554 U.S. 407, 420 (2008)).

<sup>596</sup> *Hall*, 134 S. Ct. at 1992–93 (quoting *Atkins*, 536 U.S. at 320).

<sup>597</sup> *Graham v. Florida*, 560 U.S. 48 (2010).

<sup>598</sup> *Id.* at 79, 82.

“knowing” and “voluntary” during plea colloquy.

By adopting full-spectrum consciousness, a comprehensive theoretical model that takes into consideration the complex multifaceted ways that human beings come to consciousness about their circumstances and then make decisions about how to respond to them, we have demonstrated the shortcomings of Federal Rule 11 and the knowing and voluntary component of plea-bargaining. In this article we have referenced key case law pertaining to the knowing and voluntary component of Federal Rule 11. This is significant because it is the knowing and voluntary component of the plea colloquy that ostensibly constitutionalizes the plea procedure. We have presented analysis of cognition, and a critique of Utilitarian assumptions of free will, through application of cognitive psychology, neuropsychology, and neurophenomenology. Finally, we have sought to demonstrate the massive theoretical and conceptual shortcomings of neoliberalism since it is this politically and ideologically motivated narrative that positions all American’s, including suspects of crimes, as isolated actors confronting the state.

#### *A. Objections to Our Argument*

The following thoughtful objections have been raised to the points we make in this article:

1. Defendants are provided with an attorney during the plea stage, an indication that the law does not assume that defendants are rational actors.

2. There is no systematic assumption that defendants are reasonable and rational, as is indicated by the existence of a plea colloquy to determine mental competency.

3. If we are making the argument that human decision-making is bounded by biological and environmental forces, why would it be any better to subject a defendant to a jury of twelve, each of whom are confounded by the same complex decision-making process?

Let us consider each objection in turn.

While it is true that defendants are provided with an attorney prior to commencement of plea negotiations and consistent with the Supreme Court’s determination of “critical stage,”<sup>599</sup> and while that may signal a determination by the Court that defendants facing the

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<sup>599</sup> See, e.g., *Missouri v. Frye*, 132 S. Ct. 1399, 1405 (2012) (quoting *Montejo v. Louisiana*, 556 U.S. 778, 786 (2009)).



consequence of a prison sentence or significant fine need the assistance of an attorney to thoughtfully process case facts as against subsequent charges and proposed sentences, two points are clear. First, the attorney cannot make the decision for the defendant.<sup>600</sup> And second, the defense attorney is part of a courtroom working group that for a host of reasons discussed elsewhere is not properly positioned to provide a thorough and adequate defense.<sup>601</sup> Unless proponents of this position are willing to concede that it is the assigned counsel who makes the final plea determination, the mere recognition by the Court of the plea as a critical stage requiring assigned counsel does nothing to belie the systemic rational actor assumption.

The second objection to our thesis is that the existence of the plea colloquy signifies recognition that the Court does NOT assume that defendants are reasonable and rational actors. Not surprisingly we disagree, and so does the United States Supreme Court.<sup>602</sup> It is our position that the plea colloquy is a bureaucratic procedural mechanism meant to rationalize the process. Our discussion of mental competency case law makes it clear that the likelihood of a defendant raising a successful challenge to a plea based upon the knowing and voluntary criteria is slim. Judges do not know the case file. Judges do not know the defendant. Judges are insufficiently prepared to assess the reliability of the defendant's acquiescence to the charges and the sentence. Federal Rule 11 establishing the plea colloquy requires only that there must be a "factual basis" for a plea. But what constitutes a "factual basis?" Without adequate discovery the substantive efficacy of the investigation file is questionable. Without an independent arbiter there is no way to know whether a factual basis truly exists to the extent conceded by the prosecutor and defense attorney.

In the case of *Panetti v. Quarterman*,<sup>603</sup> the U.S. Supreme Court addressed the question concerning whether the Texas state trial court had properly provided the petitioner with constitutionally required tests of mental competency before sentencing him to death.<sup>604</sup> The Fifth Circuit Court of Appeals upheld the Texas state

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<sup>600</sup> See MODEL RULES OF PROF'L CONDUCT r. 1.2(a) (AM. BAR ASS'N 2012).

<sup>601</sup> See Paige Chretien, *Dynamics of the Courtroom Workgroup*, HONORS PROJECTS (2014), <http://scholarworks.bgsu.edu/cgi/viewcontent.cgi?article=1117&context=honorsprojects>.

<sup>602</sup> Stephanos Bibas, *The Myth of the Fully Informed Rational Actor*, 31 ST. LOUIS U. L. REV. 79, 79 (2011).

<sup>603</sup> *Panetti v. Quarterman*, 551 U.S. 930 (2007).

<sup>604</sup> *Id.* at 934–35.

trial court's opinion reasoning that, *so long as the petitioner understood the correlation between his crime and the consequent punishment, he was mentally competent enough to endure the sentence of death.*<sup>605</sup> In a 5-4 opinion with Justice Kennedy writing for the majority, the Court held that the Texas state court had erred in its decision to sentence to death a petitioner with a documented history of mental illness.<sup>606</sup> Specifically, the Court held that “[g]ross delusions stemming from a severe mental disorder may put [that] awareness . . . in a context so far removed from reality that the punishment can serve no proper purpose.”<sup>607</sup>

More to our point, the structural presence of the plea colloquy as presently configured is ill equipped to properly assess mental competency.

Admittedly, the third objection had never occurred to us and when it was presented we had to smile and admit to the probity of it. We have two responses. First, a defendant would retain all of her Fifth and Sixth Amendment trial rights. One of the most significant aspects of the administration of justice in a democracy is transparency. Trial by jury is mandated in Article III of the United States Constitution, and stated with more permissive language as a right that may be “enjoyed” in the Sixth Amendment.<sup>608</sup> A jury provides a check on state power, thereby eliminating the current practice of prosecutors serving in the role of judge and jury.<sup>609</sup> Second, while it's certainly true that all juries constitute twelve human beings each of whom has his and her own cognitive processes, it is equally true, and Amy Ferrell and Daniel Givelber have written about this,<sup>610</sup> that when provided with proper mitigation at trial juries are thoughtful and deliberative. While far from perfect, the idea that there is a public check on state power, and that a defendant is able to retain vital rights protections, along with the right to appeal non-jurisdictional defects, makes the trial a more preferable option.

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<sup>605</sup> *Panetti v. Dretke*, 448 F.3d 815, 821 (5th Cir. 2006) (quoting *Garrett v. Collins*, 951 F.2d 57, 58 (5th Cir. 1992)).

<sup>606</sup> *Panetti*, 551 U.S. at 960–61, 962.

<sup>607</sup> *Id.* at 960.

<sup>608</sup> U.S. CONST. art. III, § 2, cl. 3; U.S. CONST. amend. VI.

<sup>609</sup> *See, e.g.*, DANIEL GIVELBER & AMY FARRELL, NOT GUILTY: ARE THE ACQUITTED INNOCENT? xi, 138 (2012) (stating that juries may, and often do, disagree with the prosecutor's theory of the case and the judge, thus acquitting the defendant).

<sup>610</sup> *See, e.g., id.* at xi, 138, 140, 144 (stating juries decide the verdict based on the evidence provided at trial).

*B. A Final Word: The Actually Innocent*

In 2014, there were a record-setting 125 exonerations in the United States.<sup>611</sup> Of the 125 exonerations, forty-seven defendants—38%—pled guilty to crimes that they did not commit.<sup>612</sup> Nearly all of pleas were extracted from defendants facing charges in drug cases.<sup>613</sup> A significant number of these cases—thirty-six—originated in Harris County, Texas.<sup>614</sup> Among the contributing factors generating pleas in these cases were: false or misleading forensic evidence; false confession, perjury or false accusation; mistaken eyewitness ID; inadequate legal defense; and official misconduct.<sup>615</sup> Without access to each of the exonerees and a detailed assessment of their neurophenominological composition it's impossible to say whether they truly could comply with the knowing and voluntary criteria. What we do know is that plea-bargaining represents the “dark number” of wrongful conviction. Roughly ninety-five percent of all felony convictions in the United States are resolved via the plea.<sup>616</sup> With an extremely sparse case file typically comprised of a police report, pre-sentencing report, and sometimes witness interviews (though this is rare),<sup>617</sup> how can a defense attorney, prosecutor, or judge be able to competently assess a defendant's neurophenomenological character? More importantly, scholars cannot gain access to the plea process to discern the extent and under what conditions innocent men and women are accepting pleas. Plea-bargaining takes place in secret, far from public view. And while a defendant does have a right to the presence of an attorney, for all sorts of reasons this procedural “safeguard” falls far short of fulfilling democratic mandates for transparency with regard to the administration of justice.

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<sup>611</sup> *Exonerations in 2014*, NAT'L REGISTRY OF EXONERATIONS (Jan. 27, 2015), [http://www.law.umich.edu/special/exoneration/Documents/Exonerations\\_in\\_2014\\_report.pdf](http://www.law.umich.edu/special/exoneration/Documents/Exonerations_in_2014_report.pdf).

<sup>612</sup> *Id.*

<sup>613</sup> *Id.*

<sup>614</sup> *Exoneration Detail List*, NAT'L REGISTRY OF EXONERATIONS, <http://www.law.umich.edu/special/exoneration/Pages/detailist.aspx?View={FAF6EDDB-5A68-4F8F-8A52-2C61F5BF9EA7}&FilterField1=Exonerated&FilterValue1=8%5F2014&FilterField2=ST&FilterValue2=TX> (last visited Mar. 6, 2016).

<sup>615</sup> *Id.*

<sup>616</sup> *Innocents Who Plead Guilty*, NAT'L REGISTRY OF EXONERATIONS (Nov. 24, 2015), <http://www.law.umich.edu/special/exoneration/Documents/NRE.Guilty.Plea.Article1.pdf>.

<sup>617</sup> See Eric Blumenson, *Investigation and Interviewing: Directory of Sources*, in MASSACHUSETTS CRIMINAL PRACTICE, at \*5, 16–17, 24 (Eric Blumenson & Arthur Leavens eds., 4th ed. 2012); Ion Meyn, *The Criminal Defense Attorney's Burden*, A.B.A.: GP SOLO (Sept./Oct. 2014), [http://www.americanbar.org/publications/gp\\_solo/2014/september-october/the\\_criminal\\_defense\\_attorneys\\_burden.html](http://www.americanbar.org/publications/gp_solo/2014/september-october/the_criminal_defense_attorneys_burden.html).

So all that we are left with is a deal, a contract, and a plea colloquy that enshrines Federal Rule 11 and its knowing and voluntary mandate. Given what we've presented in this article with regard to: a) the fact that judges are frequently willing to ignore even the superficial guidelines established by the Federal Rule, b) the natural and social science of neurophenomenology, and c) the neoliberal constitution of isolated subjects engaged in "freely" choosing to negotiate plea contracts, there exists considerable room for caution. If, as we are suggesting in this article, the knowing and voluntary component of pleas is constituted by a superficial procedural mechanism that fails to come close to any semblance of truly understanding whether a defendant meets even a rudimentary knowing and voluntary criteria such as what presently exists under Federal Rule 11, then it seems to us that the plea colloquy falls apart, and the constitutionality of pleas must once again be reexamined.

There will be more defendants wrongfully convicted via the plea. How many more is at this point in time impossible to know.