

Policy Significance of Social Movement Legal Framing: A Study of Creationism and Intelligent Design

James E. Stobaugh, Sean Huss

Department of Behavioral Sciences, Arkansas Tech University, Russellville, USA

Email: jstobaugh3@atu.edu

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Abstract

Social movement framing within the legal context extends its impact far beyond the confines of the courtroom, yet there remains a significant dearth of knowledge regarding the ramifications of employing legal framing strategies within judicial settings. This paper embarks on the task of addressing this knowledge gap, delving into the repercussions of legal framing with regards to the contentious topics of creationism, creation science, and intelligent design. Over the past eight decades, these ideological battles have unfolded within the legal system, as proponents and opponents alike have resorted to legal action to contest or uphold decisions made by local school boards and state legislatures. Within this legal arena, these movements are perpetually engaged in the intricate task of framing their positions in a manner that resonates with the courts, aiming to secure favorable rulings. However, these frames have far-reaching unintended consequences beyond the realm of law. Employing a comparative historical approach through case studies, we shed light on the profound impact that these legal frames have exerted on policy adoption. Our findings underscore the existence of a reciprocal relationship between legal framing and policy, particularly for movements enjoying staunch support from committed policymakers and widespread public backing. In essence, legal framing carries significant weight, shaping not only courtroom outcomes but also leaving an indelible mark on the broader sociopolitical landscape.

Keywords

Legal Framing, Policy, Social Movements, Creationism, Creations Science, Intelligent Design

1. Introduction

In April 2012, the state of Tennessee passed a law mandating that evolution be criticized when taught in schools. This policy represents the latest development in a series of educational policies dating back to the Scopes monkey trial in Dayton, Tennessee. In the years since, the ongoing battle between religion and science shows no signs of abating. In each successive round, new policies are adopted, legal challenges are initiated, and cases are decided. In court, both sides frame their cases with the hope of gaining favor. However, it is evident that the courts do not have the final say when it comes to the issue of creationism, as it continues to persist beyond each legal defeat.

This paper aims to identify and explain the consequences of legal framing beyond the courtroom. Many events in the world occur by accident or result from unintended consequences, and the same holds true for social movements (Amenta, 2006; Amenta et al., 2005). Actions taken by one group often trigger unanticipated responses from other groups or organizations that were not initially planned or beneficial to the movement. While legal frames are primarily designed for court purposes and constructed in a narrow manner, they ultimately impact various groups and institutions beyond the courtroom.

The influence of evolutionary theory on modern science has been significant, extending far beyond biology and into various scientific disciplines. The legal challenges related to the teaching of evolution, creationism, and intelligent design in schools have had a considerable impact on educational policy and the perception of science in society. Legal frames, such as those advocating for “academic freedom” or “balanced treatment,” despite being contested in courts, have often influenced policy decisions outside the legal system. This legal framing often reflects a reciprocal relationship between the courts and policy-making entities. Even in cases where creationist frames have failed legally, they have managed to leave a lasting impact on educational policies and have shaped societal and cultural views on science education (Numbers, 1998; Huskinson, 2020).

For instance, despite legal defeats, proponents of creationism and intelligent design have managed to keep the debate alive and relevant, influencing both public opinion and educational standards. This is evident in various approaches such as the Santorum Amendment or the inclusion of warning stickers on science textbooks, suggesting that evolution is not a fact but a theory subject to critique and debate (Huskinson, 2020; Barnes, Church, & Drazin-Nagy, 2017). These strategies demonstrate how legal frames used in court cases spill over into educational policy and public discourse, highlighting the complex interplay between law, policy, and science education.

The creationist movement has spent the past eighty-seven years defending its stance in court, though it has experienced limited success in modern times (Toumey, 1994). Throughout its history, the movement has advocated for various demands, including the exclusion of evolution from the curriculum, the inclusion of creationism alongside evolution, the allowance of creation science in

the curriculum, and the introduction of intelligent design as a competing theory to evolution (Larson, 2003; Forrest & Gross, 2004, Binder, 2002). Apart from an early court victory, the movement has not fared well in court, but it has been more successful in influencing policy changes and gaining public support (Berkman & Plutzer, 2010). My focus here is not on the success or failure in the courtroom but rather on the impact of legal frames once a case is decided. Contrary to predictions made on several occasions (Epperson v. Arkansas, 1968), the issue of creationism persists, and both sides regroup after each case. We examine how these successful and unsuccessful legal frames influence events following a judge's ruling, specifically focusing on their consequences for future policy adoption.

2. Frames, Consequences, and the Law

The study of social movement frames has overlooked the existence and consequences of framing conducted in the courtroom. Social movements in America have a long history of resorting to the courts for redress, and while they are not always successful, the courts have provided one potential pathway to movement success when other political avenues were closed. From the early civil rights case of *Brown v. Board of Education* to recent legal decisions overturning California's Proposition 8, the courts have played a significant role in advancing social movement claims (Meyer & Boutcher, 2007). Sometimes, the courts do not offer the desired solution, as seen in the case of *Bowers v. Hardwick*. Nevertheless, legal movements continue to turn to the courts despite this risk because the potential for a significant payoff is substantial if the decision favors their cause (Boutcher, 2005; Andersen, 2008). It can be a lengthy and challenging process for a movement, particularly a minority movement, to effect change in legislative or administrative policy. However, through a single court case, they may achieve policy implementation that would have taken decades through other means.

Social movement scholarship has examined movements that engage with the courts (Andersen, 2008, McCann, 1994, also see review in Edelman, Leachman, & McAdam, 2010). Nevertheless, the extra-legal consequences of a social movement organization's (SMO) legal framing once a case is decided have been largely overlooked. When scholars discuss legal framing, they often refer to how movements present their issue to broader constituencies outside of the court. Research in this area has explored how SMOs conceptualize their grievances in terms of rights claims and how this approach has advanced the movement's objectives (McCann, 1994; Merry et al., 2010; Crenshaw, 1988; Polletta, 2000). Movements that utilize this strategy tend to be more successful than those that do not or cannot legitimately claim such rights. It is important to note that the courts are not the sole venue for making rights claims, as research has demonstrated that appealing to rights in other settings can be an effective tactic for social movements (McCann, 1994).

However, our understanding of legal framing within the courtroom remains

underdeveloped as a field. When conceptualizing legal framing, movement scholars have not adequately examined one of the key sites of legal framing: the courts. Instead, the focus has primarily been on legal framing within state legislatures and among movements attempting to mobilize (McCammon, 2009; McCammon et al., 2008; Pedriana, 2006). Scholars in the field of social movement framing have not extensively explored this specific type of framing. Although law and society scholarship has devoted more attention to legal framing, our understanding of how framing is developed and its influence over time and across settings is still evolving. Edelman, Leachman, and McAdam (2010) have drawn attention to this gap in research and pointed toward directions that would advance it. Schoenfeld's study on the prison policy adopted after prisoners' rights lawsuits sheds some light on this issue. She demonstrates how the presentation of prisoners' grievances was framed to increase their chances of being heard and acknowledged by the court. She also examines the policies adopted by Florida in response to the lawsuits. However, her analysis primarily focuses on the state's response to judicial decisions (Schoenfeld, 2010).

The legal system operates with its unique norms and language, which are highly regarded and formalized. Frames and language that may serve a social movement well in the streets or in lobbying efforts may hold no sway in a courtroom (Edelman et al., 2010). Arguments before the court must adhere to specific terms and formats, relying on appeals to specific laws, past precedent, and constitutional rights for a movement to have any credibility in its claims (Schoenfeld, 2010; Paris, 2009; Pedriana, 2006). Previous research has demonstrated that the legal institution imposes several constraints on the types of frames that are relevant and acceptable within the legal setting. In their study of the creationist and evolutionist movements, Stobaugh and Snow (2010) reveal that the level and type of court proceedings influence which frames are deemed acceptable. They find that movements must frame their case around the issue when dealing with lower courts, but as cases progress through the court system on appeal, they must emphasize a constitutional frame. Furthermore, they show that the court favors certain frames over others, particularly valuing science frames over religious frames as long as the science claims are seen as legitimate.

We understand that social movements can have various consequences, both intended and unintended (Amenta, 2006). These consequences may encompass having their demands met, influencing broader culture, receiving media attention, or stirring opposition (Earl, 2004; Rohlinger, 2002; Fetner, 2008; Whittier, 2004). While the issue of the consequences of social movement framing has not been as extensively analyzed as other aspects of movement framing, the existing research has shown that consequences matter (Snow, 2004). We know that they matter directly for policy outcomes and play a crucial role in gaining media attention (Rohlinger, 2002). Fetner's work on LGBT activism has highlighted the unintended consequences of Anita Bryant's campaign, which inadvertently mobilized gay and lesbian activism (Fetner, 2001, 2008). However, despite our un-

derstanding of the importance of consequences in framing, we have not explored how frames crafted for one specific arena affect the broader world. Specifically, how does legal framing developed in one case influence future events? In the battle over evolution, the scientific community's legal briefs consistently attempt to connect the next iteration of the creationist movement to the previous frame. Frames and movements do not simply disappear after a court case is decided; instead, they continue to exist with consequences extending beyond their original purpose.

Despite our knowledge of movements in the court, little is known about the consequences of the movement frames used in the legal setting. While we may understand which frames are likely to be constructed (Stobaugh & Snow, 2010) and which frames have been successful in the past, it is essential to recognize that these frames do not exist solely within the confines of the courtroom. Instead, frames crafted for the legal setting often spill over into the broader world, leading to consequences for social movements, some of which are intentional, and others unintended. This paper focuses on the outcomes of legal framing on future policy made outside of the courtroom.

3. Case Histories

The interdiction of evolutionary theory in educational discourse is not an isolated legal phenomenon but is rather a manifestation of a broader socio-political dynamic. Legal frames used in pivotal cases such as the Scopes Monkey Trial (Larson, 2003; Larson, 2006) and the subsequent *Epperson v. Arkansas* and *Kitzmiller v. Dover Area School District* have reverberated beyond courtroom walls, embedding themselves into public policy and societal consciousness. Despite recurring legal repudiations, proponents of creationism and intelligent design have strategically adapted their approach, transitioning from direct opposition to evolution to advocating for intelligent design as a viable scientific alternative (Forrest & Gross, 2004). This strategic shift is evident in the infusion of creationist perspectives into educational materials and standards, as seen with textbook warning stickers in Georgia and modified school standards in Ohio (Scott & Branch, 2009). These maneuvers subtly introduce the idea of evolution as a debatable theory, thereby fostering a climate conducive to alternative explanations. Policymakers, particularly at state and local levels, often exhibit a retrospective inclination, recycling legal frames from antecedent social movements and court decisions, regardless of their legal efficacy (Moe, 2006). This inclination underscores a lack of innovation in legal framing within policy-making circles, suggesting a reliance on the trajectory carved out by social movements' legal strategies. Consequently, the constraints on the teaching of evolution stem from a confluence of legal strategies, historical precedents, public opinion, and the adaptive tactics of social movements, all of which collectively sculpt the legal and educational landscape over time (Scott & Branch, 2009). The authors briefly present the history of creationist cases in the United States from 1925 to 2005, highlighting the precedent-setting court cases, the policy changes that followed

and the legal frames utilized.

One of the most famous creationism cases was the Scopes Monkey Trial, which took place in Tennessee in 1925. The case focused on the legality of recently passed laws banning the teaching of evolution in the science classroom, the first of their kind in the nation. The laws were conceived and lobbied for by William Jennings Bryan, one of the most respected Christian fundamentalists of his time and also a former presidential candidate. Bryan and his supporters were concerned about the perceived harmful nature of Darwin's theory, attributing it as the cause of war, fascism, and atheism (Lienesch, 2007). In order to protect Christian sensibilities, it was argued that it needed to be kept out of schools. As soon as the laws passed, a teacher, with the ACLU's backing, admitted to violating them so that they could be challenged in court. The court case was one of the most watched and talked-about cases of the day and still holds a place in the consciousness of the nation today. During the trial, the states, represented by Bryan, presented the key frame as religion needing protection. He appealed to the role of religion in everyday life and as the right way to understand the world. The defense, represented by Clarence Darrow and the ACLU, framed the issue that evolution should be allowed in science class and that it was not a threat to religion (Stobaugh & Snow, 2010). The court found that the high school teacher, John Scopes, had violated the law forbidding the teaching of evolution. His conviction was eventually overturned on a technicality, and no other evolution laws in Tennessee, or any other state, were challenged for over forty years (Larson, 2003, 2006).

In 1968, the issue finally came before the Supreme Court in the case of *Epperson v. Arkansas*, which challenged the Arkansas statute forbidding the teaching of evolution. This law was very similar to that of Tennessee and was passed after the Scopes trial. The state used the same framing that Tennessee had in defending the law, claiming that religion needed protection and they had the right to set the curriculum. Evolutionists, after their original framing had failed, constructed a new frame that explicitly framed any alternative as religious, which meant it had no place in the science class. In this case, the trial court and the U.S. Supreme Court found that states could not require curricula to be consistent with religious beliefs. This case was widely derided by the Christians who opposed the idea that man evolved from a "lower life form," and it was clear, with the majority of Americans believing in the ideas of creation, that the legal decision would be challenged by future policies (Berkman & Plutzer, 2010).

Through the 1970s brought the rise of equal time and balanced treatment policies. The courts had ruled that evolution could not be banned from schools and that creationism was religious, but it did not say that other theories could not be taught alongside evolution. Several school districts and states considered these proposals. Textbook adoption in California and Texas, which was done by statewide commissions, was delayed as scientists and creationists battled over standards and which theories to include (Larson, 2006). In 1978 Wendell Bird published an article in the *Yale Law Review* where he made the case for why

equal time legislation is legal (Toumey, 1994; Binder, 2002). Following this article, Arkansas and Louisiana were quick to adopt their own balanced treatment legislation requiring that creation science be given the same amount of attention as evolution.

By the 1980s, the issue was back in court again with *McLean v. Arkansas* (1982) and *Edwards v. Aguillard* (1987). The McLean case dealt with the Arkansas balanced treatment law. The state of Arkansas framed the issue in terms of academic freedom of the children, done to protect their right to learn about competing theories to evolution. The court did not buy this and ruled in favor of the evolutionists. The case was not appealed. In 1987, the Supreme Court heard the Edwards case, which focused on the constitutionality of Louisiana's balanced treatment law. Once again, the state relied on a legal frame highlighting the importance of academic freedom, and like the previous case, the court was not swayed by it. The Supreme Court ruled that creation science was religious and that schools could not set aside dedicated time for alternatives to evolution. If an alternative to evolution was to be found, it would now have to meet this standard.

In response to these defeats, they tried a different approach by advocating the theory of intelligent design, which holds that life is too complex to have happened by chance; instead, it must have been designed. The important distinction from creation science and creationism, from their perspective, was that they never actually used the word god or identified who or what this designer is but left that up to each individual to figure out (Forrest & Gross, 2004; Binder, 2002). Phillip Johnson was the creator of the theory and along with the Discovery Institute, its chief proponent, they worked to recruit scientists to further intelligent design's research agenda and encouraged school districts to adopt the theory into their curriculum. They were famous for hosting scholars that advocated the theory of intelligent design at the institute and publishing books that advanced the theory.

In 2004, a school board in Dover, Pennsylvania attempted to introduce intelligent design as an alternative explanation to evolution. Several parents sued, and the case ended up in federal court. The school board, in defending itself, framed the issue as merely trying to present all scientific theories. Opponents framed the issue as being about religion because intelligent design was inherently religious. In the case of *Kitzmiller v. Dover Area School District*, the court ruled that intelligent design is not science and has no place in the public schools. The judge's ruling also pointed out what many critics had been saying all along, that intelligent design is simply a repackaging of creationism and creation science (*Kitzmiller v. Dover Area School Board*, 2005).

Supporters of creationism, hailing from diverse yet predominantly religious and conservative backgrounds, have consistently influenced educational policies and legal discourse, despite repeated legal challenges to their views. The foundational underpinning of their arguments traces back to historic legal frames established during the Scopes Monkey Trial, emphasizing the protection of reli-

gious beliefs against the perceived threat of evolutionary theory (Larson, 2006). Even as the legal landscape evolved with cases like *Epperson v. Arkansas* and *Edwards v. Aguillard*, proponents of creationism have adeptly pivoted, notably transitioning to advocating intelligent design as a non-religious alternative to evolution. This adaptability is exemplified by strategies such as the Santorum Amendment and the dissemination of textbook warning stickers that critique evolution's status as fact (Forrest & Gross, 2004), underscoring the tenacity of these supporters in intertwining their religious convictions with public education and policy. The persistence of creationism, despite its lack of scientific endorsement and legal support, reflects a deep-seated commitment to inserting religious perspectives into the educational narrative, thereby maintaining creationism's relevance in public discourse and educational standards (Berkman & Plutzer, 2010; Scott, 2008).

Despite the repeated legal defeats, challenges to teaching evolution continue. Several states and localities are currently considering restrictions on evolution. It is pro forma that every few years when Texas or Florida consider new textbooks, the issue of evolution reappears (Berkman & Plutzer, 2010). Clearly, this game of legal cat and mouse will continue. It is important to understand just how these legal frames presented influence the policy subsequently considered. From textbook selection in Florida and Texas to bills designed to protect the academic freedom of teachers and students who do not subscribe to evolutionary theory in Iowa and Louisiana, the battles rage on, and it is clear that these will be continued to be adjudicated by the courts (Scott & Branch, 2009). This history shows that after every court case, policymakers regrouped and worked to pass policies to undermine the role of evolution in the science classroom, while SMOs attempted to alter their framing strategy (Moore et al., 2006). At each stage of the struggle, legal frames were utilized, but what are the effects of those frames following the specific court cases? (Matzke, 2010; Rosenau, 2012; Scott, 2008)

4. Method and Data

The authors collected all available court documents pertaining to these five cases, including legal briefs, court motions, and judicial decisions, along with depositions and trial transcripts when available, from 1925 to 2005. Most of these documents were accessed through Westlaw and LexisNexis Legal. Other documents were available through webpages relating to these cases or through public open-access sites such as Findlaw and Wikipedia. The time period was chosen because it encapsulates the five precedent-setting cases in the creationist movement. There have been other legal challenges to creationism and its derivatives, but the cases of *Scopes v. Tennessee*, *Epperson v. Arkansas*, *McLean v. Arkansas*, *Edwards v. Aguillard*, and *Kitzmiller v. Dover* were ones that set important precedents. Precedent-setting cases are important because any future policy or legal challenges must address the prior precedent. The legal documents were coded for the legal frame and issue that were presented. Across time, these frames have

shifted in response to legal defeat, the type of court hearing the case, and in response to the oppositional framing present (Stobaugh & Snow, 2010). Using this data, the authors explore further the consequences that legal frames have on future frame construction, exploring how each successive frame is adopted and adapted to try and be successful while also not violating the SMOs' core belief structure.

In addition to the legal documents, the authors also gathered proposed legislation and school board policies across the time period. These consisted of the full text of school board proposals and policies, bills, and legislation when available, and media descriptions of them when the actual text was not available.

The legal documents and policies collected for this study underwent a rigorous content coding process. Each document was meticulously reviewed to identify key themes, arguments, and legal strategies presented within them. This process involved the systematic identification and categorization of relevant information, such as the specific legal issues raised in the court documents, the proposed legislation's intent, and the school board policies' provisions. Additionally, any notable language or rhetoric used to frame the issues was carefully documented.

To ensure consistency and reliability in the coding process, multiple coders were involved, and regular meetings were held to discuss and resolve any coding discrepancies. Coders followed a detailed coding manual that provided clear guidelines for identifying and categorizing content. This meticulous approach allowed for a comprehensive analysis of the legal and policy documents, facilitating the extraction of meaningful insights into the evolution of legal and educational challenges related to the creationist movement.

Furthermore, the authors employed qualitative analysis software to assist in managing and organizing the vast amount of data collected. This software aided in systematically organizing coded information, generating reports, and identifying patterns and trends within the legal documents and policies. By employing a systematic and well-documented content coding approach, the authors were able to delve deeply into the nuances of the cases and policies, shedding light on the intricate dynamics of the creationism debate over time.

5. Findings

This section examines the historical evolution of policies on teaching evolution in American public schools. Two significant periods are explored: the aftermath of the 1925 Scopes trial and the era following the 1968 Epperson decision. In the first period, several states adopted anti-evolution laws rooted in the "Protect Religion" frame, aiming to safeguard creationist beliefs. This framing persisted for decades until legal defeats for creationists. The second period saw the emergence of intelligent design as an alternative to evolution. Policymakers employed various strategies, including the Santorum Amendment and textbook warning stickers, to introduce intelligent design into classrooms. Throughout these shifts, po-

licymakers consistently reused existing legal frames rather than creating new ones, emphasizing the influence of external actors in shaping policy frames.

The first such period occurred immediately following the Scopes case in 1925. After this case, several states adopted anti-evolution statutes, using the creationist frame presented during the trial. These states included Arkansas, Mississippi, and Louisiana. Just as during the actual trial, the prominent frames in these bills were the “Protect Religion” frames. These bills aimed to protect the status quo and ensure that evolution, perceived as a threat to creationist beliefs, was not allowed into the school system. The Scopes trial was a widely covered spectacle in which evolution had been defeated in the courtroom. States looking to implement their own laws could turn to the Tennessee law, which William Jennings Bryan had helped draft and defend in court, along with the frames the movement had used as the best way to craft their legislation.

Arkansas was one of these states to adopt a similar law. The law stated:

“Doctrine of ascent or descent of man from lower order of animals prohibited. - It shall be unlawful for any teacher or other instructor in any University, College, Normal, Public School, or other institution of the State, which is supported in whole or in part from public funds derived by State and local taxation to teach the theory or doctrine that mankind ascended or descended from a lower order of animals and also it shall be unlawful for any teacher, textbook commission, or other authority exercising the power to select textbooks for above mentioned educational institutions to adopt or use in any such institution a textbook that teaches the doctrine or theory that mankind descended or ascended from a lower order of animals.” ([Arkansas Anti-Evolution Act of 1929](#))

The intent of this law is clear: to protect the place of creationism in the science classroom. Since the teaching of creationism was the norm, the act did not need to mention it specifically while outlawing alternatives. The trial in Tennessee had been over a law adopted to protect children from the perceived harmful consequences of the evolution theory. The legal frames presented during the trial centered on the need to protect religion from the dangerous theory of evolution. States considering adopting similar bills utilized a similar framing in their laws. These subsequent bills were written in a way that assured religion and creationism were protected from the challenge that evolution theory could bring. It would take over forty years before these laws were challenged again in court, but once they were, the creationists faced nothing but legal defeat.

The second policy period occurred following the Epperson decision. This was a period of great uncertainty. Before the case, only a few states had anti-evolution statutes still on their books, so few that when the Supreme Court struck down the Arkansas law, it was assumed that hardly anyone would notice ([Epperson v. Arkansas, 1968](#)). However, the case ended up awakening a sleeping beast that was now ready to defend itself. Throughout the 1970s, states and school boards struggled with what to teach in the science classroom. The Supreme Court said

that evolution could not be banned and that creationism was religious, but that left a host of options for elected officials who were opposed to evolution. In the first three years following the Epperson decision, several states considered policies that would undermine evolution (Larson, 2006; Toumey, 1994). Many of these policies utilized elements of the creationist “Curriculum” legal frame that had been successfully used in the Scopes case and unsuccessfully in the Epperson case. This frame focused on the state’s right to set and manage the curriculum of publicly funded schools.

Arkansas adopted a law that would require balanced treatment be given to creation science when evolution was taught. Section 6 of the law specified the legislative intent:

“This Legislature enacts this Act for public schools with the purpose of protecting academic freedom for students’ differing values and beliefs; ensuring neutrality toward students’ diverse religious convictions; ensuring freedom of religious exercise for students and their parents; guaranteeing freedom of belief and speech for students; preventing the establishment of Theologically Liberal, Humanist, Nontheist, or Atheist religions; preventing discrimination against students on the basis of their personal beliefs concerning creation and evolution; and assisting students in their search for truth. This Legislature does not have the purpose of causing instruction in religious concepts or making an establishment of religion.” (Arkansas Balanced Treatment Act 590 of 1981)

Louisiana’s law, adopted shortly after Arkansas’s, also aimed to dictate curriculum standards. The state law, relying on its authority to set curriculum standards, ordered:

A. Each city and parish school board shall develop and provide to each public school classroom teacher in the system a curriculum guide on the presentation of creation science. B. The governor shall designate seven creation-scientists who shall provide resource services in the development of curriculum guides to any city or parish school board upon request. Each such creation-scientist shall be designated from among the full-time faculty members teaching in any college and university in Louisiana. These creation-scientists shall serve at the pleasure of the governor and without compensation. (Balanced Treatment for Creation-Science and Evolution-Science in Public School Instruction, 1980)

Both states used the same framing that the creationists had used previously in court. When considering introducing creation science into schools, the policy-makers did not attempt to construct new frames. Instead, they used the exact same framing used by the movement previously. They knew that this would be challenged, and they tried their best to address the main points that the justices had raised in striking down the anti-evolution laws. However, their justification for the policy still rested on the previous framing strategy.

Following the court's ruling that balanced treatment policies mandating a certain amount of time be set aside to teach an alternative to evolution was unconstitutional, the opponents of evolution were forced to draft new policies that would stand up to judicial challenges but still be acceptable to their constituents. During the late 1980s and the 1990s, opponents of evolution set about crafting a new theory of intelligent design to explain the creation of humans and other living creatures. Chief proponents of this were Phillip Johnson, a Berkeley law professor, and the fundamentalist-funded Discovery Institute. Both of them became vocal advocates of intelligent design, claiming that there was scientific controversy over evolution and that there were unexplained biological components that could never have evolved. The desire to undercut evolution was all the motivation school boards and state legislatures needed to consider instructional alternatives to evolution.

There were a couple of different approaches that policymakers took in the 1990s and into the early part of the 2000s. The policies adopted during this period focused on teaching alternatives to evolution, especially intelligent design, which proponents contended was different from the recently banned creation science and was, in fact, scientific. These proposals were framed in terms of "Academic Freedom" and the right of children to learn all theories, as well as the need to "Teach Both Sides". These proposals were framed in relation to the students' need and right to know that evolution is not settled science and that alternative theories exist. At the same time, each of these bills propagated the notion that there was a valid alternative to evolution that was acceptable to the scientific community, and that it was necessary to include these in the science curriculum.

In 2001, Senator Rick Santorum proposed an amendment to the No Child Left Behind Bill that would have allowed the teaching of alternatives to evolution. Notice how the text begins by seemingly reaffirming the difference between science and philosophy, then quickly pivots:

"The Conferees recognize that a quality science education should prepare students to distinguish the data and testable theories of science from religious or philosophical claims that are made in the name of science. Where topics are taught that may generate controversy (such as biological evolution), the curriculum should help students understand the full range of scientific views that exist, why such topics may generate controversy, and how scientific discoveries can profoundly affect society." (Santorum Amendment, 2001)

The amendment attempted to provide children with an understanding of the controversy surrounding evolution as well as the alternative explanations. The Santorum Amendment was eventually stricken in reconciliation, but intelligent design supporters considered it a major coup to have gotten that far (Dembski, 2006).

The Santorum Amendment was not a one-off affair. From 1999 to 2005, four-

teen other states or local school boards considered proposals that would require school children to learn about an alternative to evolution. These bills continuously combined the diagnostic and prognostic legal frames used by the creation scientists to assert that there is a controversy surrounding evolution and that children have a right to learn about that controversy. Sometimes the controversy was explicitly stated, and sometimes it was assumed, but the result was always the same: a proposal that would allow an alternative to evolution to be included in the school's curriculum.

Some states called for the all-out teaching of an alternative in the science classroom. Michigan considered an amendment revising the school code so that it would require the introduction of the idea of intelligent design:

“In the science standards, all references to ‘evolution’ and ‘how species change through time’ shall be modified to indicate that this is an unproven theory by adding the phrase ‘all students will explain the competing theories of evolution and natural selection based on random mutation and the theory that life is the result of the purposeful, intelligent design of a creator.’” (Revised School Code, 2001)

These bills and others like it attempted to do the same thing that the creation science proposal had done, arguing that a controversy exists and demanding to be included as the counterpoint to evolution. With the Discovery Institute advocating that intelligent design was scientific and not religious, it made it easy for policymakers to grab hold of it and include it in the curriculum. Besides Michigan, the other states or localities that attempted to formally teach intelligent design in the classroom were Ohio in 2002, along with Kansas and Pennsylvania in 2005. Only the Kansas proposal was adopted but quickly repealed in 2007 after the Republican members of the Kansas State Board of Education that had supported the act were voted out.

Other states and school boards took a more measured approach to introducing the idea of an alternative theory to evolution. Instead of formally adding it to the curriculum, they subtly introduced the notion that evolution is contested and needs to be critiqued. While Ohio was rejecting a proposal to introduce intelligent design in the classroom, it chose instead to adopt an amendment to the tenth-grade biology standards that read:

“Describe how scientists continue to investigate and critically analyze aspects of evolutionary theory. (The intent of this indicator does not mandate the teaching or testing of intelligent design.)” (Ohio Life Sciences Grade 10 Standards, Indicator 23, 2002)

The school board framed evolution not as a fact but as something that the scientific community is critical of, and therefore students should be wary of it while at the same time introducing the idea of an alternative to evolution. Ohio was able to expose the idea of another theory to oppose evolution while asserting that they were not advocating for it. They cast evolution as embroiled in a debate

between scientists, which the science community repeatedly states does not exist, and introduced the notion of another side of the issue.

Another way those schools could introduce the notion that there was debate over evolution and the theory of intelligent design was to include warning stickers on science textbooks. Cobb County, Georgia was the first place to do this. The stickers read:

“This textbook contains material on evolution. Evolution is a theory, not a fact, regarding the origin of living things. This material should be approached with an open mind, studied carefully, and critically considered. Approved by Cobb County Board of Education Thursday, March 28, 2002.”
(*Selman v. Cobb County School Board*, 2006)

By mentioning that evolution is not a fact but a theory, used in this case to mean conjecture or opinion, while also making no reference to a specific alternative, they quietly framed the issue as there being another possibility out there, even if that alternative is not mentioned by name. This warning was an attempt to introduce into the classroom an alternative to evolution in much the same way that the “Teach Both Sides” frame had attempted to justify the bringing of creation science into the classroom.

In 2005, the Dover, Pennsylvania school board voted to introduce the idea that evolution was a theory and not a fact, but went further than Cobb County by actually mentioning intelligent design by name. Instead of stickers placed on books, the teacher would read a statement on the first day of the ninth-grade biology class that stated:

“The Pennsylvania Academic Standards require students to learn about Darwin’s theory of evolution and eventually to take a standardized test of which evolution is a part.

Because Darwin’s Theory is a theory, it is still being tested as new evidence is discovered. The Theory is not a fact. Gaps in the Theory exist for which there is no evidence. A theory is defined as a well-tested explanation that unifies a broad range of observations.

Intelligent design is an explanation of the origin of life that differs from Darwin’s view. The reference book, *Of Pandas and People*, is available for students to see if they would like to explore this view in an effort to gain an understanding of what intelligent design involves.

As is true with any theory, students are encouraged to keep an open mind. The school leaves the discussion of the origins of life to individual students and their families. As a standards-driven district, class instruction focuses on preparing students to achieve proficiency on standards-based assessments.” (*Kitzmiller v. Dover Area School Board*, 2005)

Instead of implying another theory to evolution exists, the Dover school board now explicitly named it and encouraged students to pursue learning about it. This was done by stating that evolution is not a fact and there are gaps, subtly

inferring that they can never be answered. The Dover policy never actually provided teacher instruction on intelligent design, but it was drafted as a way to subtly introduce an alternative to evolution while also undercutting the students' perception of evolution as a unifying theory of biology that the vast majority of scientists subscribe to and have no disagreement over.

Each time new policies were considered following major court cases, the policy makers employed the same legal frames that their sides had used in the previous cases. Modifications were made to address specific issues mentioned in the rulings, but even in cases of legal failure, the frames were still utilized. This appears to be because policy makers are not particularly skilled in legal tactics and instead operate within the confines of the available policy area following a legal ruling (Schoenfeld, 2010). They understand which outcomes they desire and which ones the courts have explicitly prohibited in the past. Using this information, they innovate policies based on the available tools at hand, but creating new and novel legal framing innovations does not appear to be their strength. This finding aligns with that of McCammon, who has demonstrated that frames must be introduced to policy makers; they do not craft and innovate their own frames.

6. Conclusion

These findings show that legal frames spill over into areas other than their intended targets. The frames used in court have consequences, both intended and unintended, for policy decisions. Frame transformation in the legal setting is an iterative process best studied over time (Stobaugh & Snow, 2010), and this paper has demonstrated that time is a crucial factor in examining the extra-legal consequences of legal framing. The policies influenced by legal framing can take decades or more to materialize. The legal frames used in previous rounds of court cases influence future policy debates and outcomes, but these consequences may take years or decades to become evident.

After each court case, new policies were considered and adopted by supporters of creationism. As we have shown, policymakers consistently refer back to the most recent legal frames to shape future policies. This adoption of past legal frames occurs even when the frame was unsuccessful. In such cases, the old frame is employed with slight alterations to accommodate the previous court decision. The reason for this appears to be that policymakers, particularly at the state legislature and local school board levels, are not innovators in legal framing; instead, they draw inspiration from the most recent social movement activities, even if those activities have failed. Policymakers seem to have a retrospective approach, while the social movements that go to court to defend these policies tend to be forward-thinking.

Despite what multiple courts have believed, the issue of creationism and evolution is not fading away. It is a safe bet that there will be future cases, and new legal strategies will be attempted and tested. Recognizing how these frames influence post-court case outcomes is a vital lesson for scholars studying various

social movements. The legal arena stands as one of the most significant arenas for social movement achievements, yet our comprehension of the dynamics of social movements in this context remains greatly underdeveloped. We have endeavored to enhance our understanding of the concept of legal framing and the repercussions of social movement framing extending beyond their intended targets. The case of creationism is distinct in the realm of social movement studies because it garners widespread public support, a luxury most movements do not enjoy. Future research should explore whether policymakers adopt legal frames that lack public sympathy.

In conclusion, the enduring debate between creationism and evolution continues to shape our legal and societal landscapes. As new cases arise and novel legal strategies emerge, understanding the far-reaching effects of these frames on post-court case outcomes is essential for scholars studying diverse social movements. The legal arena remains a pivotal stage for social movement progress, and there is a pressing need for further exploration of the intricacies within this environment. Through this research, we have expanded our comprehension of legal framing and its implications, particularly in cases like creationism, which enjoy substantial public support—a characteristic rare among most movements. Future research should delve deeper into the dynamics of legal framing, especially when policymakers adopt frames that may not align with public sentiment.

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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