

The Psychological Origins of a Constitutional Revolution: The Supreme Court, Birth Order, and Nationalizing the Bill of Rights

Kevin T. McGuire

Political Research Quarterly 2013 66: 441 originally published online 21 March 2012

DOI: 10.1177/1065912912439630

The online version of this article can be found at:

<http://prq.sagepub.com/content/66/2/441>

Published by:



<http://www.sagepublications.com>

On behalf of:

The University of Utah



Western Political Science Association



Additional services and information for *Political Research Quarterly* can be found at:

Email Alerts: <http://prq.sagepub.com/cgi/alerts>

Subscriptions: <http://prq.sagepub.com/subscriptions>

Reprints: <http://www.sagepub.com/journalsReprints.nav>

Permissions: <http://www.sagepub.com/journalsPermissions.nav>

Citations: <http://prq.sagepub.com/content/66/2/441.refs.html>

>> [Version of Record](#) - May 1, 2013

[OnlineFirst Version of Record](#) - Mar 21, 2012

[What is This?](#)

The Psychological Origins of a Constitutional Revolution: The Supreme Court, Birth Order, and Nationalizing the Bill of Rights

Political Research Quarterly
66(6) 441–453
© 2012 University of Utah
Reprints and permissions:
sagepub.com/journalsPermissions.nav
DOI: 10.1177/1065912912439630
prq.sagepub.com


Kevin T. McGuire¹

Abstract

One of the most significant changes in American law was the application of the Bill of Rights to the states. Some members of the U.S. Supreme Court enthusiastically supported the doctrine of incorporation, while others actively opposed it. Why? Evolutionary psychology posits that birth order can explain support for radical change; older siblings identify with authority and resist changes in the rules, while laterborns defy authority and are willing to alter the status quo. Applying the birth order hypothesis to the Court, the author finds that the incorporation revolution was led by laterborns, even after taking account of justices' political preferences.

Keywords

US Supreme Court, birth order, evolutionary psychology, Fourteenth Amendment, incorporation

The application of the Bill of Rights to the states was not inevitable. The question of whether the Fourteenth Amendment would bind the states to the constitutional limitations that were intended to limit the national government was resolved by the U.S. Supreme Court only gradually, over a period spanning more than half a century. During that time, some justices readily adopted the view that the Fourteenth Amendment drastically changed the relationship between federal and state governments; others remained steadfast in opposing the doctrine of incorporation (see, e.g., Amar 2000; Cortner 1981; Curtis 1986; Schwartz 1977).¹

This divergence of opinion among the justices illustrates a more general analytical puzzle. Some legal doctrines gain currency on the U.S. Supreme Court; others do not. In writing their opinions for the Court, the justices have long sought to persuade their colleagues through the development of a wide variety of legal canons, analytical tests, and principles of interpretation. There is considerable variation, however, in the extent to which individual justices adopt these doctrines and use them to govern the resolution of subsequent cases. What explains why some members of the Court will accept and employ a new legal standard while others remain firm in their rejection of it?

One plausible explanation, drawn from the field of psychology, is that an individual's relative position among siblings has a formative effect on a person's receptivity to new ideas. Birth order has long been a subject of intensive

study, and in recent years evolutionary psychologists have given close attention to its link to a person's openness to innovation. By positing that laterborns must be creative and adaptable as a means of distinguishing themselves from their older siblings, this research has shown that, across a wide range of human endeavor, those responsible for revolutionary ideas have disproportionately been younger siblings. Older siblings—and firstborns in particular—exhibit a tendency to reject intellectual innovation, owing to their strong propensity to identify with authority and, thus, to support the status quo (Sulloway 1996).

This logic is easily extended to the members of the Supreme Court, where differences over the applicability of precedent, the advisability of judicial review, and the appropriate level of judicial scrutiny mark just a few of the sharp divisions that exist between the justices. Leaving aside the impact that birth order may have on the ideological orientations of the justices (McGuire 2008), can birth order help account for the levels of acceptance

¹University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

Corresponding Author:

Kevin T. McGuire, Department of Political Science, University of North Carolina at Chapel Hill, CB# 3265, 353 Hamilton Hall, Chapel Hill, NC 27599.
Email: kmcguire@unc.edu

among members of the Court for inventive ideas in legal interpretation?

To preview the test of this theory and its results, I argue that the justices' micro environments at childhood should affect their approach to legal decision making on the bench. Firstborn justices should support existing interpretive regimes, while laterborn justices should be more open to exploring and employing new alternatives. The legal context for this test is the doctrine of incorporation, the idea that the Fourteenth Amendment embraces, either in whole or in part, the substantive protections contained in the Bill of Rights, thereby applying them to the states as well as the Congress. The results demonstrate that birth order plays a prominent role in accounting for the justices' reactions to the incorporation doctrine.

A Theory of Birth Order and the Legal Mind

Legal decision making requires a certain amount of creativity. Even Levi's (1948, 503) classic *Introduction to Legal Reasoning*, which extols the virtues of reasoning by example, allows that judges must always permit the application of innovative ideas. "The rules change as the rules are applied. More important, the rules arise out of a process which, while comparing fact situations, creates the rules and then applies them. . . . The categories used in the legal process must be left ambiguous in order to permit the infusion of new ideas." This is especially true for the U.S. Supreme Court, where the law is so often indeterminate. The justices routinely slate for argument cases in which highly plausible legal arguments may be made for either side of a dispute. Spontaneous innovations by the Court—that is, landmark precedents—become a guide for subsequent cases, but the leading precedents themselves are the product of the justices addressing a new legal issue, a new doctrine, or both. These jurisprudential innovations must spring from the intellectual ingenuity of the justices.

For some time, psychologists have known that problem solving is governed in no small degree by creativity (Getzels and Csikszentmihalyi 1976), an aptitude that is marked by a number of distinctive characteristics. "The creativity literature has identified several individual-difference variables that appear to influence creative problem solving, including divergent thinking, openness, tolerance of ambiguity, and intrinsic motivation" (Pretz, Naples, and Sternberg 2003, 21).

These qualities, which reflect a general openness to complex stimuli, are common among leaders of the artistic and scientific communities; by remaining amenable to the natural variation that runs through competing ideas, these leaders succeed in their fields by practicing a kind of Darwinian selection, continuously adapting to their current needs those ideas that are not only best suited to their

present purposes but also more likely to survive over the long term (Simonton 1999).

Creativity may spring from a number of different sources. Biological attributes, such as cognitive activity in the right hemisphere of the brain, are believed to contribute to creative thinking (Martindale 1998), but so too are the various influences of social environment (Feldman 1998). Among these environmental factors, one of the most prominent and consistent influences is birth order. As early as the late nineteenth century, social scientists began to recognize that one's ordinal position among siblings was associated with various personal attributes—firstborns demonstrated higher levels of professional achievement than laterborns, for example (Galton 1874)—and psychologist Alfred Adler ([1928] 1967) was among the first to note a specific connection between birth order and personality development. By his reckoning, the oldest child in a family places great emphasis on authority and abiding by the status quo. Younger offspring, especially the lastborns of a family, exhibit more creative traits; they are more prone to innovate to establish themselves as unique relative to older siblings.

The theories that account for these findings often place strong emphasis on the micro environment—the family setting in which children are raised—and assume that children are motivated by a basic need for parental attention and investment. The incentives for securing that investment, however, vary dramatically depending on the ordinal position among siblings. Stated differently, relative birth position creates a need for specialization, or "niche seeking," as each subsequent child recognizes that she or he cannot occupy the same role as her or his older siblings and hence searches for ways to distinguish herself or himself (Sulloway 1996). This differentiation within the micro environment follows regular patterns: As the sole focus of their parents' attention, firstborns are rewarded for fulfilling (typically high) parental expectations and for deferring to their authority. Younger siblings, by contrast, must be increasingly adaptable; so, as older siblings settle into the niche of fulfilling existing expectations, the youngest must find creative ways to distinguish themselves and therefore must be the most open to life's myriad possibilities. Lastborns, therefore, exhibit a tendency to rebel and to question authority (see also Healy and Ellis 2007; Simonton 1994). Because the structure of incentives varies so significantly across the birth order, the variation in personality and disposition among siblings of the same family is generally greater than the variation among similar siblings between families.

Birth order, therefore, should play a prominent role in the acceptance of diverse and nontraditional ideas, with older siblings demonstrating resistance to innovations and younger ones greater acceptance. Testing this proposition across numerous forms of scientific innovation, Sulloway (1996) found strong evidence to support the hypothesis. "In general, later-born scientists were much more quick to

join the scientific avant-garde. First-borns, in contrast, tended to fight rear-guard actions against the encroachment of new ideas” (Simonton 1994, 152).²

Birth order’s ability to condition the acceptance of novel ideas need scarcely be restricted to the scientific community. Indeed, it could well inform the behavior of any group of individuals who deal regularly with competing notions of how best to make sense of the world. Appellate judges certainly fit the bill; in sifting through different ideas about the proper interpretation of law, they necessarily consider disparate views about the meaning and relevance of legal doctrines, arguments, and precedents of various vintage.

On the U.S. Supreme Court, of course, the need to come to terms with contending modes of legal analysis is only magnified. As the final arbiters of federal law, the justices systematically seek cases in which the law is unclear and strong arguments can be readily mustered for either side (Perry 1991; Gressman et al. 2007). It is not surprising that disagreement among the members of the Court is common. Indeed, divisions over the proper interpretation of the Constitution as well as federal laws and regulations is the norm, driven principally by ideological differences among the justices (Maltzman, Spriggs, and Wahlbeck 2000; Segal and Spaeth 2002).

One of the primary contexts in which the justices differ over whether to accept innovations in the law occurs in the application of precedent. In fact, some justices readily absorb new legal doctrines into their canon, while others exhibit a remarkable tenacity in opposing them, adhering steadfastly to their original opposition to the setting of precedent—the rules of *stare decisis* notwithstanding (Spaeth and Segal 2001).

The hypothesis regarding the relevance of birth order, therefore, should be obvious enough. If firstborns receive positive parental reinforcement for respecting authority and adhering to established rules, firstborn justices should exhibit a resistance to innovations in the law and oppose the development of novel legal doctrines. As Adler ([1928] 1967, 379, emphasis added) first observed, “When [a first-born] grows up, he likes to take part in the exercise of authority and exaggerates the importance of rules and laws. Everything should be done by rule, and *no rule should ever be changed.*” Laterborn justices, as children, would have found it necessary to employ “adaptive strategies” to secure parental investment by displaying an “openness to experience” and thus placing a premium on risk taking through novel stimuli and inventive ideas (Sulloway 1996). Such justices should perforce be willing to take the road less traveled when deciding cases on the merits and support budding legal developments that may lack long-term pedigrees.

Despite the obvious testability of this linkage, scholars of the Supreme Court have not explored it. This is not to suggest, of course, that psychological perspectives have

failed to inform the study of judicial behavior. To the contrary, at least since Schubert’s (1965) systematic analysis of voting on the Supreme Court, scholars have borrowed concepts from psychology—including ideas about personality, self-esteem, and cognition—to animate their hypotheses about the justices and other judicial actors (see Baum 1997, 135–41). Indeed, psychological explanations continue to feature prominently in a good deal of current research on law and courts (see, e.g., Baum 2006; Braman 2010; Klein and Mitchell 2010; Wrightsman 2006).

The psychological insights regarding birth order, however, have attracted only modest attention. One systematic study, for example, finds that firstborns have historically been overrepresented on the Court (Weber 1984). Given that the justices are more driven, credentialed, and accomplished than the mass public, one would expect an above average proportion of firstborns, individuals who are high achievers rewarded for their discipline and hard work in fulfilling parental expectations. In this respect, the justices illustrate a more general tendency for firstborns to occupy positions of influence (Clark and Rice 1982; Hudson 1990; Simonton 1994). Moreover, the variation in birth order that does exist among the justices plays an important role in explaining their political ideology and thus their voting behavior (McGuire 2008; Sulloway 1996). Still, the ability of birth order to account for the acceptance of innovations in the law—a natural situation in which to test its ability to explain openness to new ideas—remains unexamined.

A Legal Context for Testing the Hypothesis

One of the legal settings best suited for such an inquiry is the application of the Bill of Rights to the states via the provisions of the Fourteenth Amendment. Not only was the doctrine of incorporation a legal landmark, it also made possible a host of subsequent landmarks in which the justices protected the individual liberties enumerated in the national constitution against state encroachment. Taken together, these decisions became the basis for most of the policy making on the modern Supreme Court. It is easy to conclude, therefore, that “[t]he most important modern development in civil liberties policy as enunciated by the United States Supreme Court has been the nationalization of the Bill of Rights” (Cortner 1975, 1). As a case of fundamental transformation in American law, the doctrine of incorporation certainly qualifies.

Testing the birth order hypothesis, however, also requires that there be variation in the justices’ support for the doctrine. Although it is now largely accepted that the states are bound by almost all provisions of the Bill of Rights, incorporation has divided the justices—to say nothing of lower court judges, scholars, and other members of the legal community—since its inception (Curtis 1986).

Early in the Court's history, this question was thought to have been settled by the decision in *Barron v. Baltimore* (1833), a case in which a unanimous Court, speaking through Chief Justice John Marshall, held that the provisions of the Bill of Rights were intended to limit only the powers of Congress, not the states. By placing new restrictions on the states, however, the Fourteenth Amendment introduced critical new language into the Constitution that, according to some, was a kind of legal conduit through which flowed the protections of the Bill of Rights.

In 1873, in the *Slaughterhouse Cases*, the Court considered one of the provisions that served as a basis for the incorporation argument, the guarantee that "[n]o State shall make or enforce any law which shall abridge the privileges or immunities of citizens of the United States." Although the Court conceded that there are privileges and immunities stemming from national citizenship that states could not infringe, it construed the notion of national rights so narrowly as to exclude any of the protections contained in the Bill of Rights.

In the years following, some supporters of expanding personal liberties turned elsewhere in the Fourteenth Amendment, advancing the position that its Due Process Clause—which prohibits the states from depriving "any person of life, liberty, or property, without due process of law"—was meant to ensure that the Bill of Rights was enforceable against the states (Cortner 1981). At least some justices adopted this comprehensive interpretation, most notably the elder Justice John Harlan, who argued that the Due Process Clause embraced the Bill of Rights in its totality. In his dissent in *O'Neil v. Vermont* (1892, 370), for example, he argued that "since the adoption of the Fourteenth Amendment, not one of the fundamental rights of life, liberty or property, recognized and guaranteed by the Constitution of the United States, can be denied or abridged by a State in respect to any person within its jurisdiction. These rights are principally enumerated in the earlier Amendments of the Constitution." Harlan's doctrine of total incorporation would have essentially erased any distinctions of federalism that might have existed in the liberties and rights in the U.S. Constitution.

Harlan's view never commanded a majority, and a majority of justices remained opposed to the notion of incorporation. In *Hurtado v. California* (1884, 535), the Court explicitly rejected any suggestion that the Fourteenth Amendment achieved any form of incorporation. Justice Stanley Matthews argued that the variation in liberties and rights across the states was a preserved element of the federal system, the Fourteenth Amendment notwithstanding. Quoting Justice Joseph Bradley, he wrote, "The Fourteenth Amendment does not profess to secure to all persons in the United States the benefit of the same laws and the same remedies. Great diversities in these respects may exist in two States separated only by an imaginary

line." Somewhat more tractably, some members of the Court were willing to allow that the concept of due process of law might include some of the protections in the Bill of Rights, but only because they were themselves a part of the due process of law that states were bound to respect, not because of any incorporation. Illustrative of this approach was the Court's opinion in *Twining v. New Jersey* (1908, 99), in which Justice William Moody noted that "it is possible that some of the personal rights safeguarded by the first eight Amendments against National action may also be safeguarded against state action, because a denial of them would be a denial of due process of law. If this is so, it is not because those rights are enumerated in the first eight Amendments, but because they are of such a nature that they are included in the conception of due process of law." Under either the *Hurtado* or the *Twining* assumption, these members of the Court rebuffed any direct linkage between the Fourteenth Amendment and the Bill of Rights.

Harlan's opinion—which did of course garner its supporters, such as Justice Hugo Black—helped frame the debate that took place across subsequent cases. The result of that debate was embodied in the decision in *Palko v. Connecticut* (1937, 324-25), an opinion in which the Court opted for selective incorporation, a process by which the justices would evaluate, on a case-by-case basis, whether the "immunities that are valid as against the federal government by force of the specific pledges of particular amendments [are] implicit in the concept of ordered liberty, and thus, through the Fourteenth Amendment, become valid as against the states." By employing this variant of the incorporation doctrine, the Court has come to bind the states to virtually all of the provisions of the Bill of Rights.³

What accounts for such disparity in opinion among the justices? Given the radical change foreshadowed through the adoption of the doctrine of incorporation, the justices most receptive to a fundamental alternation in the relationship between the national and state governments would be those who had the greatest degree of openness, creativity, and willingness to support innovative legal doctrine. According to the birth order theory, its adherents should be laterborns, whose personalities developed out of a need to be adaptable enough to find ways to distinguish themselves from their older siblings. Firstborns, by contrast, whose parental attentions were prone to be a function of dutiful adherence to rules and authority, are the most likely candidates for rejecting incorporation. Having been rewarded as children for their support of the status quo, firstborn justices should oppose major shifts away from any longstanding conception of the law.

Analysis

To operationalize this test, I began by gathering data on the votes of the justices in cases in which the Court considered

whether the Fourteenth Amendment incorporated, either through the due process clause or the privileges or immunities clause, any of the liberties and rights contained in the first eight amendments to the U.S. Constitution. To identify these cases, I relied on the Congressional Research Service's (2004) *Constitution of the United States of America: Analysis and Interpretation*, whose chapter on "Amendments to the Constitution" contains an inventory and historical overview of the cases in which the justices have considered applying a provision of the Bill of Rights to the states. These data span a time period from the Court's first case in which incorporation was contemplated, the *Slaughterhouse Cases* in 1873, through *Baldwin v. New York* in 1970 ($N = 56$).⁴ Since I am interested in the views of individual justices, I do not distinguish between cases in which the Court actually decided to incorporate a provision of the Bill of Rights and those in which it declined to do so. All that matters is that it was an issue presented in a case. The dependent variable is coded based on support for the general doctrine of incorporation, not whether a justice voted to apply a particular provision of the Bill of Rights to the states. (In virtually every case, though, this is a distinction without a difference; a justice who favors incorporation in the abstract almost always supports its application.) In each case, a justice's vote was coded as supporting incorporation if that justice wrote or joined a majority, concurring, or dissenting opinion that championed either total incorporation or selective incorporation; opposing votes were those in which a justice joined any opinion that disavowed the application of the Bill of Rights to states via the Fourteenth Amendment.⁵ Across these cases, there were some fifty-nine justices who cast at least one vote supporting or opposing incorporation. (All of the data necessary to replicate the analysis are available at <http://mcguire.web.unc.edu>.)

For each of these justices, I gathered additional demographic and professional data, including data on that justice's birth order.⁶ Although birth order can be conceptualized in a number of ways, I employ "effective" rather than "biological" birth order (Sulloway 1996) and create a simple three-category variable, measuring whether a justice was a firstborn (or only) child, a middleborn child in a family with two or more siblings, or the lastborn in a family of two or more children.⁷

What do these data on birth order reveal about the justices' views on the application of the Bill of Rights to the states? Among lastborn justices—those expected to challenge conventional thinking—the elder Justice John M. Harlan was a leading advocate of incorporation. Indeed, he was one of the earliest pioneers of the doctrine, serving as its standard bearer in a series of notable dissents in which he argued at length that the Fourteenth Amendment's purpose was to incorporate the Bill of Rights in its totality. In decisions such as *Hurtado v. California* (1884), *Maxwell*

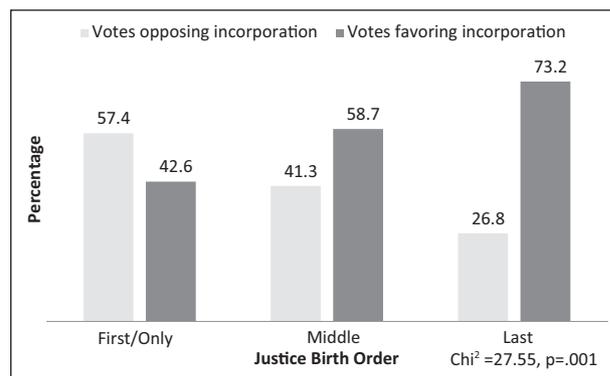


Figure 1. Impact of birth order on acceptance of the doctrine of incorporation.

v. Dow (1900), and *Twining v. New Jersey* (1908), the last-born Harlan advanced the iconoclastic view that would make the explicit limitations on the federal government enforceable against the states.⁸

Among the other justices in the sample, incorporation devotees include such lastborn justices as Hugo Black, Louis Brandeis, Benjamin Cardozo, and Earl Warren. Among its critics were numerous firstborns, such as Henry Billings Brown, Oliver Wendell Holmes, Jr., Robert Jackson, and Willis Van Devanter, each of whom only modestly endorsed incorporation.

As a preliminary exercise, Figure 1 illustrates the general relationship of birth order to support for the incorporation doctrine. These data are derived from the votes of the members of the Court in all incorporation cases, with the percentage of votes favoring and opposing incorporation cast by justices in each birth order category. The results reveal a strong relationship between birth order and the application of the Bill of Rights to the states ($\chi^2 = 27.55, p = .001$).

Among firstborns and only children, only 43 percent of their votes favored incorporation. Thus, the justices who were nurtured in an environment that reinforced their sense of responsibility and fidelity to longstanding rules exhibited only negligible degrees of readiness to uproot the traditional understanding of the Fourteenth Amendment. Compared to their older siblings, justices who were middleborns would have had a greater need to be open to innovation to find a niche in which they could stand apart in their parents' eyes. Consistent with that expectation, they reveal a higher level of receptivity to incorporation than their firstborn siblings; better than half of their votes endorsed the doctrine of incorporation.

The greatest openness to the Fourteenth Amendment "revolution," however, is to be found among those who, because they faced the greatest competition for parental investment, would have needed to be the most creative and unconventional, the most open to risks, adventure, and diverse alternatives. These are precisely the justices who

should be predisposed to a novel interpretation of the law, one that would upset the constitutional apple cart, and the data in Figure 1 confirm that they are. Among lastborn justices, nearly three-quarters of their votes (73 percent) endorsed the incorporation doctrine.⁹ To the extent that earlier-born children cling steadfastly to rules while laterborns search for ways to alter them, this tendency is clearly manifest among the justices.

To this point, the data suggest confirmation of the birth order hypothesis. These descriptive data, however, do not consider competing causes that might undercut the impact of the personality traits formed and honed during early family life. Among the other factors that might undercut the role of birth order are variables that relate to when a justice was appointed to the Court. The age at which a justice decides a case is a potential complicating variable since receptivity to new ideas generally declines the older one becomes (Diamond 1980; Messeri 1988; Sulloway 1996, 34-36). Quite apart from a justice's age, the time period in which she or he came to the Court is apt to affect her or his views on the Fourteenth Amendment. The Court adopted selective incorporation only gradually, and once it began to apply the provisions of the Bill of Rights to the states, it did so in only piecemeal fashion, incorporating specific constitutional provisions on a case-by-case basis. The steady accumulation of incorporated amendments provided the time necessary to weave the doctrine more fully into the fabric of the law. Since the amount of support for a policy among decision makers affects its subsequent rate of adoption by others (Berry and Berry 2007; Walker 1969), surely this would reduce resistance among those reluctant to get behind "new" ideas in constitutional law.

To consider the impact of these alternative explanations, I begin with a probit model that estimates each justice's vote in each incorporation case in which she or he participated, holding constant these other factors. A justice's age is measured as her or his age at the time the case was decided, and the currency of the incorporation doctrine on the Court is measured as the number of precedents incorporating a specific provision of the Bill of Rights that were decided prior to a vote in a given case.¹⁰ The expectation for each variable is straightforward; older justices should be less inclined to vote in support of incorporation, while a larger number of incorporation precedents should smooth the way to greater acceptance of this legal doctrine. The results are presented in model 1 of Table 1.¹¹

These results confirm what was evident from Figure 1; birth order is a statistically significant predictor of a justice's endorsement of incorporation. In probabilistic terms, an otherwise average justice would have a .51 likelihood of supporting incorporation if she or he were a firstborn. By comparison, that same justice would have a .58 probability of endorsing incorporation if she or he were the middleborn of the family and a .65 probability if she or he

were the lastborn in the family. Measured by this model, the consequences of strategic adaptation as children clearly manifest themselves among the members of the Court; those who are rewarded for following the rules are the least likely to change them, while those who are encouraged to innovate and seek new experiences are the most willing to support legal change. A justice's age bears no relationship to these votes, but precedents have significant consequences; as precedents for incorporation accumulate, the legal basis for endorsing similar outcomes in future cases becomes more compelling.

When birth order's impact is made conditional on the legal context, its influence remains substantial. For example, an average-age lastborn has a reasonably good chance ($p = .30$) of voting to apply a provision of the Bill of Rights to the states—even if there were no existing precedents supporting incorporation at the time of the decision. By contrast, a comparable firstborn (i.e., a firstborn at the mean age and with no precedents as a guide) has only a .18 likelihood of voting for incorporation, leaving substantial room for legal context to affect that justice's vote. A firstborn justice would need at least two precedents supporting incorporation ($p = .34$) to equal what a lastborn was willing to do without legal authority. The data suggest that as the Court amassed a sustained body of doctrine endorsing incorporation, such jurisprudence would likely have mattered most for those justices who were otherwise least inclined to accept it. Stated differently, it appears that firstborns needed a reason to change the rules; lastborns did not.

With this simple index of birth order, model 1 assumes that the impact of childhood adaptation is consistent for each position within the family lineup. That impact, however, may differ markedly between, say, firstborns and lastborns. Distinguishing laterborns from older siblings often offers one of the clearest ways to demarcate the effects of birth order (Sulloway 1996). One way to investigate those potential differences is to disaggregate the ordinal variable into individual categories and estimate their specific effects. Model 2 provides this test, including dummy variables for firstborns (coded 1, otherwise 0) and lastborns (coded 1, otherwise 0), leaving middleborns as the omitted category. These results suggest that lastborns carry the more potent effect: while firstborns have a .57 likelihood of voting to apply a provision of the Bill of Rights to the states, lastborns have a substantially higher probability of .70. Moreover, the difference between the two estimates of variation in family socialization is not trivial; the coefficients for firstborns and lastborns are significantly different from one another.¹² This result conforms nicely to other findings on birth order, which emphasize that, quite apart from the difference between firstborns and middleborns—which is insignificant in this model—it is the laterborn siblings who are distinctly prone to innovation and acceptance of novel ideas (Sulloway 1996). For their part,

Table 1. Explanatory Models of Support for Incorporation Doctrine on the Supreme Court.

Variable	(1)	(2)	(3)	(4)	(5)
Birth order	0.18* (0.08)	—	0.52* (0.11)	—	—
Firstborn or only child	—	0.14 (0.15)	—	-0.22 (0.41)	0.17 (0.48)
Lastborn	—	0.48* (0.13)	—	0.65* (0.16)	0.35* (0.15)
Ideology	—	—	1.62* (0.36)	1.50* (0.40)	1.08* (0.43)
Age at time of decision	-0.32 (0.50)	-0.46 (0.51)	-1.02* (0.52)	-1.00* (0.53)	-1.95* (0.45)
Incorporation precedents	0.45* (0.10)	0.48* (0.11)	-0.53 (0.32)	-0.48 (0.32)	-0.15 (0.36)
Sibship size	—	—	—	—	0.060* (0.031)
Socioeconomic status	—	—	—	—	-0.37* (0.08)
Constant	0.25 (2.02)	0.93 (2.08)	4.04 (2.02)	4.87 (2.02)	8.95 (1.79)
R ²	.15	.15	.07	.08	.15
N	470	470	252	252	252
Wald χ^2	27.24	28.80	42.40	46.44	91.60
df	3	4	4	5	7
p <	.001	.001	.001	.001	.001

Dependent variable is coded as 1 if a justice's vote in a case supported incorporation, 0 if the justice opposed incorporation. Coefficients are probit estimates, with robust standard errors (clustered by case) in parentheses. Birth order is coded as 1 for firstborns and only children, 2 for middle children, and 3 for lastborns, and sibship is the total number of children raised in a justice's family. A justice's age (at the time of the decision and logged) is taken from the U.S. Supreme Court Justices Database (Epstein et al. 2007), as is the justice's childhood family socioeconomic status, which is coded as 1 for lower class, 2 for lower-middle class, 3 for middle class, 4 for upper-middle class, and 5 for upper class. The number of incorporation precedents is equal to the number (plus 1, then logged) of Supreme Court decisions incorporating a provision of the Bill of Rights, measured at the time of the vote, according to *The Constitution of the United States of America: Analysis and Interpretation* (Congressional Research Service 2002). Ideology is measured as the Segal-Cover (1989) newspaper editorial scores.

* $p < .05$ or better, two-tailed test.

the statistical control variables remain unchanged from model 1; age is not a significant predictor of a justice's willingness to support a change in the legal regime, but the accumulation of doctrine supporting that change is.

Of course, a reasonable criticism of these two models is that they offer no account of a justice's ideology. After all, justices who are liberal are typically protectors of civil liberties and rights and would thus favor incorporation as a natural consequence. Conservative justices would look for ways to limit those protections, and they would be natural skeptics of any expansive reading of the Fourteenth Amendment. Since firstborns and only children support the status quo and laterborns reject existing norms and are more open to experience, birth order may simply be a stand-in for the driving influence of ideology.

A problem with this interpretation, however, is that one's birth order temporally precedes the development of political ideology. Indeed, birth order has a systematic and significant effect on the political preferences of the members

of the Court: being born later in the family lineup produces increased liberalism among the justices (McGuire 2008). Seen in this way, ideology does not exercise a truly exogenous effect. Instead, its effects are governed, to a significant degree, by the personality traits imbued in the childhood environment. Birth order, therefore, works indirectly on the justices' ideological behavior, conditioning their attitudes, which in turn affect their votes.

Leaving that aside, it is nevertheless important to exclude the possibility that birth order has no direct impact after having taken policy preferences into account. If birth order fails to influence the justices' views on incorporation, after controlling for ideology, that would suggest that the effects of tolerance (or intolerance) of novel ideas would be exclusively channeled through the mediating force of the justices' preferences.

Because several of the justices who voted on various incorporation cases served largely in the late nineteenth and early twentieth centuries, however, we lack the

standard ideological barometers that are commonly used to measure the justices' political preferences. Still, these data are available for at least one-third of the justices in the sample,¹³ and a test of the impact of ideology can be constructed for these (quite obviously, more recent) members of the Court. I employ the ideological scores constructed by Segal and Cover (1989), which, unlike the Martin–Quinn (2002) scores, have the advantage of being completely independent of the justices' votes and designed specifically to measure support for civil liberties and civil rights.¹⁴ These scores range from 0 to 1, with higher scores indicating greater ideological liberalism.

The results of this test, which appear as model 3, actually show birth order exercising an important direct influence on a justice's support for (or opposition to) extending the reach of the Bill of Rights, quite apart from any ideological effects. Ideology adds to our understanding of votes on the incorporation doctrine—the more liberal a justice, the more likely that justice will cast a vote in favor of expanding the protections of the Bill of Rights—but the impact of birth order remains strong, even in the face of the measure that is most likely to subsume its effects.¹⁵ (Although one might reasonably worry about multicollinearity between birth order and ideology, it poses no threats to valid statistical inference. While birth order is positively and significantly correlated with ideology among *all* justices—the later a justice is born in the sibling lineup, the more liberal the justice—for the subset of justices who participated in incorporation cases, the correlation is in fact slightly negative [$r = -.17$].)

Model 3 also yields a rather surprising result. In contrast to the previous models, it shows that a justice's willingness to accept an extension of the Bill of Rights is actually *reduced* by the number of existing incorporation precedents, and significantly so (at least if one allows for a one-tailed test). In other words, this equation suggests that prior cases expanding the application of the Bill of Rights made it harder, not easier, for a justice to vote in favor of incorporation. Odd as this may seem, there is actually a highly plausible interpretive story that is consistent with this change, one that lies in the nature of the Court's docket.

One of the important consequences of the Court's entering a new legal domain and staking out a policy position is that the substance of subsequent cases undergoes a systematic change. This process of "issue evolution" follows a distinctive pattern; an initial landmark decision stakes out the Court's general policy position, one that gives rise to subsequent litigation. It is these "second-generation cases that raise more difficult questions in a unidimensional issue space" (Pacelle, Marshall, and Curry 2007, 705). Thus, once the justices map out their support for a liberal policy domain—such as the expansion of civil liberties—the questions posed by relevant progeny become more difficult to decide in a liberal fashion (see also Baum 1988).

In the context of incorporation, where the legal standard for applying a particular provision of the Bill of Rights to the states is whether it is "implicit in the concept of ordered liberty," it is probably not accidental that the Court's earlier decisions extended the protections of speech, press, and religion, liberties that fit readily and comfortably within that test. Provisions subsequently litigated—especially in the realm of defendants' rights, such as those involving the right to confront witnesses and the right to a jury trial—are not as obviously embraced by that test and thus are more "difficult" to incorporate. Indeed, the right to indictment by a grand jury remains one of the few provisions of the Bill of Rights that has *not* been applied to the states (see *Hurtado v. California* 1884).

Seen in this way, the negative coefficient for the number of previous incorporation decisions is an indication of agenda change; the earlier incorporation cases were easy to resolve in a liberal direction, and the later cases were harder. Since the expansion of the Bill of Rights has roughly paralleled increases in the Court's liberalism, the number of incorporation precedents in the previous models was perhaps simply serving as a crude proxy for the justices' policy preferences, thereby generating a positive estimate. The objective difficulty in expanding the reach of incorporation in later cases becomes apparent only when the ideology of the justices is held constant.¹⁶

This equation, unlike the previous models, reveals age to be an important determinant of the incorporation vote. All else being equal, the earlier in life a justice is faced with an incorporation question, the more willing that justice is to upend convention and support applying a provision of the Bill of Rights to the states. Older justices appear more set in their ways and are therefore reluctant to endorse legal innovations.

Model 4 provides further clarity by again disaggregating the measure of birth order into separate estimates. This equation confirms the results of model 2; although firstborns have no significant impact on the extension of the Bill of Rights, lastborns—socialized as children to challenge convention—make a substantial contribution to increasing such support. In addition, the justices' policy preferences retain their significant effect reported in model 3; the more liberal a justice, the greater the probability of expanding the protections of civil liberties. Regardless of birth order or ideology, the adverseness to change that sometimes accumulates with age remains relevant here, and the legal context—successive incorporation decisions, each presumably more difficult to endorse than those previously decided (Pacelle, Marshall, and Curry 2007)—retains its negative effect.

So the lingering consequences of childhood socialization are sustained, even in the face of the justices' personal policy preferences. How do the effects of birth order and ideology compare? Figure 2 presents their relative effects,

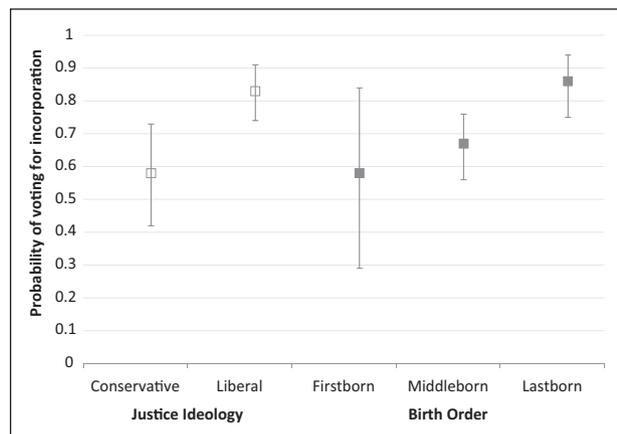


Figure 2. Impact of ideology and birth order on support for incorporation.

holding other variables at their means. It graphs estimated probabilities together with 95 percent confidence intervals. These estimates illustrate ideology's substantial role in governing how justices interpret the Fourteenth Amendment. A conservative justice (measured at one standard deviation below mean ideology) has a .58 likelihood of supporting incorporation, compared to a justice who is more liberal (measured at one standard deviation above the ideological mean), whose probability of endorsing the application of the Bill of Rights to the states (.83) is substantially greater.

However important attitudes are to the incorporation debate on the Court, birth order remains an equally relevant part of the story.¹⁷ Indeed, birth order produces changes that are similar in magnitude. Even when ideology is constrained to its mean, an otherwise average firstborn justice substantially resembles an ideological conservative, evincing a .58 likelihood of supporting incorporation. Since this coefficient is insignificant, however, its confidence interval is relatively wide, and thus it does not differ statistically from the estimate for middleborn justices ($p = .67$). Still, lastborns are clearly differentiated from their earlier-born brethren, with a probability of .86 and correspondingly tight confidence interval. As the greatest risk takers—and thus the most ready to endorse legal innovations—lastborns show the highest expected levels of support for an expansive interpretation of the Fourteenth Amendment. Early-born justices, presumably socialized as children to resist altering the status quo, remain more averse to new legal rules.

As a final robustness check to ensure that the impact of birth order is not influenced by related demographic factors, model 5 includes two additional controls, one for the number of children within a justice's family (or sibship) and another for the socioeconomic status of a justice's family. The reason for introducing these controls is that, within the literature on birth order, they are the two variables that most consistently undermine its effects (Ernst and Angst 1983; Sulloway

1996). Firstborns, for example, are typically high achievers, but, as Harris (1999, 367) explains, the reasons may have little to do with birth order itself:

Because small sibships are relatively more prevalent at higher SES levels, and because firstborns are relatively more prevalent in small sibships, the failure to control for these variables leads to a confounding of demographic factors with birth order. Outstandingly successful people are more likely to be firstborns not because of their superior position in the family of origin but because their family of origin was more likely to be superior in education and income.

To assess the effect of a justice's socioeconomic background, I employ an ordinal variable, ranging from 1 (*lower class*) to 5 (*upper class*).

Model 5 demonstrates that birth order's impact remains unaffected, even after accounting for these considerations. The coefficient for lastborns is still highly significant, but perhaps it is not surprising that its size is somewhat diminished, as the variables measuring family size and socioeconomic background siphon off some of the effects that might otherwise be attributed to birth order. That is, larger families and lower incomes both contribute to a liberal outlook, just as smaller families and higher incomes are associated with a more conservative point of view. To the extent that the measure of ideology does not fully capture its effects, sibship and socioeconomic status probably reveal something important about a justice's dispositions. More important, these rivals for the explanatory power of birth order do not undermine its genuine effects.

Conclusions

How did the Supreme Court come to use the Fourteenth Amendment to extend the Bill of Rights to the states? And why did some justices consistently take the lead in trying to upend established precedents in an effort to rearrange one of the foundations of the federal system, while others clung tenaciously to the moorings of an established and undisturbed body of law? To be sure, the justices' ideological orientations and the legal context mattered a good deal, but the childhood micro environment offers additional—and, it turns out, quite substantial—insight into the justices' reaction to using the Fourteenth Amendment to apply the national protections of liberties and rights to the individual states.

Children seek particularized domains that systematically accord with their place in the sibling lineup. Those who are born earlier have the advantage of disproportionate parental attention and expectations. They respond by trying to fulfill those expectations and in so doing come to identify with the interests embodied in authority, placing a premium

on adhering to the “rules of the game.” Older children, therefore, come of age with a belief that the status quo should be preserved and that existing rules should not be changed. Raised in an environment in which they did not have to compete for parental nurturing—or, alternatively, being able to dominate younger siblings who might vie for parental attentions—justices who were only children and firstborns had incentives to identify with and support authority, thus instilling a tendency to maintain existing rules and to stand firm against potential change. It is scarcely a wonder that, as members of the Court, they would fight back against a major transformation in the fundamental law.

The later one is born relative to siblings, by contrast, the greater the need to seek out creative ways of establishing a distinctive niche for oneself. Lastborns in particular have to be the most creative and maintain the greatest awareness of the varied alternatives that will enable them to develop a niche that is uniquely their own. Having learned to value differentness and sensitive to the need to distinguish themselves, lastborns must explore alternative means of securing familial favor, since it is only by remaining open to experience that they are able to establish distinctive identities relative to their older brothers and sister. As justices, lastborns are therefore given to greater rebelliousness and come to the Court accustomed to exploring novelty and innovation. Practiced in defying convention, these justices appear to have grown up with more mutinous dispositions; they are iconoclastic and ready to adapt new ideas to their otherwise stolid environments. Consequently, they evince greater eagerness to move the law in a new direction.

Seen in this way, the justices exhibit these fundamental differences in legal interpretation because, long before they became judges, they acquired very different senses of how to resolve a conflict of ideas. Justices raised as firstborns and only children developed personalities that made them predisposed to resist change. Having benefitted from steadfastly following expectations and identifying with the interests of authority, they grew to value established practices and to resist that which threatened to alter them. From their earliest days, though, laterborn members of the Court learned to value divergence and adaptability since their share of parental attention was contingent on finding a place in the family in which they could shine. As justices, they were keen to explore new modes of constitutional interpretation.

To the extent that the impact of birth order is generalizable to other legal questions, there is good reason to expect that it has relevance for other decisions that involve a judicial challenge to the status quo. Laterborns might well be significantly more willing to vote to overturn precedent or to invalidate challenged legislation. Future research on these questions would illuminate the extent to which the impact of birth order travels across different legal contexts

within the Court. Moreover, birth order may have more widespread consequences within the judicial system more generally. At the trial court level, for example, it is possible that firstborn judges might take a more stringent view of law violations and therefore impose harsher sentences than laterborns. Being more open to different alternatives, laterborns might be more inclined than earlier borns to deviate from established practice and impose less conventional sentences, such as probation or community service.

Here, it is easy to see why, in the context of applying the Bill of Rights to the states, *Barron v. Baltimore* (1833) would represent a venerated policy to firstborn justices. It is equally easy to comprehend why laterborns wanted to wipe the slate clean and start afresh. To be sure, the evidence presented here does not provide a complete accounting of how different justices reacted to the application of the Bill of Rights to the states. Still, it suggests that scholars may be overlooking a basic force that structures how the justices respond to the prospects of legal change.

Acknowledgments

I am grateful to Lawrence Baum, Charles E. Smith, Jr., Georg Vanberg, and the anonymous reviewers for their comments and criticisms.

Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

Notes

1. Whether the Fourteenth Amendment was *intended* to incorporate the Bill of Rights was—indeed, still is—an issue of considerable disagreement among judges and scholars (see, e.g., Berger 1977; Brennan 1961; Fairman 1949; Yarbrough 1976).
2. Simonton was commenting, in 1994, on an early, unpublished version of Sulloway’s manuscript that was later published under the title *Born to Rebel* (1996). After its publication, *Born to Rebel* garnered much similar praise, but because it advanced a thesis that is controversial among many psychologists, it also attracted a fair amount of criticism, as well (see, e.g., Conley 2005; Freese, Powell, and Steelman 1999; Harris 1999).
3. Some justices, of course, preferred more extended forms of the incorporation doctrine. Justices Black and Harlan (the elder), for instance, supported the total incorporation of the Bill of Rights. More expansive still were the views of Brennan, Goldberg, and Warren, who believed that the Fourteenth Amendment incorporated not only the whole of the Bill of Rights but also other basic but nonexplicit rights

- (see O'Brien 2003, 301-15 for an analysis and discussion of these views).
4. The Court has since decided another incorporation case, *McDonald v. Chicago* (2010), but I do not include this case for reasons I explain below.
 5. By these coding rules, not every justice expressed an opinion on the doctrine of incorporation. In a small number of early incorporation cases, some justices simply dissented without any written opinion to support their views. Where a justice's position could reasonably be inferred given the majority opinion—say, if a justice dissented from a majority opinion incorporating one of the provisions of the Bill of Rights—I coded the justice's vote accordingly. In a few instances, a justice dissented from an incorporation decision but on grounds unrelated to incorporation; these votes are not included since, as a formal matter, the justice took no position on whether the Bill of Rights applies to the states.
 6. I rely on Sulloway's (1996) coding of birth order of the justices. Although Weber (1984) also reports data on the birth order of the members of the Court, Sulloway's replication revealed a nontrivial number of errors in Weber's original analysis. Of course, electronic data sources now facilitate the collection of such information. Nevertheless, birth order data are not always reliably recorded in biographical sources, and this problem is exacerbated for justices appointed in the eighteenth and nineteenth centuries, periods for which dependable data may be harder to obtain.
 7. "Effective birth order" is distinct from "biological birth order"; for example, Justice Ruth Bader Ginsburg was the latterborn of two children, but the death of her six-year-old sister, when she herself was only one year old, rendered Ginsburg an effective only child (Salokar 1996, 79). Also, as the sole focus of parental attention and expectations, only children are typically expected to exhibit the same kind of deference to existing rules and support for the status quo that is common among firstborns (Sulloway 1996). Thus, I code justices who were only children (e.g., Justice Antonin Scalia) in the same category as firstborns.
 8. Harlan's willingness to cut against the grain of the established legal order was not restricted to the doctrine of incorporation. He was, of course, the only dissenter in *Plessy v. Ferguson* (1896), which upheld state-sanctioned racial discrimination.
 9. The numbers of votes are sufficiently large for each category—firstborns and only children ($n = 148$), middleborns ($n = 184$), and lastborns ($n = 138$)—to permit meaningful statistical comparison among groups, and the differences are scarcely trivial. Difference of proportions tests reveal that firstborns and only children are significantly *less* supportive of incorporation than all other justices ($z = 4.56, p < .001$) and that lastborns are significantly *more* supportive than earlier-born justices ($z = -4.34, p < .001$).
 10. Each of these variables is transformed. Because additional precedents probably matter less as their number increases—in other words, because the accumulated effect of such precedents should increase more modestly as the number of precedents increases—this variable is measured as the log of the number of incorporation precedents (plus 1). The same logic applies to age; the effect of aging should matter less with each successive year, and so this variable is measured as the log of a justice's age at the time of a decision.
 11. Because statistical models based on a data set of this type are likely to produce correlated error structures, I employ robust standard errors through clustering as a corrective. The results that I report are based on case-level clusters rather than justice-level clusters, and the reasons are entirely practical: the interclass correlation within these data is substantially greater at the case level (and therefore more likely a source of downward bias in the standard errors) than at the justice level. (Zorn [2006] reports the same finding for his analysis of search and seizure cases, which suggests that cases—not justices—are more likely to be the consistent source of error bias.) One could cluster at the justice level, but the coefficients remain unaffected. Thus, I utilize the more conservative approach. (The impact of birth order is still quite strong at the justice level. For example, calculating the percentage of cases in which each justice endorsed incorporation yields the following levels of support: 31 percent for firstborns, 42 percent for middleborns, and 60 percent for lastborns, differences that are statistically significant [$F = 3.77, p = .03$].)
 12. The null hypothesis that the estimate for firstborn justices is no different from the estimate for lastborns is easily rejected ($\chi^2 = 4.68, p = .03$).
 13. There were fifty-nine justices who voted on one or more incorporation questions. There are ideological scores for twenty-three of them.
 14. The Martin–Quinn scores can be substituted for the Segal–Cover scores, and the results are consistent and robust across the various models presented here. Alternatively, one might employ the ideology of a justice's appointing president as a plausible proxy for a justice's own ideology. On the modern Court, the party identification of the appointing president is a standard choice, but of course the ideologies of the Democratic and Republican Parties were a good deal different in the late nineteenth century when the question of incorporation began to appear on the Court's docket. (Postbellum Republicans were liberal on social issues, while Democrats were more conservative, for example.) There are DW-Nominate scores for some of these presidents, but they demonstrate no discernible linkage to votes on incorporation, either on their own or taken in tandem with other predictors.
 15. In 2010, the Court decided the case of *McDonald v. Chicago* (2010), a decision that applied the Second Amendment's right to keep and bear arms to the states. In other incorporation cases, justices typically reason that because they endorse (or, alternatively, do not endorse) the doctrine of incorporation as a matter of principle, the specific provision of the Bill of Rights at issue is (or is not) applicable to the states. This case was highly unusual in that, while the Court divided over

whether the Second Amendment itself should be incorporated, every justice wrote or joined an opinion supporting the principle of incorporation. Stated differently, there were nine justices endorsing the *incorporation doctrine*, but only a bare majority of five conservative justices supporting its *application* in this case. The reason is fairly obvious; unlike other incorporation cases that have embraced liberal values—such as expanding the freedoms of speech, press, or religion—the decision to extend constitutional protection to gun owners is almost universally viewed as a conservative policy outcome. Perhaps it is not surprising that including *McDonald* in models that assess support for the incorporation doctrine substantially undercuts the impact of the justices' ideology. But including this case has *no effect on the impact of birth order*. For example, including *McDonald* in an equation that assesses the impact of ideology, firstborns, and lastborns cuts the size of the ideology estimate almost in half, compared to a model that excludes *McDonald*, from 1.07 ($t = 2.84$) to 0.64 ($t = 1.51$). The coefficient for lastborns, by contrast, is identical: 0.62 ($t = 3.74$) without *McDonald* and 0.61 ($t = 3.73$) when that case is taken into account. (Similar results obtain for models 3, 4, and 5.) Because it has no empirical consequences for my central hypothesis about the relevance of birth order, I choose to exclude *McDonald* from my analysis. Doing so maintains the statistical relevance of the justices' ideology and thus simply preserves an empirical picture that is consistent with the historical view of the incorporation cases as exemplifying liberal policy outcomes.

16. Diagnostic tests reinforce this interpretation. Making the impact of birth order conditional on different numbers of previous incorporation cases reveals that the first three or four incorporation precedents—the “easy” cases—each *raises* the probability of supporting incorporation for *both* firstborn and lastborn justices. Beyond that, however, the probability remains steady and unchanged for lastborns while it declines for firstborns. So precedents had the initial effect of making it easier for all justices to support incorporation, but as the cases got progressively “harder,” firstborns found it more and more difficult, and their support quickly wanes. To be sure, at some point incorporation may have shifted from being a *challenge* to the status quo to a legitimate *part* of the status quo—something the growing number of precedents presumably taps—but the evidence suggests that the provisions of the Bill of Rights under review were consistently “harder” to incorporate.
17. There is no theoretical reason to think that a justice's political ideology exercises different effects for different categories of the birth order. It is not clear, for example, that political preferences would matter more for lastborns than they would for firstborns. Various multiplicative models (not shown here) that interact the justices' ideology with birth order—as an ordinal variable as well as separate estimates for first- and lastborns—reveal no significant effects for any interaction term. These results, as well as the data necessary to replicate all of the results presented here, are available from the author.

References

- Adler, Alfred. (1928) 1967. “Understanding and Treating the Problem Child.” In *Individual Psychology of Alfred Adler: A Systematic Presentation in Selections from His Writings*, edited by Heinze L. Ansbacher and Rowena R. Ansbacher, 384-410. New York: Harper & Row.
- Amar, Akhil Reed. 2000. *The Bill of Rights: Creation and Reconstruction*. New Haven, CT: Yale University Press.
- Baldwin v. New York, 399 U.S. 66 (1970).
- Barron v. Baltimore, 32 U.S. 243 (1833).
- Baum, Lawrence. 1988. “Measuring Policy Change in the U.S. Supreme Court.” *American Political Science Review* 82:905-12.
- Baum, Lawrence. 1997. *The Puzzle of Judicial Behavior*. Ann Arbor: University of Michigan Press.
- Baum, Lawrence. 2006. *Judges and Their Audiences: A Perspective on Judicial Behavior*. Princeton, NJ: Princeton University Press.
- Berger, Raoul. 1977. *Government by Judiciary: The Transformation of the Fourteenth Amendment*. Cambridge, MA: Harvard University Press.
- Berry, Frances Stokes, and William D. Berry. 2007. “Innovation and Diffusion Models in Policy Research.” In *Theories of the Policy Process*, 2nd ed., edited by Paul Sabatier, 169-200. Boulder, CO: Westview.
- Braman, Eileen. 2010. *Law, Politics, and Perception: How Policy Preferences Influence Legal Reasoning*. Charlottesville: University of Virginia Press.
- Brennan, William J. 1961. “The Bill of Rights and the States.” *New York University Law Review* 36:761-78.
- Clark, Roger D., and Glenn A. Rice. 1982. “Family Constellations and Eminence: The Birth Orders of Nobel Prize Winners.” *Journal of Psychology* 110:281-87.
- Congressional Research Service. 2002. *The Constitution of the United States of America: Analysis and Interpretation*. Washington, DC: Government Printing Office.
- Conley, Dalton. 2005. *The Pecking Order: A Bold New Look at How Family and Society Determine Who We Become*. New York: Vintage.
- Cortner, Richard C. 1975. *The Supreme Court and Civil Liberties Policy*. Palo Alto, CA: Mayfield.
- Cortner, Richard C. 1981. *The Supreme Court and the Second Bill of Rights: The Fourteenth Amendment and the Nationalization of Civil Liberties*. Madison: University of Wisconsin Press.
- Curtis, Michael Kent. 1986. *No State Shall Abridge: The Fourteenth Amendment and the Bill of Rights*. Durham, NC: Duke University Press.
- Diamond, Arthur M., Jr. 1980. “Age and the Acceptance of Cliometrics.” *Journal of Economic History* 40:838-41.
- Ernst, Cecile, and Jules Angst. 1983. *Birth Order and Its Influence on Personality*. New York: Springer.
- Epstein, Lee, Thomas G. Walker, Nancy Staudt, Scott Hendrickson, and Jason Roberts. 2007. “The U.S. Supreme Court Justices Database.” Northwestern University School of Law, Chicago, March 8. <http://epstein.law.northwestern.edu/research/justicesdata.html>.

- Fairman, Charles. 1949. "Does the Fourteenth Amendment Incorporate the Bill of Rights? The Original Understanding." *Stanford Law Review* 2:5-139.
- Feldman, David Henry. 1998. "The Development of Creativity." In *Handbook of Creativity*, edited by Robert J. Sternberg, 169-88. Cambridge, UK: Cambridge University Press.
- Freese, Jeremy, Brian Powell, and Lala Carr Steelman. 1999. "Rebel without a Cause or Effect: Birth Order and Social Attitudes." *American Sociological Review* 64:207-31.
- Galton, Francis. 1874. *English Men of Science: Their Nature and Nurture*. London: Macmillan.
- Getzels, Jacob W., and Mihaly Csikszentmihalyi. 1976. *The Creative Vision: A Longitudinal Study of Problem Finding in Art*. New York: John Wiley.
- Gressman, Eugene, Kenneth S. Geller, Stephen M. Shapiro, Timothy S. Bishop, and Edward A. Hartnett. 2007. *Supreme Court Practice*. 9th ed. Washington, DC: Bureau of National Affairs.
- Harris, Judith Rich. 1999. *The Nurture Assumption: Why Children Turn Out the Way They Do*. New York: Touchstone.
- Healy, Matthew D., and Bruce J. Ellis. 2007. "Birth Order, Conscientiousness, and Openness to Experience: Tests of the Family-Niche Model of Personality Using a Within-Family Methodology." *Evolution and Human Behavior* 28:55-59.
- Hudson, Valerie M. 1990. "Birth Order of World Leaders: An Exploratory Analysis of Effects on Personality and Behavior." *Political Psychology* 11:583-601.
- Hurtado v. California, 110 U.S. 516 (1884).
- Klein, David, and Gregory Mitchell. 2010. *The Psychology of Judicial Decision Making*. New York: Oxford University Press.
- Levi, Edward H. 1948. *An Introduction to Legal Reasoning*. Chicago: University of Chicago Press.
- Maltzman, Forrest, James F. Spriggs, II, and Paul J. Wahlbeck. 2000. *Crafting Law on the Supreme Court: The Collegial Game*. Cambridge, UK: Cambridge University Press.
- Martin, Andrew, and Kevin Quinn. 2002. "Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953-1999." *Political Analysis* 10:134-53.
- Martindale, Colin. 1998. "Biological Bases of Creativity." In *Handbook of Creativity*, edited by Robert J. Sternberg, 137-52. Cambridge, UK: Cambridge University Press.
- Maxwell v. Dow, 176 U.S. 581 (1900).
- McDonald v. Chicago, 130 S.Ct. 320 (2010).
- McGuire, Kevin T. 2008. "Justices and Their Birth Order: An Assessment of the Origins of Preferences on the U.S. Supreme Court." Paper presented at the annual meeting of the Midwest Political Science Association, Chicago, April.
- Messeri, Peter. 1988. "Age Differences in the Reception of New Scientific Theories: The Case of Plate Tectonics Theory." *Social Studies of Science* 18:91-112.
- O'Brien, David M. 2003. *Constitutional Law and Politics: Volume II, Civil Rights and Civil Liberties*. 5th ed. New York: Norton.
- O'Neil v. Vermont, 144 U.S. 323 (1892).
- Pacelle, Richard L., Jr., Bryan W. Marshall, and Brett W. Curry. 2007. "Keepers of the Covenant or Platonic Guardians? Decision Making on the U.S. Supreme Court." *American Politics Research* 35:694-725.
- Palko v. Connecticut, 302 U.S. 319 (1937).
- Perry, H. W., Jr. 1991. *Deciding to Decide: Agenda Setting in the United States Supreme Court*. Cambridge, MA: Harvard University Press.
- Plessy v. Ferguson, 163 U.S. 537 (1896).
- Pretz, Jean E., Adam J. Naples, and Robert J. Sternberg. 2003. "Recognizing, Defining, and Representing Problems." In *The Psychology of Problem Solving*, edited by Janet E. Davidson and Robert J. Sternberg, 3-30. Cambridge, UK: Cambridge University Press.
- Salokar, Rebecca Mae. 1996. "Ruth Bader Ginsburg." In *Women in Law: A Bio-Bibliographical Sourcebook*, edited by Rebecca Mae Salokar and Mary L. Volcansek, 78-87. Westport, CT: Greenwood.
- Schubert, Glendon A. 1965. *The Judicial Mind: The Attitudes and Ideologies of Supreme Court Justices, 1946-1963*. Evanston, IL: Northwestern University Press.
- Schwartz, Bernard. 1977. *The Great Rights of Mankind: A History of the American Bill of Rights*. New York: Oxford University Press.
- Segal, Jeffrey A., and Albert D. Cover. 1989. "Ideological Values and the Votes of U.S. Supreme Court Justices." *American Political Science Review* 83:557-65.
- Segal, Jeffrey A., and Harold J. Spaeth. 2002. *The Supreme Court and the Attitudinal Model Revisited*. Cambridge, UK: Cambridge University Press.
- Simonton, David Keith. 1994. *Greatness: Who Makes History and Why*. New York: Guilford.
- Simonton, David Keith. 1999. *Origins of Genius: Darwinian Perspectives on Creativity*. New York: Oxford University Press.
- Slaughterhouse Cases, 83 U.S. 36 (1873).
- Spaeth, Harold J., and Jeffrey A. Segal. 2001. *Majority Rule or Minority Will: Adherence to Precedent on the U.S. Supreme Court*. Cambridge, UK: Cambridge University Press.
- Sulloway, Frank J. 1996. *Born to Rebel: Birth Order, Family Dynamics, and Creative Lives*. New York: Vintage.
- Twining v. New Jersey, 211 U.S. 78 (1908).
- Walker, Jack L., Jr. 1969. "The Diffusion of Innovations among the American States." *American Political Science Review* 63:880-99.
- Weber, Paul J. 1984. "The Birth Order Oddity in Supreme Court Appointments." *Presidential Studies Quarterly* 14:561-68.
- Wrightsmann, Lawrence S. 2006. *The Psychology of the Supreme Court*. New York: Oxford University Press.
- Yarbrough, Tinsley E. 1976. "Justice Black, the Fourteenth Amendment, and Incorporation." *University of Miami Law Review* 30:231-76.
- Zorn, Christopher. 2006. "Comparing GEE and Robust Standard Errors for Conditionally Dependent Data." *Political Research Quarterly* 59:329-41.