

*Children are Different . . . Sometimes:  
Science, the Supreme Court, and the Juvenile Brain*

By  
Erika N. Marzorati

Submitted in partial fulfillment of the requirements of the  
King Scholars Program  
Michigan State University College of Law

Under the direction of  
Professor Catherine M. Grosso

Spring 2013

## TABLE OF CONTENTS

Table of Contents .....	1
Introduction .....	2
I. A Look at Supreme Court Jurisprudence Involving Juveniles (1948–2004) .....	3
A. Due Process Rights and <i>Miranda</i> : Protecting Juveniles against Coerced Confessions .....	3
B. First Amendment Touchstones: Protecting Children by Restricting Speech.....	8
C. Cruel and Unusual Punishment: Death is Different.....	10
II. Brain Science Takes the Stage: Five Recent Cases (2005–12).....	16
A. <i>Roper v. Simmons</i> (2005).....	18
B. <i>Graham v. Florida</i> (2010).....	21
C. <i>J.D.B. v. North Carolina</i> (2011) .....	23
D. <i>Brown v. Entertainment Merchants Association</i> (2011).....	25
E. <i>Miller v. Alabama</i> (2012).....	28
III. Tying It All Together: Analysis and Implications.....	31
A. Which One of these Cases is Not Like the Others? .....	31
B. <i>Roper, Graham, J.D.B., and Miller</i> : Is this the End of the Story? .....	33
Conclusion.....	35

“There’s a light on in the attic.  
Though the house is dark and shuttered,  
I can see a flickerin’ flutter,  
and I know what it’s about.”<sup>1</sup>

## INTRODUCTION

The United States Supreme Court has long used scientific data to inform its decision making.<sup>2</sup> Despite popular beliefs that science and constitutional law are separate and distinct fields, the Court’s legal opinions have become increasingly infused with discussions involving scientific data.<sup>3</sup> Thanks to advances in technology, brain development science has become noticeably prominent in the Court’s recent cases involving juveniles; the same is true of *amici curiae* who present such science through their briefs.<sup>4</sup>

Part I of this paper provides an overview of Supreme Court jurisprudence on juveniles from 1948 through 2004. Part II analyzes five cases since 2005 in which the Court considered scientific brain development evidence to guide its determinations of whether children required enhanced protections under various areas of the law: *Roper v. Simmons*,<sup>5</sup> *Graham v. Florida*,<sup>6</sup> *J.D.B. v. North Carolina*,<sup>7</sup> *Brown v. Entertainment Merchants Association*,<sup>8</sup> and *Miller v.*

---

<sup>1</sup> SHEL SILVERSTEIN, *A Light in the Attic*, in *A LIGHT IN THE ATTIC* 7 (1981).

<sup>2</sup> See DAVID L. FAIGMAN, *LABORATORY OF JUSTICE: THE SUPREME COURT’S 200-YEAR STRUGGLE TO INTEGRATE SCIENCE AND THE LAW* (2004).

<sup>3</sup> Anthony Varoudakis, Book Review, 4 *J. HIGH TECH. L.* 1, 1 (2004–2005) (reviewing DAVID L. FAIGMAN, *LABORATORY OF JUSTICE: THE SUPREME COURT’S 200-YEAR STRUGGLE TO INTEGRATE SCIENCE AND THE LAW* (2004)).

<sup>4</sup> See cases cited *infra* notes 5–9.

<sup>5</sup> See *Roper v. Simmons*, 543 U.S. 551 (2005).

<sup>6</sup> See *Graham v. Florida*, 130 S. Ct. 2011 (2010).

<sup>7</sup> See *J.D.B. v. North Carolina*, 131 S. Ct. 2394 (2011).

<sup>8</sup> See *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729 (2011).

*Alabama*.<sup>9</sup> Part III answers the question, “Which one of these cases is not like the others?” and then looks at implications of—and questions left open by—the Court’s recent cases involving juveniles. The paper concludes by describing the likely future trajectory of the Supreme Court’s use of brain development science in cases involving juveniles.

## I. A LOOK AT SUPREME COURT JURISPRUDENCE INVOLVING JUVENILES (1948–2004)

The five cases discussed in Part II did not occur in a vacuum. In fact, the United States Supreme Court has explicitly acknowledged the constitutional significance of childhood since the mid-1900s.<sup>10</sup> This section offers an overview of Court’s evolving juvenile jurisprudence over the five and a half decades preceding its 2005 decision in *Roper v. Graham*.

### A. Due Process Rights and *Miranda*: Protecting Juveniles against Coerced Confessions

The 1948 case of *Haley v. Ohio* set the scene for later opinions with its recognition that children “cannot be judged by the more exacting standards of maturity” expected of adults.<sup>11</sup> The Court in *Haley* prohibited the use of a fifteen-year-old’s confession on due process grounds after observing that “special care” must be used to evaluate the circumstances surrounding custodial interrogation when “a mere child—an easy victim of the law” is involved.<sup>12</sup> Noting the boy’s “tender and difficult age” and “the period of great instability” produced by “the crisis of

---

<sup>9</sup> See *Miller v. Alabama*, 132 S. Ct. 2455 (2012).

<sup>10</sup> Beth A. Colgan, *Constitutional Line Drawing at the Intersection of Childhood and Crime*, 9 STAN. J. CIV. RTS. & CIV. LIBERTIES 79, 90 (2013).

<sup>11</sup> *Haley v. Ohio*, 332 U.S. 596, 599 (1947).

<sup>12</sup> *Id.* at 599–601.

adolescence,” the Court remarked, “[t]hat which would leave a man cold and unimpressed can overawe and overwhelm a lad in his early teens.”<sup>13</sup>

*Haley*—the Court’s first case intoning that children are constitutionally different from adults—touched on two additional concepts that later took root. Justice Frankfurter, concurring in the judgment, took the opportunity to espouse his belief that “even capital offenses by boys of fifteen should [not] be dealt with according to the conventional criminal procedure.”<sup>14</sup> He also noted that an inquiry into whether a teenager’s confession is constitutionally sound “depends on an evaluation of psychological factors, or, more accurately . . . the persuasive feeling of society regarding such psychological factors.”<sup>15</sup> Noting the “inherent vagueness” of the required tests, he lamented the lack of “available experts on such matters to guide the judicial judgment.”<sup>16</sup> Thus, *Haley* foreshadowed both the downfall of the juvenile death penalty and the rise of the Court’s reliance on science and *amici* to bolster society’s “vague” notions of child development. Meanwhile, the dissent emphasized another point that would have tremendous impact in the field of juvenile justice in the years that followed: “that many felonies are being committed . . . by minors and an obligation attaches to law enforcement officials to punish, prevent and discourage such conduct by minors as well as by adults.”<sup>17</sup>

In 1962, the Supreme Court relied heavily on *Haley*’s central message about the constitutional differences between children and adults in another case involving a teenager’s

---

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

<sup>14</sup> *Id.* at 602–03 (Frankfurter, J., concurring).

<sup>15</sup> *Id.* at 605.

<sup>16</sup> *Haley v. Ohio*, 332 U.S. 596, 605 (1947).

<sup>17</sup> *Id.* at 614 (Burton, J., dissenting).

confession.<sup>18</sup> In *Gallegos v. Colorado*, the Court reiterated that “the youth of the accused” was one relevant factor in evaluating the totality of circumstances surrounding whether a statement was obtained through coercion, and thus a violation of due process.<sup>19</sup> Emphasizing that a fourteen-year-old “cannot be compared to an adult in full possession of his senses and knowledgeable of the consequences of his admissions,” the Court held that to uphold the boy’s conviction “would, in effect, be to treat him as if he had no constitutional rights.”<sup>20</sup> Writing for the majority, Justice Douglas—who also delivered the opinion in *Haley*—emphasized a critical element at the core of the Court’s jurisprudence involving juveniles: a need for “adult protection.”<sup>21</sup> “A lawyer or an adult relative or friend could have given the petitioner the protection which his own immaturity could not,” Douglas wrote. Without such adult guidance, he concluded, “a 14-year-old boy would not be able to know, let alone assert, [his] constitutional rights.”<sup>22</sup>

Four years later came *Miranda v. Arizona*,<sup>23</sup> a case that “drastically changed the landscape of confession suppression jurisprudence.”<sup>24</sup> In order to protect the Fifth Amendment privilege against self-incrimination in light of the inherent compulsion of custodial interrogations, *Miranda* established that police must give certain warnings to notify an in-

---

<sup>18</sup> See *Gallegos v. Colorado*, 370 U.S. 49 (1962).

<sup>19</sup> *Gallegos*, 370 U.S. at 52.

<sup>20</sup> *Id.* at 54–55. Three justices dissented on the facts, finding none of the offending aspects of Haley’s interrogation present during Gallegos’ questioning, aside from the boy’s status as a juvenile. *Id.* at 63. The dissent emphasized that “*Haley* does not indicate that youth alone is sufficient to render a juvenile’s confession inadmissible.” *Id.* at 64.

<sup>21</sup> *Id.* at 54.

<sup>22</sup> *Id.*

<sup>23</sup> *Miranda v. Arizona*, 384 U.S. 436 (1996).

<sup>24</sup> Martin Guggenheim & Randy Hertz, J.D.B. and the Maturing of Juvenile Confession Suppression Law, 38 WASH. U. J.L. & POL’Y 109, 120 (2012).

custody suspect of his rights before proceeding with questioning.<sup>25</sup> Despite *Haley*, *Gallegos*, and *Miranda*, juvenile courts continued to adhere to informal practices that eschewed many of the procedural protections available to adult criminal defendants.<sup>26</sup> This discrepancy was rooted in the belief that children, unlike adults, have rights “not to liberty but to custody” and that the state’s main role as *parens patriae* was to provide such custody for delinquent youth.<sup>27</sup>

This changed in 1967 with *In re Gault*.<sup>28</sup> The Court in *Gault* made it clear that the state’s role “to function in a ‘parental’ relationship is not an invitation to procedural arbitrariness,”<sup>29</sup> and reiterated that due process indeed was required in juvenile court proceedings.<sup>30</sup> Repeating the concerns surrounding juvenile confessions that were present in *Haley* and *Gallagos*, the Court remarked that “[i]t would indeed be surprising if the privilege against self-incrimination were available to hardened criminals but not to children.”<sup>31</sup> Thus, the Court concluded, the Fifth Amendment privilege against self-incrimination applies to juveniles, as it does to adults.<sup>32</sup> Recognizing that waiver of the privilege by children may present “special problems,” the Court stated that “differences in technique—but not in principle” may occur based on the child’s age, and that the “greatest care” is required to ensure the voluntariness of juvenile admissions.<sup>33</sup>

---

<sup>25</sup> *Miranda*, 384 U.S. at 467. Specifically, police must warn the suspect “that he has the right to remain silent, that anything he says can be used against him in a court of law, that he has the right to the presence of an attorney, and that if he cannot afford an attorney one will be appointed for him . . . .” *Id.* at 479.

<sup>26</sup> Guggenheim & Hertz, *supra* note 24, at 128.

<sup>27</sup> *In re Gault*, 387 U.S. 1, 17 (1967).

<sup>28</sup> *See In re Gault*, 387 U.S. 1 (1967).

<sup>29</sup> *Id.* at 30 (quoting *Kent v. United States*, 383 U.S. 541, 555 (1966)).

<sup>30</sup> *Id.* at 30–31.

<sup>31</sup> *Id.* at 45–47.

<sup>32</sup> *Id.* at 55.

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

Another twelve years passed before the Supreme Court decided its first *Miranda* case involving a juvenile.<sup>34</sup> In *Fare v. Michael C.*, the Court held that the totality-of-the-circumstances approach used to determine whether an adult knowingly and voluntarily waived his *Miranda* rights is “adequate . . . even where interrogation of juveniles is involved.”<sup>35</sup> The approach was appropriate, said the Court, because it already incorporated a look at all relevant factors, including “the juvenile’s age, experience, education, background, and intelligence, and . . . whether he has the capacity to understand the warnings given him, the nature of his Fifth Amendment rights, and the consequences of waiving those rights.”<sup>36</sup>

Perhaps in response to *Fare* and a series of empirical studies about juveniles’ ability to understand and competence to waive *Miranda* warnings, advocates increasingly turned to social science data to support their push for heightened protection of youthful defendants’ rights.<sup>37</sup> Such data strengthened the case for treating youth as “a significant factor in assessing voluntariness for due process and *Miranda* purposes . . . and for finding that youth below a certain age are unable to make a ‘knowing and intelligent’ waiver” of rights.<sup>38</sup>

The Court heard its next case involving juvenile confessions two and a half decades later.<sup>39</sup> This underlying issue in *Yarborough v. Alvarado* was whether a court must consider a juvenile’s age in determining if he was “in custody” for *Miranda* purposes.<sup>40</sup> Justice Kennedy delivered the Court’s opinion, noting that the relevant test was whether, given the circumstances,

---

<sup>34</sup> Guggenheim & Hertz, *supra* note 24, at 134.

<sup>35</sup> *Fare v. Michael C.*, 442 U.S. 707, 724–25 (1979).

<sup>36</sup> *Id.* at 725.

<sup>37</sup> Guggenheim & Hertz, *supra* note 24, at 137–39.

<sup>38</sup> *Id.* at 140.

<sup>39</sup> *Id.* at 135.

<sup>40</sup> *Yarborough v. Alvarado*, 541 U.S. 652, 659–60 (2004).



“a reasonable person [would] have felt he or she was not at liberty to terminate the interrogation and leave.”<sup>41</sup> Emphasizing the intentionally objective nature of the test as distinguishing it from other contexts in which age was considered, Kennedy noted that the Court’s prior opinions involving the *Miranda* custody test “have not mentioned the suspect’s age, much less mandated its consideration.”<sup>42</sup> Thus, he concluded, the state court was reasonable in disregarding the suspect’s age.<sup>43</sup> Justice O’Connor wrote separately to point out that, while Alvarado’s proximity to the age of majority made the consequence of his juvenile status less clear, “[t]here may be cases in which a suspect’s age will be relevant to the ‘custody’ inquiry under *Miranda*.”<sup>44</sup> Justice Breyer’s dissent was more pointed: “Common sense, and an understanding of the law’s basic purpose in this area, are enough to make clear that Alvarado’s age—an objective, widely shared characteristic about which the police plainly knew—is also relevant to the inquiry.”<sup>45</sup> Breyer’s dissenting view would gain favor seven years later, in *J.D.B. v. North Carolina*.<sup>46</sup>

## **B. First Amendment Touchstones: Protecting Children by Restricting Speech**

The Supreme Court considered a string of cases beginning in 1968 that involved the protection of children through free speech restrictions. In *Ginsberg v. New York*, the Court

---

<sup>41</sup> *Id.* at 663.

<sup>42</sup> *Id.* at 666–67.

<sup>43</sup> *Id.* at 669. It is important to recognize that the Court’s role in reviewing Alvarado’s federal habeas claim under the Antiterrorism and Effective Death Penalty Act of 1996 (AEDPA) was to determine whether the lower court decision “was contrary to, or involved an unreasonable application of, clearly established Federal Law, as determined by the Supreme Court of the United States.” *Id.* at 655 (citing 28 U.S.C. §2254(d)(1)). It was *not* the Court’s role to decide the underlying merits of whether Alvarado indeed was in custody for *Miranda* purposes.

<sup>44</sup> *Yarborough*, 541 U.S. at 669 (O’Connor, J., concurring).

<sup>45</sup> *Id.* at 676 (Breyer, J., dissenting).

<sup>46</sup> *See J.D.B. v. North Carolina*, 131 S. Ct. 2394 (2011).

upheld a state statute prohibiting the sale of obscene materials to those under the age of 17.<sup>47</sup> Justice Brennan began his analysis by pointing out that the “girlie” magazines involved were not considered obscene for adults,<sup>48</sup> but explained that “the concept of obscenity or of unprotected matter may vary according to the group to whom the questionable material is directed.”<sup>49</sup> Given that “[t]he well-being of its children is of course a subject within the State’s constitutional power to regulate,”<sup>50</sup> he noted that the Court must uphold the law if it was “not irrational for the legislature to find that exposure to material condemned by the statute is harmful to minors.”<sup>51</sup> Brennan notably brushed aside any concerns over the lack of studies linking obscene material and harm to children: “[T]he growing consensus of commentators is that while these studies all agree that a causal link has not been demonstrated, they are equally agreed that a causal link has not been disproved either. We do not demand . . . scientifically certain criteria of legislation.”<sup>52</sup>

In his concurring opinion, Justice Stewart emphasized the thrust of the Constitution’s First Amendment protection: “a society of free choice” that “presupposes the capacity of its members to choose.”<sup>53</sup> Accordingly, he found the restriction permissible since “at least in some precisely delineated areas, a child—like someone in a captive audience—is not possessed of that full capacity for individual choice which is the presupposition of First Amendment guarantees.”<sup>54</sup>

---

<sup>47</sup> See *Ginsberg v. New York*, 390 U.S. 629 (1968).

<sup>48</sup> *Id.* at 634.

<sup>49</sup> *Id.* at 636.

<sup>50</sup> *Id.* at 639.

<sup>51</sup> *Id.* at 641.

<sup>52</sup> *Id.* at 642–43 (citation and internal quotation marks omitted).

<sup>53</sup> *Ginsberg v. New York*, 390 U.S. 629, 649 (1968) (Stewart, J., concurring).

<sup>54</sup> *Id.* at 649–50.

In 1975, the Supreme Court in *Erznoznik v. City of Jacksonville* invalidated a city ordinance that prohibited a drive-in theater from showing films containing nudity.<sup>55</sup> Justice Powell held that the ordinance impermissibly censored theater owners' First Amendment rights by barring them from showing films with *any* nudity, "however innocent or educational," if they could be seen in public places "where the offended viewer readily can avert his eyes."<sup>56</sup> Although rejecting the city's claim that the ordinance was reasonably aimed at protecting minors, the Court acknowledged *Ginsberg's* "well settled" rule that a government entity may adopt tighter restrictions on "communicative materials available to youths than on those available to adults."<sup>57</sup> The Court emphasized, however, that restrictions on disseminating protected materials to children are valid "only in narrow and well-defined circumstances."<sup>58</sup> Recognizing that the "First Amendment rights of minors are not 'co-extensive with those of adults,'" the Court returned to a familiar theme: that the age of a minor is a "significant factor" in determining whether he or she "has the requisite capacity for individual choice."<sup>59</sup>

### **C. Cruel and Unusual Punishment: Death is Different**

A series of cases beginning in the 1970s reexamined the constitutionality of the death penalty and laid a foundation for the Court ultimately to prohibit capital punishment for entire classes of defendants, including juveniles.<sup>60</sup> Although the earliest of these cases involved adult

---

<sup>55</sup> See *Erznoznik v. City of Jacksonville*, 422 U.S. 205 (1975).

<sup>56</sup> *Id.* at 211–12.

<sup>57</sup> *Id.* at 212 (citing *Ginsberg*, 390 U.S. 629).

<sup>58</sup> *Erznoznik*, 422 U.S. at 212–13.

<sup>59</sup> *Id.* at 214.

<sup>60</sup> See, e.g., *Furman v. Georgia*, 408 U.S. 238 (1972), which stopped short of eliminating the death penalty altogether, but—recognizing the uniqueness of the sentence—deemed all capital punishment schemes then in

defendants, they form a backdrop to the Court’s continued juvenile jurisprudence. This period saw the first official appearance of the oft-cited “death is different” mantra,<sup>61</sup> along with a steady insistence on individualized sentencing.<sup>62</sup> As the Court stated in *Woodson v. North Carolina*:

A process that accords no significance to relevant facets of the character and record of the individual offender or the circumstances of the particular offense excludes from consideration in fixing the ultimate punishment of death the possibility of compassionate or mitigating factors stemming from the diverse frailties of humankind.<sup>63</sup>

A string of cases that followed during this period emphasized that “individualized consideration” of all mitigating factors was required before a death sentence may be imposed.<sup>64</sup>

Applying this concept to the case of an Oklahoma defendant sentenced to death for a murder committed at age 16, the Court in *Eddings v. Oklahoma* observed the “considerable history reflecting the law’s effort to develop a system of capital punishment at once consistent and principled but also humane and sensible to the uniqueness of the individual.”<sup>65</sup> While vacating the Petitioner’s death sentence because the trial judge considered *only* his age as a mitigating factor—but not his family background or mental and emotional development—the

---

existence “cruel and unusual.” The Court voted 5–4 to overturn the death sentences in *Furman* and its two companion cases, but could not reach a common rationale; each of the nine justices wrote his own concurrence or dissent. Justices Brennan and Marshall believed the death penalty to be unconstitutional across the board, while the other concurrences (Justices Douglas, Stewart, and White) focused on arbitrariness and racial discrimination in the sentences. *See id.*; James S. Liebman, *Slow Dancing with Death: The Supreme Court and Capital Punishment, 1963–2006*, 107 COLUM. L. REV. 1, 7–9 (2007).

<sup>61</sup> *Gregg v. Georgia*, 428 U.S. 153, 188 (1976) (noting that *Furman* recognized “that the penalty of death is different in kind from any other . . .”). *Gregg* was one of five cases released on July 2, 1976, that resurrected capital punishment as a viable punishment. *See Liebman, supra* note 60, at 28–33.

<sup>62</sup> *See, e.g., Woodson v. North Carolina*, 428 U.S. 280, 304 (1976).

<sup>63</sup> *Id.* at 304.

<sup>64</sup> *Lockett v. Ohio*, 438 U.S. 586, 606 (1978). *See also Gregg*, 428 U.S. at 197 (requiring the jury to consider “any mitigating circumstances,” including “the characteristics of the person who committed the crime”); *Woodson*, 428 U.S. at 304 (“consideration of the character and record of the individual offender [is] . . . a constitutionally indispensable part of the process of inflicting the penalty of death”) (citation omitted).

<sup>65</sup> *Eddings v. Oklahoma*, 455 U.S. 104, 110 (1982).

Court discussed several unique qualities of youth that continue to inform its decisions.<sup>66</sup>

“[Y]outh is more than a chronological fact. It is a time and condition of life when a person may be most susceptible to influence and to psychological damage,” Justice Powell began.<sup>67</sup> Citing a pair of task force reports on juvenile crime, justice, and sentencing, he noted that teens “are more vulnerable, more impulsive, and less self-disciplined than adults,” and that they “may have less capacity to control their conduct and to think in long-range terms than adults.”<sup>68</sup> Pointing to the existence of separate criminal court systems for juveniles in every state, Powell commented, “Our history is replete with laws and judicial recognition that minors, especially in their earlier years, generally are less mature and responsible than adults.”<sup>69</sup>

Six years later came another milestone in the Supreme Court’s juvenile jurisprudence. In *Thompson v. Oklahoma*, a plurality of the Court overturned the death sentence of a minor and held that the Eighth and Fourteenth Amendments prohibited the execution of a defendant convicted of a murder committed before the age of sixteen.<sup>70</sup> The case was notable in the number of briefs filed by outside organizations seeking a voice in the development of the court’s

---

<sup>66</sup> *Id.* at 115–17.

<sup>67</sup> *Id.* at 115.

<sup>68</sup> *Id.* at 116 n.11.

<sup>69</sup> *Id.* at 115–116

<sup>70</sup> *Thompson v. Oklahoma*, 487 U.S. 815, 838 (1988) (plurality opinion). Justice Stevens announced the judgment of the Court in an opinion joined by Justices Brennan, Marshall, and Blackmun. Justice O’Connor concurred in the judgment only, based on the “considerable risk that the Oklahoma Legislature either did not realize that its actions would have the effect of rendering 15-year-old defendants death eligible or did not give the question the serious consideration that would have been reflected in the explicit choice of some minimum age for death eligibility.” *Id.* at 857 (O’Connor, J., concurring in the judgment). O’Connor thus concluded that defendants who committed their capital crimes before age 16 may not be executed under a statute (such as Oklahoma’s) “that specifies no minimum age at which the commission of a capital crime can lead to the offender’s execution.” *Id.* at 857–58.

jurisprudence on juveniles.<sup>71</sup> One of the nine amicus briefs filed in the case put the developing field of brain science front and center, marking an important step toward bolstering existing child development knowledge with physical evidence.<sup>72</sup> The American Society for Adolescent Psychiatry’s brief detailed a clinical study of fourteen U.S. death row inmates who committed their capital offenses as juveniles.<sup>73</sup> The study marshalled data from psychiatric, psychological, and educational tests—as well as a battery of neurological, neuropsychological, and electroencephalographic (EEG) examinations of the subjects.<sup>74</sup>

Justice Stevens, writing for the plurality, once again reiterated many of the now-familiar hallmarks of childhood.<sup>75</sup> In describing why juveniles’ “irresponsible conduct is not as morally reprehensible as that of an adult,” he addressed adolescents’ not-yet-developed sense of maturity and responsibility; lower levels of “experience, perspective, and judgment” as compared to adults; vulnerability, impulsivity, and lack of self-discipline; and susceptibility to emotion and peer pressure.<sup>76</sup> Acknowledging that the Court “already endorsed” the concept of juveniles’ diminished culpability as compared to adults who commit similar crimes, Stevens wrote that the

---

<sup>71</sup> Nine “friends of the court” submitted briefs in *Thompson*. Joan W. Howarth, current dean at Michigan State University College of Law, co-authored the amicus brief filed for Amnesty International. (Kevin W. Saunders, professor of law and the Charles Clarke Chair in Constitutional Law at MSU College of Law, was on brief for the petitioner.) By contrast, Westlaw research shows that only three organizations filed motions to file amicus briefs in *Eddings v. Oklahoma* three years earlier.

<sup>72</sup> Brief for the American Society for Adolescent Psychiatry and the American Orthopsychiatric Association as Amici Curiae in Support of Petitioner, *Thompson*, 487 U.S. 815 (No. 86-6169). The brief’s significance, however, may have been somewhat limited by its singular focus on brain *dysfunctions* that may have exacerbated “normal” adolescent behaviors in juvenile murderers—rather than on the more basic issue that juvenile murderers should be treated differently than adults simply because they are juveniles.

<sup>73</sup> *See id.*

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

<sup>75</sup> *Thompson v. Oklahoma*, 487 U.S. 815, 834–36 (1988) (plurality opinion).

<sup>76</sup> *Id.*

“basis for this conclusion is too obvious to require extended explanation.”<sup>77</sup> Nonetheless, he cited the summary of the study that formed the basis of the American Society for Adolescent Psychiatry brief:

Adolescence is well recognized to be a time of great physiological and psychological stresses. Normal adolescents are distinguished from adults by their intensity and volatility of feelings, their poor tolerance of anxiety, their lack of awareness of the effects of their actions, their failure of self-criticism, and their difficulty appreciating the feelings of others. Our data indicate that, above and beyond these maturational stresses, homicidal adolescents must cope with brain dysfunctions, cognitive limitations, and severe psychopathology. Moreover, they must function in families that are not merely nonsupportive but also violent and brutally abusive. These findings raise questions about the American tradition of considering adolescents to be as responsible as adults for their offenses and of sentencing them to death.<sup>78</sup>

Recognizing that the petitioner and various *amici* urged the Court to “draw a line” prohibiting the death penalty for any person whose capital offense is committed before age 18, the Court chose to stay within the bounds of the facts presented.<sup>79</sup> Justice Stevens concluded by declaring the death penalty cruel and unusual punishment for those who commit their capital offenses at age fifteen or younger.<sup>80</sup>

The Court found its opportunity to address the fate of older teens the following year.<sup>81</sup> In *Stanford v. Kentucky*, the Court held that the death penalty was an allowable punishment for those who commit murder at age sixteen or seventeen.<sup>82</sup> Eleven *amici*, including the American

---

<sup>77</sup> *Id.* at 835.

<sup>78</sup> *Id.* at 835 n.42 (citation omitted).

<sup>79</sup> *Id.* at 838.

<sup>80</sup> *Thompson v. Oklahoma*, 487 U.S. 815, 838 (1988) (plurality opinion). Stevens drew support for his chosen line from the “near unanimity” among states in treating those under 16 as minors for purposes such as jury service, driving, marrying, purchasing pornography, and gambling. *Id.* at 824.

<sup>81</sup> *Stanford v. Kentucky*, 492 U.S. 361 (1989), *abrogated by Roper v. Simmons*, 543 U.S. 551 (2005).

<sup>82</sup> *Id.* at 380.

Society for Adolescent Psychiatry, put forth their positions this time.<sup>83</sup> Justice Scalia, who wrote the plurality opinion, turned down the petitioners’ “invitation to rest constitutional law upon [the] uncertain foundations” urged by “interest groups” and “various professional organizations” that presented “an array of socioscientific evidence concerning the psychological and emotional development of 16- and 17-year-olds.”<sup>84</sup> Explaining that the public is the appropriate audience for scientific arguments as to what constitutes cruel and unusual punishment, Scalia emphasized that “[t]he battle must be fought . . . on the field of the Eighth Amendment; and in that struggle, socioscientific, ethnoscientific, or even purely scientific evidence is not an available weapon.”<sup>85</sup> Justice O’Connor concurred in the judgment, but flatly rejected the plurality’s suggestion that a proportionality analysis taking into account the defendant’s age while balancing the punishment against the defendant’s culpability is not relevant to the Eighth Amendment inquiry.<sup>86</sup>

The *Stanford* dissent also took issue with Justice Scalia’s assessment of the appropriate scope of the Court’s inquiry and countered that “[t]he views of organizations with expertise in relevant fields . . . also merit our attention.”<sup>87</sup> Turning its attention thusly—and with several citations to the American Society for Adolescent Psychiatry brief—the dissent found “strong indications that the execution of juvenile offenders violates contemporary standards of

---

<sup>83</sup> Michigan State Law Dean Joan W. Howarth again co-authored a brief from Amnesty International.

<sup>84</sup> *Stanford*, 492 U.S. at 377–78 (plurality opinion).

<sup>85</sup> *Id.* at 378.

<sup>86</sup> *Id.* at 382 (O’Connor, J., concurring in the judgment).

<sup>87</sup> *Id.* at 384 (Brennan, J., dissenting).



decency.”<sup>88</sup> Sixteen years after *Stanford*, the dissent’s position would prevail when *Stanford* was overturned by *Roper v. Simmons*.<sup>89</sup>

*Stanford* and events in the broader field of juvenile justice helped mobilize child advocates to build a stronger scientific foundation to support their arguments.<sup>90</sup> The MacArthur Foundation, for example, established a Research Network on Adolescent Development and Juvenile Justice, through which top psychologists, criminologists, academics, and attorneys conducted a decade worth of research on juvenile culpability and rehabilitation.<sup>91</sup> The foundation’s work, together with other similar studies on child development and the juvenile brain, would help “reshape juvenile justice in America.”<sup>92</sup>

## II. BRAIN SCIENCE TAKES THE STAGE: FIVE RECENT CASES (2005–12)

The cases described above broadly set the scene for a series of five high-profile Supreme Court decisions involving juveniles from 2005 to 2012.<sup>93</sup>

These cases reflect an overall trend showing dramatic increases in the number of amicus briefs filed—and the number of “friends” filing such briefs—in high court cases over time.<sup>94</sup> One study, for example, showed an 800% rise in the number of amicus briefs filed over a fifty-year

---

<sup>88</sup> *Id.* at 405.

<sup>89</sup> See *Roper v. Simmons*, 543 U.S. 551 (2005).

<sup>90</sup> Robert G. Schwartz, *Age-Appropriate Charging and Sentencing*, 27-Fall CRIM. JUST. 49, 49 (2012).

<sup>91</sup> *Id.*

<sup>92</sup> *Id.*

<sup>93</sup> See cases cited *infra* notes 5–9.

<sup>94</sup> Adam Chandler, *Cert.-stage amicus “all stars”: Where are they now?*, SCOTUSblog (Apr. 4, 2013, 3:00 PM), <http://www.scotusblog.com/2013/04/cert-stage-amicus-all-stars-where-are-they-now/> (“The total number of [cert.-stage amicus] briefs filed between May 19, 2009, and August 15, 2012] swelled by thirty-five percent, and the number of organizations filing them ballooned even more, by about sixty-five percent. Of the nearly 1750 organizations in my most recent study, 348 filed two or more briefs, and 160 filed three or more. Five years ago, those numbers were 259 and 118, respectively.”). See also Joseph D. Kearney & Thomas W. Merrill, *The Influence of Amicus Curiae Briefs on the Supreme Court*, 148 U. PA. L. REV. 743 (2000).

period from 1946 to 1995.<sup>95</sup> While friend-of-the-court briefs were filed in only 23% of argued cases as of 1955,<sup>96</sup> that number rose to 93% in the 2010–11 term.<sup>97</sup> In the same period, the average number of amicus briefs *per case* also increased from fewer than one to nine.<sup>98</sup>

Supreme Court justices and the legal community at large have widely diverging thoughts on the usefulness and impact of amicus briefs—some view them as valuable guidance, others see them as an unnecessary burden, and still others are critical of *amici* organizations as pursuing their own self-interests rather than the truth.<sup>99</sup> While “clear examples of amicus influence on the high court are unusual,” it is apparent that justices are relying on amicus briefs “more than ever.”<sup>100</sup>

This trend holds true with regard to the science behind the juvenile brain.<sup>101</sup> As brain development science has advanced and scientific data supporting long-recognized general propositions about the fallibilities of youth have become more readily available (including via amicus briefs), the Court’s reliance on science has become more apparent.<sup>102</sup> The following cases are illustrative.

---

<sup>95</sup>Kearney & Merrill, *supra* note 91, at 749.

<sup>96</sup> *Id.* at 753.

<sup>97</sup> R. Reeves Anderson & Anthony J. Franze, *Commentary: The Court’s increasing reliance on amicus curiae in the past term*, THE NATIONAL LAW JOURNAL (August 24, 2011), [http://www.arnoldporter.com/resources/documents/Arnold&PorterLLP\\_NationalLawJournal\\_8.24.11.pdf](http://www.arnoldporter.com/resources/documents/Arnold&PorterLLP_NationalLawJournal_8.24.11.pdf).

<sup>98</sup> *Id.*

<sup>99</sup> Kearney & Merrill, *supra* note 91, at 745–747.

<sup>100</sup> Anderson & Franze, *supra* note 94.

<sup>101</sup> See cases cited *infra* notes 5, 6, 7, and 9.

<sup>102</sup> *Id.* This presents somewhat of a chicken-and-egg question: Did more data become available because the Court needed it, or did the Court rely on the data because it was there? It seems likely that both factors converged.

### A. *Roper v. Simmons* (2005)

In 2005, the Supreme Court took another opportunity to address the constitutionality of the death penalty for juveniles who committed capital offenses at age sixteen or seventeen.<sup>103</sup> Overturning *Stanford*—which upheld such sentences less than two decades earlier—the Court in *Roper v. Simmons* held that executing juveniles who commit crimes before the age of eighteen is a violation of the Eighth Amendment.<sup>104</sup> The decision was based on the general idea that such a punishment was disproportionate to the culpability of juvenile offenders, given their lowered capacity for mature judgment, vulnerabilities to external influences, and still-developing character.<sup>105</sup>

The Court this time arrived at the bench armed with—and somewhat more receptive to—a wealth of scientific data on juvenile brain development.<sup>106</sup> Out of the eighteen *amici curiae* briefs filed in the case, two primarily focused on juvenile brain development science.<sup>107</sup> Another six at least touched on the subject.<sup>108</sup> To support its position that executing juvenile offenders is cruel and unusual punishment under the Eighth Amendment, the American Psychological Association (APA) in its brief first presented evidence from behavioral studies showing that sixteen- and seventeen-year-olds are “less likely to consider alternative courses of action,

---

<sup>103</sup> See *Roper v. Simmons*, 543 U.S. 551 (2005).

<sup>104</sup> *Id.*

<sup>105</sup> *Id.* at 568–574.

<sup>106</sup> *Id.*

<sup>107</sup> Brief for the American Psychological Association et al., as Amici Curiae Supporting Respondent, *Roper v. Simmons*, 543 U.S. 551 (2005) (No. 03-633); Brief for the American Medical Association et al., as Amici Curiae in Support of Respondent, *Roper v. Simmons*, 543 U.S. 551 (2005) (No. 03-633).

<sup>108</sup> This group includes briefs by the following organizations, all of which supported the respondent: the Juvenile Law Center et al., the American Bar Association, the Coalition for Juvenile Justice, the National Legal Aid and Defender Association, the United States Conference of Catholic Bishops et al., and the Missouri Ban Youth Executions (BYE) Coalition.

understand the perspective of others, and restrain impulses,” and are more likely to engage in “heightened risk-taking.”<sup>109</sup> The APA bolstered its position with neuropsychological research demonstrating that juvenile brains have not yet reached adult maturity, especially in the prefrontal cortex and rest of the frontal lobes—the portions of the brain that control the higher functions involved in decision-making.<sup>110</sup> Thanks to recent advances in magnetic resonance imaging (MRI) and other technologies, the APA said, “a new window into the differences between adolescent and adult brains” had been opened.<sup>111</sup>

The American Medical Association (AMA) in its brief similarly laid out data from brain research conducted after *Stanford v. Kentucky*.<sup>112</sup> It began: “The adolescent’s mind works differently from ours. Parents know it. This Court has said it. Legislatures have presumed it for decades or more. And now, new scientific evidence sheds light on the differences.”<sup>113</sup> The AMA presented detailed evidence showing that teens are more likely to take risks and more impulsive than adults, and that their brains do not mature until young adulthood.<sup>114</sup> It also touted the benefits of “sophisticated and non-invasive brain imaging techniques” available through by MRI and other methods, stating:

These imaging techniques are a quantum leap beyond previous mechanisms for assessing brain development. Before the rise of neuroimaging, the understanding of brain development in the days of *Thompson* and *Stanford* was gleaned largely from post-mortem examinations, which shed little light on how a live brain operates and how a particular brain develops over time, or “longitudinally.” Brain

---

<sup>109</sup> Brief for the American Psychological Association, at 4–9 (No. 03-633).

<sup>110</sup> *Id.* at 9–12.

<sup>111</sup> *Id.* at 9.

<sup>112</sup> Brief for the American Medical Association et al., as Amici Curiae in Support of Respondent, *Roper v. Simmons*, 543 U.S. 551 (2005) (No. 03-633).

<sup>113</sup> *Id.* at 2.

<sup>114</sup> *Id.*

imaging, in contrast, allows researchers to study how a live brain progresses longitudinally.<sup>115</sup>

The AMA’s brief also emphasized the import of juveniles’ still-maturing frontal lobes and prefrontal cortex.<sup>116</sup> The latter brain region, it explained, is “associated with a variety of cognitive abilities, including decision making, risk assessment, ability to judge future consequences, evaluating reward and punishment, behavioral inhibition, impulse control, deception, responses to positive and negative feedback, and making moral judgments.”<sup>117</sup> It also is one of the last to mature, the AMA noted.<sup>118</sup> Finally, the brief—whose co-author, the American Society for Adolescent Psychiatry, submitted the science-based briefs in *Thompson* and *Stanford*—reminded the Court of the exacerbating effects of brain trauma, a dysfunctional family, and past abuse on a juvenile’s already-fragile psyche.<sup>119</sup>

With *Roper*, the scientific stakes had increased. Justice Kennedy, writing for the majority, began his discussion of the differences between juveniles and adults by pointing to the science:

First, as any parent knows and as the scientific and sociological studies respondent and his *amici* cite tend to confirm, “[a] lack of maturity and an underdeveloped sense of responsibility are found in youth more often than in adults and are more understandable among the young.”<sup>120</sup>

---

<sup>115</sup> *Id.* at 10–11.

<sup>116</sup> *Id.* at 13.

<sup>117</sup> *Id.* at 13–14. Here, the AMA cited a long list of scientific articles from industry journals such as *Biological Science*, *Brains*, *Neuroscience*, *NeuroImage*, and *Neuropsychologia*.

<sup>118</sup> Brief for the American Medical Association et al., as Amici Curiae in Support of Respondent, *Roper v. Simmons*, 543 U.S. 551, at 16 (2005) (No. 03-633).

<sup>119</sup> *Id.* at 20–21. See also Brief for the American Society for Adolescent Psychiatry and the American Orthopsychiatric Association as Amici Curiae in Support of Petitioner, *Thompson v. Oklahoma*, 487 U.S. 815 (1988) (No. 86-6169); *Thompson v. Oklahoma*, 487 U.S. 815, 835 n.42 (1988) (plurality opinion).

<sup>120</sup> *Roper v. Simmons*, 543 U.S. 551, 569 (2005).

Recognizing the “objections always raised against categorical rules,” Kennedy noted that “a line must be drawn” nonetheless.<sup>121</sup> Picking up where the *Thompson* Court left off, Kennedy extended the line for death penalty eligibility upward from age 16 to age 18—the same point at which “society draws the line for many purposes between childhood and adulthood.”<sup>122</sup> With that, *Stanford* was overruled.

### **B. *Graham v. Florida* (2010)**

*Graham v. Florida* followed five years later, continuing the path toward heightened leniency for juvenile offenders set by *Roper* and the earlier cases.<sup>123</sup> Holding that the Eighth Amendment prohibits life without parole sentences for juveniles convicted of crimes other than murder, the Court for the first time imposed a categorical prohibition on a sentence less than death.<sup>124</sup> The case reinforced the idea that childhood—not just death—is different.<sup>125</sup>

Once again, the Supreme Court looked to age and its associated qualities—along with available brain development studies—to justify its ruling for heightened protection of juveniles.<sup>126</sup> In addition to its own research, the Court had briefs from twenty-two *amici* to consider.<sup>127</sup> Those from the American Medical Association and American Psychological Association again squarely focused on scientific brain studies to support the position that life-

---

<sup>121</sup> *Id.* at 574.

<sup>122</sup> *Id.* The majority attached to its opinion appendices showing that “almost every State prohibits those under 18 years of age from voting, serving on juries, or marrying without parental consent” to illustrate “the comparative immaturity and irresponsibility of juveniles.” *Id.* at 579– 87.

<sup>123</sup> See *Graham v. Florida*, 130 S. Ct. 2011 (2010).

<sup>124</sup> *Id.* at 2030.

<sup>125</sup> See *Miller v. Alabama*, 132 S. Ct. 2455, 2470 (2012).

<sup>126</sup> See *Graham*, 130 S. Ct. 2011.

<sup>127</sup> *Id.*

without-parole sentences for juvenile non-homicide offenders were unconstitutional due to biological differences between juvenile and adult brains.<sup>128</sup> At least eleven more briefs on both sides of the issue addressed the topic in varying degrees.<sup>129</sup>

Reiterating the “recognized developmental characteristics of adolescents” discussed in numerous earlier cases, the AMA again presented neuroscience research showing that juvenile brains are anatomically immature in areas that manage “higher-order executive functions such as impulse control, planning ahead, and risk evaluation.”<sup>130</sup> This data, according to the organization, was at odds with two primary goals of punishment: retribution and deterrence.<sup>131</sup>

Justice Kennedy, again writing for the majority, acknowledged the science in his opinion.<sup>132</sup> Citing the AMA and APA amicus briefs, Kennedy noted that “[n]o recent data provide reason to reconsider the Court’s observations in *Roper* about the nature of juveniles. As petitioner’s *amici* point out, developments in psychology and brain science continue to show fundamental differences between juvenile and adult minds.”<sup>133</sup> Based on juveniles’ greater capacity to change and the difference between homicide and non-homicide crimes, Kennedy

---

<sup>128</sup> See Brief for the American Society for Adolescent Psychiatry et al. as Amici Curiae Supporting Petitioners, *Graham v. Florida*, 130 S. Ct. 2011 (2010) (No. 08-7412); Brief for the American Medical Association et al. as Amici Curiae in Support of Neither Party, *Graham v. Florida*, 130 S. Ct. 2011 (2010) (No. 08-7412).

<sup>129</sup> These include briefs by the following organizations: Constitutional Jurisprudence, Educators, Juvenile Law Center et al., Council of Juvenile Correctional Administrators et al., J. Lawrence Aber et al., the American Association of Jewish Lawyers and Jurists, the Criminal Justice Legal Foundation, Disability Rights Legal Center, the Mothers Against Murderers Association, the NAACP Legal Defense & Educational Fund et al., and the Sentencing Project.

<sup>130</sup> Brief for the American Society for Adolescent Psychiatry et al. as Amici Curiae Supporting Petitioners, *Graham v. Florida*, 130 S. Ct. 2011, at 4 (2010) (No. 08-7412).

<sup>131</sup> *Id.* at 5.

<sup>132</sup> *Graham v. Florida*, 130 S. Ct. 2011, 2026 (2010).

<sup>133</sup> *Id.* at 2026.

concluded that, “compared to an adult murderer, a juvenile offender who did not kill or intend to kill has a twice diminished moral culpability.”<sup>134</sup>

Not surprisingly, the dissent took issue with the majority’s discussion of the science involved.<sup>135</sup> “[E]ven if it were relevant,” Justice Thomas wrote, “none of this psychological or sociological data is sufficient to support the Court’s ‘moral’ conclusion that youth defeats culpability in *every* case.”<sup>136</sup> Thomas—who would have left the sentencing decision to the states—found it “unacceptable” that the Court, “swayed by studies reflecting the general tendencies of youth, decree that the people of this country are not fit to decide for themselves.”<sup>137</sup>

### **C. *J.D.B. v. North Carolina* (2011)**

The next year, the Court again repeated its much-recited rule that age is a relevant factor—this time while revisiting the question that *Alvarado* left open regarding the proper scope of the *Miranda* custody inquiry.<sup>138</sup> The focus in *J.D.B. v. North Carolina* again was on the historical assumption that “children characteristically lack the capacity to exercise mature judgment and possess only an incomplete ability to understand the world around them.”<sup>139</sup> This case saw notably fewer amicus briefs than in the preceding two death penalty cases—only

---

<sup>134</sup> *Id.* at 2026–27.

<sup>135</sup> *Id.* at 2054–55 (Thomas, J. dissenting) (citation and internal quotation marks omitted).

<sup>136</sup> *Id.* at 2055.

<sup>137</sup> *Id.*

<sup>138</sup> *See J.D.B. v. North Carolina*, 131 S. Ct. 2394 (2011).

<sup>139</sup> *J.D.B.*, 131 S. Ct. at 2403 (citing 1 W. Blackstone, *Commentaries on the Laws of England*).



nine.<sup>140</sup> Although at least two focused on the “unique vulnerabilities of children” based on age, both were geared toward psychological—rather than neurological—evidence.<sup>141</sup>

Such evidence was enough for the Court to find, once again, that children are different under the law.<sup>142</sup> The Court held that “so long as the child’s age was known to the officer at the time of police questioning, or would have been objectively apparent to a reasonable officer, its inclusion in the custody analysis is consistent with the objective nature of that test.”<sup>143</sup> In her analysis for the majority, Justice Sotomayor pointed out that “in many cases involving juvenile suspects, the custody analysis would be nonsensical absent some consideration of the suspect’s age.”<sup>144</sup> Such was the case here, where the juvenile was removed from his seventh-grade social studies class in order to be questioned at his middle school.<sup>145</sup> To ignore his age in evaluating “objective circumstances that, by their nature, are specific to children,” Sotomayor noted, would result in “absurdity.”<sup>146</sup>

Here, rather than relying directly on the scientific data to underscore the majority’s decision, Justice Sotomayor opined that “officers and judges need no imaginative powers, knowledge of developmental psychology, training in cognitive science, or expertise in social and cultural anthropology to account for a child’s age. They simply need the common sense to know

---

<sup>140</sup> By comparison, eighteen *amici* briefs were filed in *Roper*, and twenty-two were filed in *Graham*.

<sup>141</sup> See Brief for the American Bar Association, as Amici Curiae in Support of Petitioner, *J.D.B. v. North Carolina*, 131 S. Ct. 2394 (2011) (No. 09-1121); Brief for the Juvenile Law Center et al., as Amici Curiae in Support of Petitioner, *J.D.B. v. North Carolina*, 131 S. Ct. 2394 (2011) (No. 09-1121).

<sup>142</sup> *J.D.B.*, 131 S. Ct. at 2403–04.

<sup>143</sup> *Id.* at 2406.

<sup>144</sup> *Id.* at 2405.

<sup>145</sup> *J.D.B. v. North Carolina*, 131 S. Ct. 2399 (2011).

<sup>146</sup> *Id.* at 2405.

that a 7-year-old is not a 13-year-old and neither is an adult.”<sup>147</sup> Based on such “common sense principles,” Sotomayor concluded that the observations regarding children in earlier cases “restate what ‘any parent knows’—indeed, what any person knows—about children generally.”<sup>148</sup> With a nod to the underlying science, however, she added that “[a]lthough citation to social science and cognitive science authorities is unnecessary to establish these commonsense propositions [that children are different than adults], the literature confirms what experience bears out.”<sup>149</sup>

#### **D. *Brown v. Entertainment Merchants Association* (2011)**

Just eleven days after *J.D.B.*, the Court decided a different type of case involving the protection of children.<sup>150</sup> In *Brown v. Entertainment Merchants Association*, the Court reviewed a California state law restricting the sale of violent video games to minors.<sup>151</sup> Justice Scalia, writing for the majority, firmly established at the outset that “video games qualify for First Amendment protection.”<sup>152</sup> Therefore, he noted, the restriction “is invalid unless California can demonstrate that it passes strict scrutiny—that it, unless it is justified by a compelling government interest and is narrowly drawn to serve that interest.”<sup>153</sup> The Court found that the state failed to meet the standard.<sup>154</sup>

---

<sup>147</sup> *Id.* at 2407.

<sup>148</sup> *Id.* at 2403 (citing *Roper v. Simmons*, 543 U.S. 551, 569 (2005)).

<sup>149</sup> *Id.* at 2403 n.5.

<sup>150</sup> See *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729 (2011).

<sup>151</sup> *Id.*

<sup>152</sup> *Id.* at 2733.

<sup>153</sup> *Id.* at 2738.

<sup>154</sup> *Id.*

Detailed brain development science and other evidence was presented *en masse* to the Justices through thirty-two amicus briefs prepared by business organizations, child advocates, broadcasters, scientists, and others.<sup>155</sup> Two *amici* presented brain science evidence supporting the state’s position that violent video games harm children.<sup>156</sup> The non-profit organization Common Sense Media argued in its brief that the constitutionally significant differences between juvenile and adult minds—the same differences recognized by the Court in juvenile sentencing and interrogation cases—also are relevant to state policies aimed at preventing youth violence and promoting healthy development.<sup>157</sup> The brief discussed studies showing that exposure to violent video games was “significantly related” to increased levels of aggressive behavior and aggressive thoughts, and likely to trigger “permanent changes” in the player’s personality.<sup>158</sup> It continued by reiterating general neuroscientific findings about the incomplete development of the juvenile brain that were relevant in criminal law cases.<sup>159</sup>

A brief by California senator Leland Yee—jointly filed with the California Chapter of the American Academy of Pediatrics and the California Psychological Association—similarly emphasized research on the harmful effects of violent video games on the juvenile mind.<sup>160</sup> The brief compiled evidence that—in addition to increasing aggressive thoughts and behaviors—such

---

<sup>155</sup> Four were submitted in support of the State of California, while twenty-eight supported the video game industry.

<sup>156</sup> See Brief of Amicus Curiae of California State Senator Leland Y. Yee, Ph.D., et al., in Support of Petitioners, *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729 (2011) (No. 08-1448); Brief of Amicus Curiae Common Sense Media in Support of Petitioners, *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729 (2011) (No. 08-1448). Kevin W. Saunders, professor of law and the Charles Clarke Chair in Constitutional Law at MSU College of Law, co-authored the Common Sense Media brief.

<sup>157</sup> See Brief of Amicus Curiae Common Sense Media in Support of Petitioners, *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729 (2011) (No. 08-1448).

<sup>158</sup> *Id.* at 6.

<sup>159</sup> *Id.* at 8–10.

<sup>160</sup> See Brief of Amicus Curiae of California State Senator Leland Y. Yee, Ph.D., et al., in Support of Petitioners, *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729 (2011) (No. 08-1448).

games can cause “antisocial behavior, desensitization, poor school performance and reduced activity in the frontal lobes of the brain.”<sup>161</sup>

Justice Scalia, nonetheless, was particularly critical of the science behind California’s argument:

California relies primarily on . . . studies [that] purport to show a connection between exposure to violent video games and harmful effects on children. These studies have been rejected by every court to consider them, and with good reason: They do not prove that violent video games cause minors to act aggressively (which would at least be a beginning). Instead, “[n]early all of the research is based on correlation, not evidence of causation, and most of the studies suffer from significant, admitted flaws in methodology.” They show at best some correlation between exposure to violent entertainment and minuscule real-world effects, such as children’s feeling more aggressive or making louder noises in the few minutes after playing a violent game than after playing a nonviolent game.<sup>162</sup>

Justice Alito concurred in the judgment, but was more willing to leave the door open for future reconsideration of the science.<sup>163</sup> “There are reasons to suspect that the experience of playing violent video games just might be very different from reading a book, listening to the radio, or watching a movie or a television show,” Alito noted.<sup>164</sup> He concluded that “the Court is far too quick to dismiss the *possibility* that the experience of playing video games (and the effects on minors of playing violent video games) may be very different from anything that we have seen before.”<sup>165</sup>

In his dissenting opinion, Justice Breyer gave significant space to discussing the scientific support in favor of upholding California’s restriction on violent video games as constitutional on

---

<sup>161</sup> *Id.* at 6.

<sup>162</sup> *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729, 2739 (2011).

<sup>163</sup> *Id.* at 2742 (Alito, J., concurring in the judgment).

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

<sup>165</sup> *Id.* at 2748.

its face.<sup>166</sup> Unlike his fellow justices, Breyer found “many scientific studies that support California’s views,” including “cutting-edge neuroscience” studies showing causal evidence that playing such games results in harm.<sup>167</sup> In Justice Breyer’s view, such evidence was sufficient to warrant deference to California elected officials’ determination as to how best to carry out the state’s duty to protect its citizens.<sup>168</sup>

#### **E. *Miller v. Alabama* (2012)**

Last year, the Court returned to its juvenile sentencing line of cases.<sup>169</sup> In *Miller v. Alabama*, the Court this time faced two companion cases involving juveniles sentenced to life without parole for murders committed at age 14.<sup>170</sup>

Twelve *amici curiae* briefs were filed in the case, with several of the Court’s old “friends” once again present.<sup>171</sup> In its brief, the American Medical Association based its explanation of why juveniles ought to be treated differently than adults on a wealth of scientific authorities centered on the biological basis for juveniles’ lacking maturity.<sup>172</sup> Again reinforcing the long-known behavioral science observations of the differences between children and adults,

---

<sup>166</sup> *Id.* at 2761–71 (Breyer, J., dissenting).

<sup>167</sup> *Id.* at 2768.

<sup>168</sup> *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729, 2770 (2011). Justice Breyer attached two appendixes listing nearly 150 peer-reviewed journal articles on psychological harm resulting from playing violent video games. *Id.* at 2771–2779 (Appendixes to dissenting opinion).

<sup>169</sup> *See Miller v. Alabama*, 132 S. Ct. 2455 (2012).

<sup>170</sup> *Id.*

<sup>171</sup> *See id.*

<sup>172</sup> *See* Brief for the American Medical Association and the American Academy of Child and Adolescent Psychiatry as Amici Curiae in Support of Neither Party, *Miller v. Alabama*, 132 S. Ct. 2455 (2012) (No. 10-9646).

the brief focused on “the neurobiological underpinnings for why adolescents act the way they do.”<sup>173</sup> The AMA summarized the relevant science as follows:

Brain imaging studies reveal that adolescents generally exhibit greater neural reactivity than adults or children in areas of the brain that promote risky and reward-based behavior. These studies also demonstrate that the brain continues to mature, both structurally and functionally, throughout adolescence in regions of the brain responsible for controlling thoughts, actions, and emotions. Together, these studies indicate that the adolescent period poses vulnerabilities to risk taking behavior but, importantly, that this is a temporary stage.<sup>174</sup>

The AMA also presented data on a slightly different angle than was taken in earlier cases: research demonstrating that juvenile brains “tend to be more active than adult brains in regions associated with risky, impulsive, and sensation-seeking behavior and less active in regions associated with the ability to voluntarily control behavior.”<sup>175</sup>

Justice Kagan wrote for the majority this time.<sup>176</sup> Citing the APA brief and others, Kagan noted that the “evidence presented to us . . . indicates that the science and social science” behind *Roper* and *Graham*’s conclusions on juvenile development “have become even stronger.”<sup>177</sup> Justice Kagan reiterated findings from earlier cases that the “distinctive attributes of youth diminish the penological justifications” (retribution, deterrence, incapacitation, and rehabilitation) for such a harsh sentence.<sup>178</sup> Such attributes, she noted, include “their immaturity, recklessness, and impetuosity,” as well as their unique capacity for change.<sup>179</sup>

---

<sup>173</sup> *Id.* at 3.

<sup>174</sup> *Id.*

<sup>175</sup> *Id.* at 28.

<sup>176</sup> *Miller v. Alabama*, 132 S. Ct. 2455 (2012).

<sup>177</sup> *Id.* at 2465 n.5.

<sup>178</sup> *Id.* at 2465.

<sup>179</sup> *Id.*

Pointing to *Roper*, *Graham*, and other cases mandating individualized sentencing, Kagan concluded that “a judge or jury must have the opportunity to consider mitigating circumstances before imposing the harshest” penalty now available for juveniles.<sup>180</sup> While not ruling life-without-parole sentences themselves unconstitutional for young offenders, Kagan drew the line at barring *mandatory* sentences that do not consider mitigating evidence, including age and age-related characteristics.<sup>181</sup>

Justice Breyer, joined by Justice Sotomayor, filed a concurring opinion that suggests another possible line: one forbidding life without parole sentence (mandatory or otherwise) for juveniles convicted of felony murder.<sup>182</sup> Breyer focused on *Graham*’s emphasis of the “twice diminished moral culpability” of “a juvenile offender *who did not kill or intend to kill.*”<sup>183</sup> Pointing to psychological and brain science demonstrating that juveniles’ actions are less likely to show “evidence of irretrievably depraved character” than those of adults, Breyer noted that defendants lacking the intent to kill are “categorically less deserving of the most serious forms of punishment than are murderers.”<sup>184</sup> For such defendants, he concluded, “the Eighth Amendment simply forbids imposition of a life term without the possibility of parole.”<sup>185</sup>

---

<sup>180</sup> *Id.* at 2475. Since earlier cases prohibited the death penalty for those under age 18, life without parole now is the harshest penalty available for juveniles.

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

<sup>182</sup> *Miller v. Alabama*, 132 S. Ct. 2455, 2475 (2012) (Breyer, J., concurring).

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

<sup>184</sup> *Id.*

<sup>185</sup> *Id.* at 2477.

### III. TYING IT ALL TOGETHER: ANALYSIS AND IMPLICATIONS

This section identifies and offers several reasons for the uniqueness of the odd case out of the group of five. It then continues with an overview of the many implications and questions left open by the five recent decisions.

#### A. Which One of these Cases is Not Like the Others?

With one notable exception during the period from 2005 to 2012, the Court continued to give juveniles greater Constitutional protection than adults, over the states' arguments promoting equal treatment of adults and teens.<sup>186</sup> In the odd case out, the state argued the other side—that children required greater protection—but again lost.<sup>187</sup> Science seems to be one determining factor.

In *Roper*, *Graham*, *J.D.B.*, and *Miller*, the Supreme Court found the weight of the science sufficiently convincing to support its long-held notions of youth.<sup>188</sup> Juveniles now are widely deemed “less guilty by reason of adolescence.”<sup>189</sup> Scientific studies showing that children are less culpable and less able to understand the system—explicitly or otherwise—helped the court justify prohibiting the death penalty for those under age 18,<sup>190</sup> rejecting life sentences for juvenile non-homicide offenders,<sup>191</sup> holding that a minor's age must be taken into consideration before imposing a life-without-parole sentence, and proclaiming that age is relevant in

---

<sup>186</sup> See cases cited *infra* notes 5, 6, 7, and 9.

<sup>187</sup> See *Brown v. Entertainment Merchants Ass'n*, 131 S. Ct. 2729 (2011).

<sup>188</sup> See cases cited *infra* notes 5, 6, 7, and 9.

<sup>189</sup> See Lawrence Steinberg & Elizabeth S. Scott, *Less Guilty by Reason of Adolescence: Developmental Immaturity, Diminished Responsibility, and the Juvenile Death Penalty*, 58 AM. PSYCHOLOGIST 1009 (2003).

<sup>190</sup> See *Roper v. Simmons*, 543 U.S. 551, 568 (2005).

<sup>191</sup> See *Graham v. Florida*, 130 S. Ct. 2011, 2030 (2010).



determining whether a minor was “in custody” for *Miranda* purposes.<sup>192</sup> As the Court succinctly stated in *J.D.B.*, “children are not just miniature adults” and, thus, require different treatment under the juvenile law.<sup>193</sup>

In *Entertainment Merchants*, a majority of the Court was not swayed by the science.<sup>194</sup> Given that the case involved a prohibition on a form of protected speech—violent video games—the state had to clear the high strict scrutiny bar to win.<sup>195</sup> The majority, however, found the studies unconvincing in their effort to link violent video game play with harm to children.<sup>196</sup> “The Free Speech Clause exists principally to protect discourse on public matters,” Justice Scalia wrote, “but we have long recognized that it is difficult to distinguish politics from entertainment, and dangerous to try.”<sup>197</sup> Scalia explained, “whatever the challenges of applying the Constitution to ever-advancing technology, the basic principles of freedom of speech and the press . . . do not vary.”<sup>198</sup> Thus, the state’s interest in protecting children from the “ever-advancing technology” yielded to competing First Amendment interests.

Comments by the concurring and dissenting justices, however, suggest that *Entertainment Merchants* is not necessarily the end of the story. Justice Alito, joined by the Chief Justice, “question[ed] the wisdom of the Court’s approach” in his concurring opinion, but noted that he is “not prepared at this time to go as far as” the dissenting justices, Thomas and

---

<sup>192</sup> *J.D.B. v. North Carolina*, 131 S. Ct. 2394, 2399 (2011).

<sup>193</sup> *Id.* at 2397 (citing *Eddings v. Oklahoma*, 455 U.S. 104, 115–116 (1982)).

<sup>194</sup> *Brown v. Entertainment Merchants Ass’n*, 131 S. Ct. 2729, 2739 (2011).

<sup>195</sup> *Id.* at 2733, 2738.

<sup>196</sup> *Id.* at 2739.

<sup>197</sup> *Id.* at 2733.

<sup>198</sup> *Id.* (Alito, J., concurring) (citation and internal quotation marks omitted).

Breyer.<sup>199</sup> After describing the realistic imagery, interactive nature, sophisticated technology, and strong antisocial themes of the games at issue, Alito stated that he “would not squelch legislative efforts to deal with what is perceived by some to be a significant and developing social problem [if] differently framed statutes are enacted by the States or by the Federal Government.”<sup>200</sup> Given this, and the views of the two dissenters, it appears that a door remains open to reconsidering whether a state can protect its children by restricting violent material, under the right set of facts.

### **B. *Roper, Graham, J.D.B., and Miller: Is this the End of the Story?***

The remaining four cases discussed in Part II may give rise to as many questions as answers. It is clear that more cases will follow to shape the Court’s jurisprudence involving juvenile sentencing and confessions.

In *J.D.B.*, the dissent was quick to point out that the “ease and clarity” of *Miranda*’s application were threatened by the Court’s failure to give even “a word of actual guidance.”<sup>201</sup> The “limited departure from *Miranda*’s one-size-fits-all reasonable-person test,” according to the dissent, results in a new test that “will be hard for the police to follow, and it will be hard for judges to apply.”<sup>202</sup>

Commentators have pointed out some practical grey areas left open by *J.D.B.*<sup>203</sup> If a suspect’s age is an element of the *Miranda* custody analysis, at what age are *Miranda* warnings

---

<sup>199</sup> *Id.* at 2746–47.

<sup>200</sup> *Id.* at 2748–2751.

<sup>201</sup> *J.D.B. v. North Carolina*, 131 S. Ct. 2394, 2415–16 (2011) (Alito, J., dissenting).

<sup>202</sup> *Id.* at 2415.

<sup>203</sup> See Lyle Denniston, *Opinion analysis: Children’s age and Miranda*, SCOTUSblog (Jun. 16, 2011, 11:18 AM), <http://www.scotusblog.com/2011/06/opinion-analysis-childrens-age-and-miranda/>.

required, and what exactly does a police officer do with a conclusion about a suspect's age?<sup>204</sup> And does the Court's reasoning in *J.D.B.* require consideration of the age of "an old person who might seem vulnerable"?<sup>205</sup> Scholars have asked whether *J.D.B.*'s holding should be extended to other contexts.<sup>206</sup> If a juvenile's age is relevant to the "custody" issue, is it also relevant to whether an "interrogation" took place?<sup>207</sup> Or to the question of whether *Miranda* warnings that were given to a juvenile reasonably conveyed his rights?<sup>208</sup> And, considering the lessons learned thus far about child development, should a new bright-line rule be created that prohibits the custodial interrogation of a juvenile who has not yet had an opportunity to consult with counsel?<sup>209</sup> Finally, how should age factor into an examination of a minor's waiver of rights?<sup>210</sup>

The trio of juvenile sentencing cases (*Roper*, *Graham*, and *Miller*) opened similar inquiries. *Miller* in particular has sparked significant questions.<sup>211</sup> Scholars already are asking what exactly suffices for the "individualized sentencing" now required for juveniles convicted of homicide, whether the Court's reasoning might apply to mandatory sentences for adult offenders, and whether long prison sentences that are "the practical equivalent" of life without parole are

---

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

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

<sup>206</sup> See Guggenheim & Hertz, *supra* note 24.

<sup>207</sup> *Id.* at 165.

<sup>208</sup> *Id.*

<sup>209</sup> *Id.* at 170–71.

<sup>210</sup> Abigail Kay Kohlman, Note, *Kids Waive the Darndest Constitutional Rights: The Impact of J.D.B. v. North Carolina on Juvenile Interrogation*, 49 AM. CRIM. L. REV. 1623, 1643 (2012).

<sup>211</sup> Professor Craig Lerner of George Mason University School of Law goes so far as to call the *Miller* opinion "riddled with uncertainties that will spawn more litigation." Craig S. Lerner, *Sentenced to Confusion: Miller v. Alabama and the Coming Wave of Eighth Amendment Cases*, 20 GEO. MASON L. REV. 25, 27 (2012).

permitted.<sup>212</sup> State courts already are occupied by cases asking whether *Miller*'s rule banning mandatory life-without-parole sentences for juveniles should be applied retroactively.<sup>213</sup>

Commentators also are opining about whether *Miller*'s reach might be extended to prohibit the confinement of juveniles together with adults,<sup>214</sup> and—given Justice Breyer's concurring opinion in *Miller*—whether a juvenile convicted of felony murder can permissibly be sentenced to life without parole.<sup>215</sup>

### CONCLUSION

Only time will tell what the future trajectory of U.S. Supreme Court juvenile jurisprudence has in store. However, history is a strong indicator that the Court will continue to look to brain science—and, thus, scientific data presented by its non-party “friends”—in cases involving juveniles. While the Court has broadly accepted the brain development science supporting less harsh treatment of juveniles under the criminal law (specifically with regard to confessions and sentencing), it appears that attempts to restrict violent speech in the near future will require some measure of direct scientific evidence of harm. And, although the available evidence was deemed inadequate in *Entertainment Merchants*, the Court seems to have left a door open to allow for future reconsideration under the right facts and given the ever-changing nature of the science.

---

<sup>212</sup> *Id.* See also Erwin Chemerinsky, *Juvenile Life-Without-Parole Case Means Courts Must Look at Mandatory Sentences*, ABA JOURNAL (August 8, 2012), [http://www.abajournal.com/news/article/chemerinsky\\_juvenile\\_life-without-parole\\_case\\_means\\_courts\\_must\\_look\\_at\\_sen/](http://www.abajournal.com/news/article/chemerinsky_juvenile_life-without-parole_case_means_courts_must_look_at_sen/).

<sup>213</sup> See e.g., *People v. Carp*, No. 307758, 2012 WL 5846553 (Mich. App. Nov. 15, 2012); *State v. Williams*, 2012 IL App (1st) 111145, 2012 WL 6206407 (Nov. 27, 2012).

<sup>214</sup> See Andrea Wood, Comment, *Cruel and Unusual Punishment: Confining Juveniles with Adults after Graham and Miller*, 61 EMORY L.J. 1445 (2012).

<sup>215</sup> See Emily C. Keller, *Constitutional Sentences for Juveniles Convicted of Felony Murder in the Wake of Roper, Graham & J.D.B.*, 11 CONN. PUB. INT. L.J. 297 (2012).