Backlash, Consensus, or Naturalization:
The Impact of Policy Shift on Subsequent Public Opinion Levels

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Abstract:
To date, research considering the relationship between public opinion and a change in public policy has focused predominantly on the role of opinion as an important pre-cursor to a shift in state policy by state actors. In contrast, we focus in this paper on the short-term and long-term effects of a shift in policy by state actors on the subsequent levels of public opinion.

Current public policy research raises three separate possibilities for the expected effect of a change in policy upon public opinion: a backlash model, a consensus model, and a naturalization model. In the backlash model, the introduction of a new policy might be thought to generate a crystallization of opinion that fosters a subsequent increase in opposition to the policy shift. In the consensus model, the change in policy simply reflects the emerging consensus that is simultaneously reflected in public opinion; the policy is neither controversial nor unexpected as it reflects existing attitude change. In the naturalization model, policy shift is thought to simply codify an emerging acceptance of the new social norm and the very formalization into law of the norm actually facilitates the rate of social acceptance of the new norm.

To investigate this question, we consider state policy changes and statistically-generated, state-level public opinion estimates on the issue of marriage equality from 1992 through 2015. We focus on the apparent effect on opinion of state and popular action, including the introduction of state laws, state court decisions, and the successful ratification of state-wide constitutional amendments.

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Discussion of the effects of public opinion on policy shift usually focuses on the presumed necessity of a change in public support to precede any subsequent shift in the present policy position. As part of identifying a mechanism that will draw the public's attention, and thereby potentially raise the political salience of the relevant policy issue, the recent research on policy shift often highlights the impact of focusing events (e.g., Birkland 1997; Birkland 2006), issue definition (e.g., Pralle 2006) or the actions of social movements (e.g., Banaszak-Holl, Levitsky, and Zald 2010). In contrast, we begin our consideration of public opinion and policy shift at a point much later in the policy process.

For our part, we are interested in what happens to popular support for a policy after new policy positions are introduced in the form of laws? As such, our consideration begins after each focusing event has been successfully utilized to advantage and any required issue definition has occurred; the time immediately after the mobilization of social movements and interest groups has been sufficient to achieve buy-in by policymakers, realize a major policy shift, and codify this policy shift in the form of a new law. In fact, conceptually (and later statistically), we take as a given the prior hard work of social movement actors, interest groups, and policymakers to achieve this policy result and incorporate it into law. As such, we begin at a point where the traditional research focus has often shifted to policy evaluation, which is appropriate given that our analysis addresses one aspect of the efficacy of the policy.

Current public policy research raises three separate possibilities -- a backlash model, a consensus model, and a naturalization model -- for the expected effect upon subsequent public opinion of a change in law that reflects a relatively abrupt policy shift from the prior policy's position. Interestingly, these three models generate three very different hypotheses about the direction and/or the rate of change of public opinion after a new law is introduced. In this paper, we investigate the validity of these three models.

Using annual state-level public opinion estimates of support of marriage equality in the 50 US states from 1992 through 2015, we consider the effects on subsequent public of the introduction of state laws, state court decisions, and the successful ratification of state-wide constitutional amendments around marriage equality. These state-level estimates were generated statistically via multilevel regression and post-stratification (MRP) from accumulated national public opinion polling data obtained during the respective years.

To parse the effects on popular support for marriage equality of the introduction of a new state policy into law in the 50 states, we use a cross-sectional time-series Gaussian regression model. In this model, we also considered the effects propagated by the introduction of new policies into law by neighboring and neighboring states as well as the accumulated effect of state action across the nation. Cross-sectional time-series allow the consideration of pooled time-series data while simultaneously permitting the form of the statistical equation to reduce the potential bias that might otherwise be expected from consideration of such non-independent data.

The Importance of Understanding Policy Effects on Popular Opinion:

What happens to popular opinion when new policy positions are introduced into law is an essential part of understanding of the role of law as a means of effectively changing individual behavior as well as the efficacy of social movement action in utilizing law to achieve desired policy goals. In two of the models noted below – the backlash model and the naturalization model – the very utilization of law to achieve policy goals potentially creates an added effect upon public opinion, thereby respectively detracting or supplementing any existing effect from the actions of social movements, interest groups and policymakers. In one model, the backlash model, the incorporation into law acts to expose a new policy to increased popular scrutiny and reaction to its apparent detriment whereas in the other model, the naturalization model, the incorporation into law acts to increasingly insulate the new policy to its ongoing advantage. In the third model, the consensus model, law is but a reflection of pre-

established positions in ways that highlight the underlying strength of social norms as opposed to the transformative effect of law. If correct, the consensus model acknowledges the potential limitations of law to alter the accepted social norms in order to achieve desired policy goals.

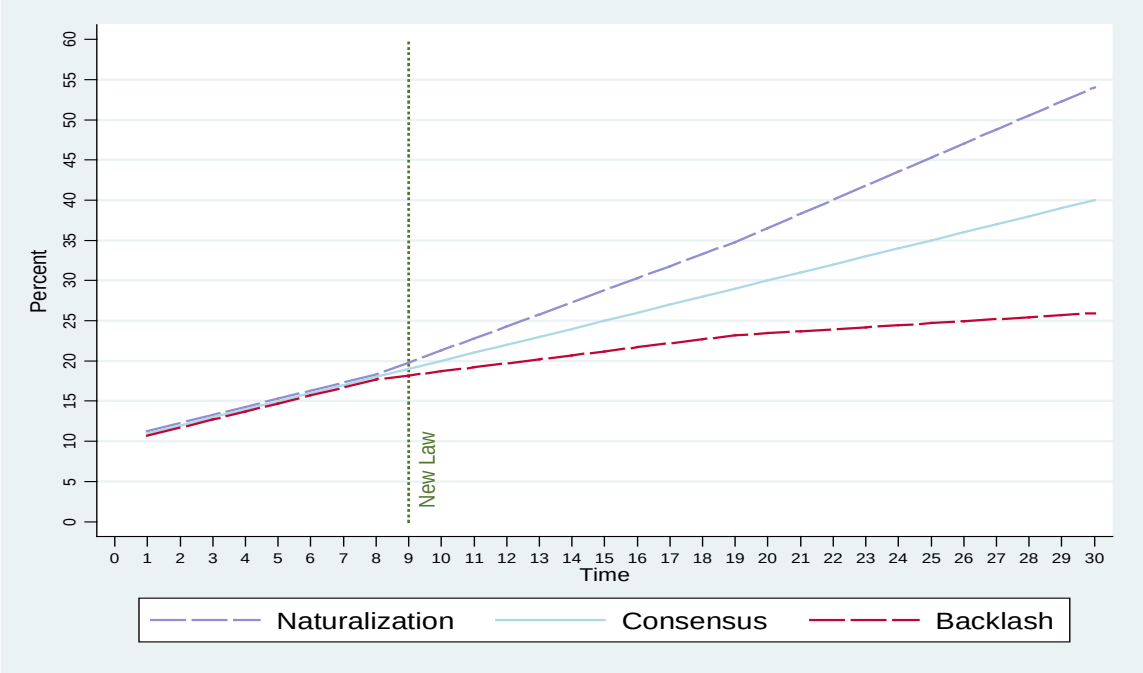
Given these hypotheses about the impact of law on attitude change, the answer to the expected effects from incorporating a new policy into law speaks directly to the State resources expected to be required to ensure policy implementation and subsequent policy compliance. Laws that encounter eroding public support are likely to require greater resource allocation to ensure that, notwithstanding any current reluctance or reticence among the population, the desired policy goals are implemented and then enforced. Conversely, laws that reflect existing attitudinal positions within the population are likely to garner both initial support in their implementation and ongoing compliance; all with less need for state action. For its part, this is an idea that has long been recognized by socio-legal scholars (e.g., Muir 1967).

The answer to this question also speaks to the likelihood of organized interests -- social movements and interest groups -- subsequently changing enacted policies in the near future. If policies accrue additional support simply as part of their incorporation into law, as the naturalization model proposes, the policies will become increasingly "sticky" – that is, harder to remove, alter or repeal – the greater the time period from their introduction. In contrast, if policies eschew support inherently as part of their incorporation into law, these policies will become decreasingly "sticky" – that is, easier to remove, alter or repeal -- the greater the time period from their introduction. And, the "stickiness" of a law offers insight into the potential ability of social movements and interest groups to subsequently challenge or defend these policies. And, if it is the change in the accepted social norm that is fundamental to subsequent attitudinal change, and the law is a simple by-product of this change as proposed by the consensus model, the focus of social movements on legal change itself might be more about ensuring political congruity than embedding new political opportunities.

Three Models of the Effects of Introducing a New Policy into Law:

There are three models currently that purport to document the expected effects of incorporating a new policy into law. These three models offer competing hypotheses about the direction and/or the rate of change of public opinion after a new law is introduced. The expected variation in public opinion across these three models is represented in the abstract in Figure One below, which uses the counterfactual of an initially rising trend in support for a policy issue.

Figure One: Expected Differences in Public Opinion over Time in the Three Models



Although these three models are treated in Figure One as separate and mutually exclusive, the current research literature, especially on backlash, raises the distinct possibility that the expectations of the appropriate model to apply might instead be based on both the policy issue under consideration and the particular salience of that issue at different times in its development. Further, as Figure One indicates graphically, two of the models – the Backlash Model and the Naturalization Model -- are largely complementary of one another in terms of expected outcomes; even if they are not always portrayed conceptually as such by the existing literature.

Backlash Model:

In the backlash model, public support for the new policy is thought to decline, often increasingly so, after the introduction of the new law.

In this model, the introduction of a new law is thought to generate a crystallization of opinion that fosters a subsequent increase in opposition to the prior policy shift. The new law acts as an overt manifestation of the policy shift. It becomes a rallying point that facilitates opposition to the new policy, such that the support for the policy shift that led to the present law declines over time. The subsequent increase in opposition often catalyzes a reaction by policymakers that reverses any existing prior changes in policy as well as precludes further policy advances in the direction previously pursued.

The introduction of same sex marriage in the 1990s and 2000s is often identified by researchers as a textbook example of a policy shift that generated such popular backlash (Rosenberg 2008; Mucciaroni 2008; Klarman 2013; *cf.* Keck 2009). In that example, backlash models identified the introduction of new legal restrictions *outside* of the original jurisdiction as evidence of a backlash against the policy shift. The backlash models that adopted this approach usually overlook the theoretical need to simultaneously demonstrate either a reversal of the policy shift *within* the original jurisdiction after the policy's introduction into law and/or a decline in popular opinion *within* that same jurisdiction (see Price and Keck 2013). Nonetheless, the backlash model is predicated on a notion that the introduction of a new policy into law is likely to lead to a decline in popular opinion *within* the original jurisdiction (*cf.* Haider-Markel 2007).

As Price and Keck (2013) have noted, backlash models also often rely on presumptions about the impact of the source and form of introduction of the new policy. Court decisions are presumed to generate greater likelihood of backlash than actions by their legislative counterparts (e.g., Sunstein 1999; Klarman 2005; Rosenberg 2008). The assumption is that judges, who are appointed, rather than elected, to the federal courts as

well as on some of the states' highest courts, are more vulnerable to being viewed as acting in contradiction to popular opinion. In contrast, elected legislators are thought to be less inclined to act in direct contradiction to the popular will of the moment (e.g., Klarman 2013: 167-68). But, generally, these presumptions are not tested empirically (*cf.* Price & Keck 2013; Keck 2009).

Consensus Model:

In the consensus model, the existing trend in public support is unchanged by the codification of the new policy into law. It is worth noting that the consensus model does not propose that public opinion itself is unchanging (as in, a constant or a flat line of support); it only proposes that the *rate* of change is unchanging such that it is neither accelerating nor decelerating in its rate of change.

In this model, the change in policy simply reflects the emerging social consensus, which is simultaneously reflected in public opinion. Since the policy is neither controversial nor unexpected within the larger society, popular support continues unabated on its existing trend. It is unaffected by the introduction of the new law since it perfectly reflects the new policy position that has slowly but surely emerged from a larger, ongoing social discourse presumably fueled and facilitated by social movement action. As such, the incorporation into law simply reflects this existing attitude change without adding to it or detracting from it.

Habermas (1998) proposes that codification into law usually occurs after a consensus has emerged successfully from the larger social discourse. And, there is an inherent logic to such an approach since, simply from consideration of electoral incentives, we might expect state legislators or congresspersons to ensure that the policies they newly enact accurately reflect changing social attitudes; a noted disjuncture between adopted policy positions and the popular position on a policy issue could easily leave elected officials vulnerable to future electoral challenge (e.g., Mayhew 2004). Since many state-level judges are also elected and/or face retention elections, we might expect that they are more likely to work to remain consistent with changing popular opinion. In

fact, it has been proposed that even non-elected judges might act to remain consistent with changing public opinion simply to avoid potential conflict with their legislative counterparts (e.g., Casillas, Enns & Wohlfarth 2011).

Naturalization Model:

In the naturalization model, the existing trend in popular support increases over time. This slightly greater rate of endorsement arises due to the characteristics inherent in embedding policy in a legal form.

In this model, policy shift is thought to simply codify an emerging acceptance of the new social norm. But unlike in the consensus model, the very act of formalizing the new norm into law actually facilitates the popular acceptance of that norm. Law is thought to slowly instill the new policy with increased social legitimacy by routinely masking much of its realization in the pre-existing bureaucratic and regulatory forms (e.g., Barnes & Burke 2006; Ewick & Silbey 1995; Ewick & Silbey 1998; Sarat 1990). Accordingly, after the introduction of the law, the rate of popular support for the norm no longer continues on its existing trend. Instead, the rate of support grows more rapidly over time as the effect of the incorporation of the policy into law increasingly supplements the existing trend in support for the new policy.

Marriage Equality as a Policy Issue at the State-Level:

Since its introduction onto the policy agenda in 1971 (Barclay & Fisher 2006) and its strong re-emergence in the wake of the 1993 Hawaii Supreme Court decision in *Baehr v Lewin* [74 Haw. 530], marriage equality has increasingly become an apt policy issue through which to consider the question of the effects of policy incorporation into law. In the last 25 years, this policy issue has evidenced two major policy shifts at the state level. The changing legal positions across states around these two policy shifts, as captured by four major legal acts, are represented in Figure Two.

First, in a majority of states, there was development of a new policy and its introduction into law – via statute, ballot initiative, state court decision, and /or state

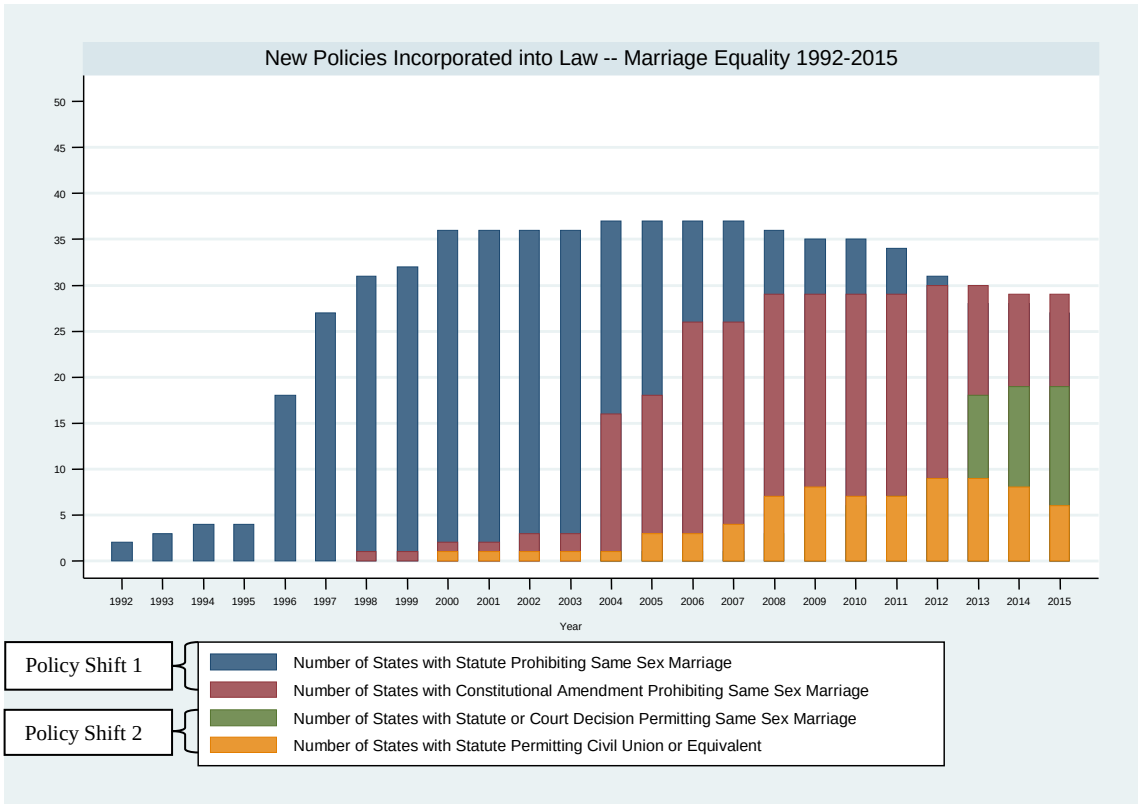
constitutional amendment -- of the parameters of marriage as it related to the gender of the two involved parties in order to **proscribe** the recognition or celebration of same sex marriages. Prior to this action, most states had no such restriction formalized into law and, in fact, rarely was such a policy formalized within existing administrative rules for the state agency responsible for regulating marriages (Eskridge 1993 & 2002). If such a restriction existed, it was often generated initially as an accidental by-product of earlier attempts to proscribe polygamous marriages and the restriction occurred as part of specifying the number of parties to a marriage (Eskridge 2002). Thus, in the majority of the US states, this codification represented a new policy shift and one that was subsequently incorporated into law. In the 22 year period between January 1992 and January 2014, 37 states introduced statutory prohibitions and 30 states passed state constitutional amendments prohibiting state recognition of same sex marriage.

Second, in a substantial minority of states, there was a development of a new policy and its introduction into law – via statute, ballot initiative, state court decision, and /or federal court decision -- of the parameters of marriage as it related to the gender of the two involved parties in order to **permit** the recognition and celebration of same sex marriages or civil unions (or an equivalent such as comprehensive versions of domestic partnerships). Prior to this action, most states had no such comprehensive relationship recognition for same sex couples formalized into law. Thus, in a substantial minority of the US states, this codification represented a new policy shift and one that was subsequently incorporated into law. In the 22 year period between January 1992 and January 2014, 19 states introduced legal recognition of same sex marriage and 9 states introduced legal recognition of civil unions (or an equivalent).

Figure Two below represents the changing legal positions from 1992 through 2015 across states around these two policy shifts. The policy shifts are captured by four major legal acts; two legal acts embedding proscription of same sex marriage and two legal acts embedding permission of relationship recognition for same sex couples.

In the chosen time period, many states adopted only one of these policy shifts, either prohibiting recognition of same sex marriage or permitting same sex marriage. Yet, these two policy shifts were developing contemporaneously and often in apparent reaction to the incorporation into law of the policy shift in other states. Accordingly, in the statistical analysis below, we also introduce into the regression equation, the policy shifts occurring contemporaneously in nearby states and more generally in other states in order to capture the general environment operating on this policy issue at the time.

Figure Two: The 50 States and the Two Major Policy Shifts around Marriage Equality



Interestingly, 13 states -- California, Colorado, Delaware, Hawaii, Illinois, Iowa, Maine, Maryland, Minnesota, Nevada, New Hampshire, Oregon, and Washington -- introduced a restriction on marriage equality into law and then each subsequently introduced either marriage equality or civil unions (e.g., Barclay 2010). Thus, these states

managed to reflect sequentially both of these major policy shifts during the period under consideration.

Marriage equality is also a particularly appropriate policy issue because it offers sufficient time after the enactment of each policy shift into law to generate meaningful insights. From the point in time when the first states introduce each policy shift into law, there exists at least a decade of subsequent data on popular opinion. For example, by 1995, four states had enacted statutes proscribing recognition of marriage equality. By July 2000, Vermont had enacted civil unions. By December 2002, three states had state constitutional amendments prohibiting same sex marriage. And, by May 2004, Massachusetts had enacted same sex marriage.

In fact, in order to incorporate into the analysis expected effects from the policy shift by several states that occurred in late 2013 or that are slated to become law in 2014, we generated, through linear extrapolation, forecasts of state opinion that slightly extend the period under consideration though to 2015. As it simply continues pre-existing trends in the estimates from 1992 through 2013, the extrapolation is unlikely to introduce inherent bias into the subsequent analysis or its interpretation. And, if it were to introduce any inherent bias, the expected bias would be in the conservative direction, as in underestimating the effects and significance of variables in the equation, which makes it less deleterious to any reported results.

Generating Annual State-Level Public Opinion Estimates:

In order to consider the effects of introducing a new policy into law on subsequent levels of popular support within each of the 50 states over time, we generated state-level public opinion estimates of support of marriage equality for each year from 1992 through 2015 for each of the 50 US states. Actual polling of a sample of a state's adult population is rare and it is usually conducted only at the height of an active political campaign on the policy issue. This preference of the timing of state-level polling introduces a potential selective bias into both its availability and its reported results.

To overcome this limitation on state-level polling data, we turned to a statistical procedure, multilevel regression and poststratfication (MRP). This procedure utilizes national survey data, which tends to be collected with greater regularity, to effectively model state-level opinion on salient policy issues. As such, MRP has been used to generate reliable sub-national, opinion estimates from accumulated, geo-coded, national-level polling data (Lax & Phillips 2009a; Lax & Phillips 2009b; Lax & Phillips 2012; Pacehco 2011; Park, Gelman, & Bafumi 2004; Warshaw & Rodden 2012). Although the unfettered utilization of this method is questioned by some social scientists (e.g., Buttice & Highton 2013), the application of MRP specifically around policy issues involving gay rights, including marriage equality, has proven empirically to produce state estimates that are both consistent and reliable (Buttice & Highton 2013, 458; Lax & Phillips 2009b).

The geo-coded, national-level polling data was accumulated from proprietary data obtained by the Williams Institute as well as all applicable public opinion data from public sources, such as the data held by the Roper Center and ICPSR data archives. This accumulated national data allowed us to generate large enough samples in each year to capture support for marriage equality in each state as it occurs within a variety of social demographic sub-groups. For example, in the period between 1992 and 2013, national-level polling data that incorporated a question on marriage equality averaged 6,224 respondents per year, with a minimum of 1,216 respondents in 1992 and a maximum of 19,740 respondents in 2012.

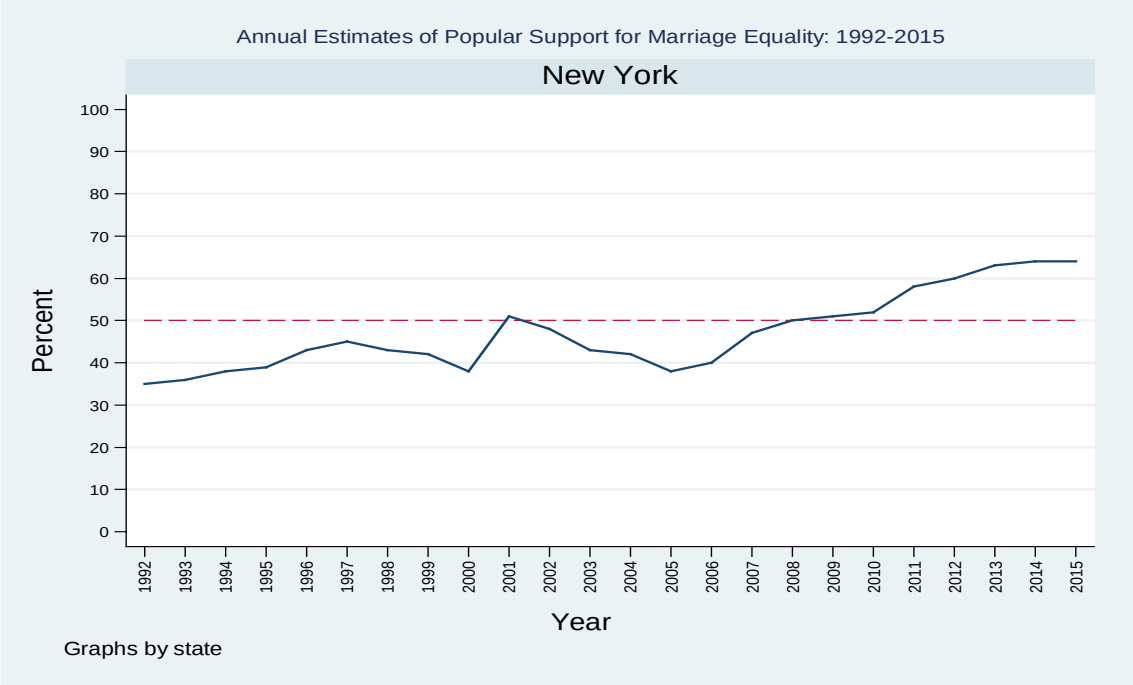
Current Population Survey data from the US Census Bureau determined the distribution of these social demographic sub-groups in each time period in each state. Examples of such sub-groups might be: the number of college-educated, under-35 women in each state or the number of over-65, African American men in each state.

MRP, as a statistical technique, simply allows us to use these two pieces of information – polling data representing the position of a wide variety of respondents in each state and the demographic breakdown of similarly-situated respondents in each state -- to generate consistent and reliable estimates of popular support of marriage equality

among adults in each state in each year. Further information on this statistical technique as applied in the current context is included in the reviewers' appendix.

Although they are statistically generated, these estimates rely upon real information from the accumulated polling data in each respective year. Therefore, they are not simple linear trends over time in each state. They reflect dynamic changes in opinion in response to contemporaneous events. As such, the estimates reflect the peaks and troughs over time in the levels of support for a policy position usually found in public opinion data for each state. This variation in support is well demonstrated by Figure Three, which graphically displays the generated estimates of popular support in the State of New York in the period from 1992 through 2015.

Figure Three: Opinion Estimates of Popular Support for Marriage Equality—New York



Overall, the state-level estimates range from a minimum of 12% support in Mississippi in 2006 to a maximum of 80% support in the District of Columbia in 2013. According to these estimates, all states increased in their support for marriage equality over the 22 year period from 1992 to 2014. There was an average rate of increase in

support of 26.16% during this time period (or an average rate of increase of 1.19% a year). Among states, Utah had the smallest increase of only 12% (or an average rate of increase of 0.55% a year) and Hawaii had the greatest increase of 50% (or an average rate of increase of 2.27% a year).

Fifteen states saw a 20% *or less* increase in support for marriage equality from 1992 through 2014: (from lowest to highest among the 15 state group) Utah, South Carolina, Louisiana, North Dakota, West Virginia, Kansas, Oklahoma, Alabama, Alaska, Idaho, Kentucky, Nebraska, Arkansas, Mississippi, and Texas.

Conversely, eighteen states and the District of Columbia saw an increase of 30% *or more* in support for marriage equality during this same period: (from lowest to highest among the 18 state group) California, Michigan, Montana, Oregon, Pennsylvania, Illinois, Iowa, Connecticut, Massachusetts, New Mexico, Nevada, Rhode Island, New Jersey, Washington, Colorado, Maryland, Vermont, and Hawaii.

One notable point, according to the present estimates, is variation in the "starting point" for the subsequent trend. Seventeen states entered the period with 20% *or less* support for marriage equality: (from lowest to highest among the 17 state group) Mississippi, Alabama, Arkansas, West Virginia, Oklahoma, Tennessee, Kentucky, Iowa, Louisiana, North Carolina, Hawaii, Nebraska, South Carolina, South Dakota, Virginia, Georgia, and Utah.

Conversely, four states and the District of Columbia began 1992 with 30% *or more* support for marriage equality: (from lowest to highest among the 4 state group) New Hampshire, California, Massachusetts, and New York.

While the current analysis focuses primarily on the impact on the subsequent trend of public opinion within each state, it is worth noting that the positioning of states in terms of the actual level of support evinced at any point in time is heavily influenced by the starting point as well as the slope of the subsequent trend. Many of the states that

subsequently introduced marriage equality did not necessarily evince high rates of change from year to year (or at least, no faster than some of their counterparts) before they introduced marriage equality, but they had often begun the process at higher starting points and subsequently evidenced at or near majority support much sooner than their counterparts. For example, in the 11 years between 1992 and 2002, Massachusetts and Michigan moved at a fairly similar rate of change in popular support per year, 1.2% for Massachusetts and 1.1% for Michigan. But, these two states began at very different starting points: Massachusetts began the period with 35% percent support for marriage equality in 1992, whereas Michigan began the period with 21% percent support for marriage equality in 1992. Obviously, it is much further to majority support from the low 20s than the mid-30s.

As this example demonstrates, in thinking about resultant policy opportunities, the rate of change evinced by a state is exacerbated by its initial starting point. Interestingly, that starting point itself likely reflects actions of state actors and the state's population in the years long before the current movements for marriage equality actually came into being. In essence, state public opinion has its own path dependency shaped by earlier policy action, prior movements' activities, and the earlier social demographics of the population within the same state.

Modeling the Effects on Popular Opinion:

To investigate the effects of the incorporation of a policy shift into law, we generated a cross-sectional time-series Gaussian regression equation that modeled changes in the level of popular support for marriage equality in the 50 states. As noted above, the values for popular support for marriage equality in each of the 50 states over the 24 year period relied on public opinion estimates generated by MRP – these annual, state-level estimates formed the dependent variable in the current regression equation.

To correctly model the expected effects from state action, we introduced 11 explanatory variables into the equation. The description of these 11 variables and their subsequent operationalization in the regression equation is largely self-evident from the

information provided in Table One. But, it is worth noting that beyond their immediate application, these 11 variables attempt to encapsulate three meta-ideas about the nature of policy shifts and state action.

1) *Location of the policy shift*:

In the current equation, we assumed that popular opinion within each state could be impacted by policy shifts occurring across three separate locations: a) the policy shifts incorporated into law within the respective states; b) the policy shifts incorporated into law by neighboring and nearby states; and c) the accumulated policy shifts by states nationally. This approach allowed us to model popular opinion as being influenced by potentially three separate and somewhat distinct sets of policy effects – a state-level effect, a regional-level effect, and a national-level effect.

Such an approach allows us to treat each state as reflecting a unique political response to each policy shift, while simultaneously acknowledging that the policy shifts were shaped both by their particular regional context as well as the larger national discussion of the policy issue produced by ongoing social movement activity. Since we are interested primarily in effects from state action, the regional context and national discussion are operationalized in our present equation by variables that capture the propensity of other states to engage in state action around this policy issue.

2) *Source of the policy shift*:

As noted previously, the existing literature (e.g., Sunstein 1999; Klarman 2005; Rosenberg 2008; Klarman 2013) has often proposed that utilizing judicial intervention to enact a major policy shift generates a greater likelihood of popular backlash than would be expected if legislative action were utilized for the same goal. Other scholars, most notably Keck (2009; see also Price & Keck 2013) relying on evidence from historical cases, have challenged this proposition.

To consider this possibility, we introduced variables into the equation that recognized the originating sources of the final policy shift. These variables treated the

activities of the legislature and judiciary as theoretically distinct from those effects generated primarily by the law taking formal effect. Statistically, this imposition of distinctness was aided by a temporal separation that often existed between these two activities -- many legislative or judicial actions occurred at an earlier time than the time at which the law realizing the policy shift actually took effect. For example, the Illinois' legislature passed the bill permitting same sex marriage on law on November 5th, 2013 and the state's Governor signed it into law on November 20th, 2013. But, the Illinois law only comes into effect as a law, with the resultant right to marry, on June 1, 2014.

And, although courts and legislatures often engaged contemporaneously with the issue, they often did so in a consecutive and serial manner rather than a parallel and simultaneous manner. In such cases, one branch prompted action by the other branch. We attempted to temporally, and hence statistically, to separate their respective engagements with the policy issue.

3) Timing of the impact of the policy shift:

Within our approach, there were three key points in time that needed to be effectively considered in order to fully capture the effects on popular opinion from the incorporation of a policy into law. The first point occurs when the law is codified by a legislative or judicial action. As Licari and Meier (2000, 875) noted, "the government obviously does not design and implement a disincentive without airing its intent for the policy or without sending "signals" about why the regulation is necessary" (Licari and Meier 2000, 875). The second point occurs when the law begins to take formal effect and the full implications of the law begin to be manifested publicly for the first time. The law at this point has been moved from abstract consideration to its actual realization. The third point occurs in the period moving forward after the formal introduction of the law and it encapsulates the long-term effect on attitudes of the law itself. The variables incorporated into the regression equation are specifically designed to capture effects at all three points in time.

It is worth noting that the regression equation does not incorporate specific variables related to the activities of social movements or interest groups around marriage equality. Temporally, the majority of these activities are likely to precede passage of the relevant law because state-level campaigns tend to be focused in a state only until legal success is achieved. After a law is introduced, the movement's attention and resources subsequently shifts to the next state with an opportunity for such activity (e.g., Stone 2012). However, where there are complementary policy outcomes and effective counter-movements, as occurs in the case of marriage equality in which policy shifts are contemporaneously occurring around states' proscribing and states' permitting such relationship recognition, we might expect social movement activities to be impacting throughout the period under consideration. In the current regression equation, these ongoing social movement dynamics are captured in two ways.

First, the social movement effects of individual state-level campaigns are implicitly attributed to the state legislature or state court that takes action. The ability of the campaigns to frame and shape the public' perception, and hence reception, of the law become incorporated, in the current equation, into the consideration of the policy actors and policy actions that actually manifest these policy shifts.

Second, the ability of social movements to reframe the larger policy agenda consistent with their policy goals are implicitly incorporated into the current equation by the consideration of the impact of the policy actions of both regional counterparts and the collective actions of all other states. The logic is that effective social movement campaigns lead to successful policy shifts at the state-level, which, in turn, become incorporated into new laws. When many new laws are introduced regionally and nationally, this is evidence that we are witnessing the amassed by-product of successful social movement activity – all of which is incorporated into the model. And, in the current equation which has complementary models, unsuccessful social movement activity around one policy shift is incorporated by the retention of existing policies or even the advancement of its complement into law.

Parsing the Effects on Popular Opinion:

Table One reports the results of the cross-sectional, time-series Gaussian regression equation that modeled popular support for marriage equality in the 50 states in the period from 1992 through 2015.

Table One: Fixed-Effects Gaussian Regression Model of the Level of Public Support for Marriage Equality in the 50 US States, 1992 –2015

Independent Variables	Coefficient (Standard Error)
Policy Action Within State:	
Change in State Law to Endorse Relationship Recognition	
Number of Years State Recognizes Marriage Equality	1.10 (0.24)*
State has introduced Civil Unions	2.21 (1.05)*
Change in State Law to Prohibit Relationship Recognition	
Constitutional Amendment Prohibiting Same Sex Marriage	-3.25 (0.70)*
Number of Years State has Constitutional Amendment	0.27 (0.09)*
State Legislative Action Endorses Relationship Recognition	
State Legislature Passes Bill on Marriage Equality/ Civil Unions	4.87 (1.01)*
State's Highest Court Endorses Relationship Recognition	
Number of Years Court Supports Marriage Equality/ Civil Unions	-0.09 (0.15)
Policy Action By Nearby States:	
State Laws in Neighboring or Nearby States Endorse Marriage Equality	
Number of Contiguous States with Marriage Equality	0.68 (0.35)*
Number of States in Same Region with Marriage Equality	0.85 (0.28)*
Policy Action in Other States:	
State Laws in Other States Endorse Civil Unions (or Equivalent)	
Number of States Nationally with Civil Unions (or Equivalent)	2.08 (0.13)*
State Laws in Other States Prohibit Marriage Equality	
Number of States Nationally with Constitutional Amendment	-0.23 (0.03)*
Number of States Nationally with Statutory Prohibition	0.01 (0.01)
Baseline Support	
Constant	28.60 (0.37)*

N = 750 Groups = 50 States Time: 24 consecutive years (1992-2015)
Correlation Structure: Fixed Effects (Within State) $R^2 = 0.64$; Sigma = 5.60; Rho = .56
F (10, 1163) = 186.66 P = 0.000
* Significant at the .05 level

The equation structure in the regression is constructed to correctly model cross-sectional, time-series data by utilizing model characteristics to reduce the potential for inherent bias introduced by using repeated measures of these same locations over time. Since we were primarily interested in the ability of policy shifts to alter popular opinion *within* a state, the current regression equation relies on a fixed effects approach, which tends to prioritize within-location effects in the selected form of the regression equation.

Such an approach allows the consideration of influences external to each respective state, but primarily highlights how such external influences shape opinion levels within each state.

Despite the incorporation of cross-sectional, time-series characteristics into the regression equation, the reliance on a Gaussian (Normal) probability distribution in this case aids the ease of interpretation of the results by reflecting many of the norms of interpretation traditionally associated with OLS regression models, including in interpreting strength, sign and significance. Consequently, for a one unit change in the relevant independent variable, we can expect a coefficient's change in the percent of popular support for marriage equality evinced among a state's population. And, in the current equation, the constant reflects the minimum baseline of support generally on marriage equality across the 50 states during this entire period – 28.6%.

Before addressing the implications of these results for the three competing models, it is worth noting five of the key findings offered by the current regression equation.

1) *The incorporation of a major policy shift into law matters when it comes to the level of popular support expected in a state.*

According to the current regression model, we can expect a 4.87% increase in subsequent support for marriage equality by a state's population around the time when the respective state legislature successfully passes a bill permitting comprehensive relationship recognition -- either marriage equality or civil unions -- of same sex couples.

Interestingly, in the current regression equation, an opinion by a state's highest court endorsing relationship recognition was not significant. This is surprising given that state courts have clearly been major players in facilitating the public engagement over marriage equality since the early 1990s (e.g., Barclay & Fisher 2006). For example, in Massachusetts in 2004 and Iowa in 2009, they legalized same sex marriage by judicial order. And, in California in 2008, Connecticut in 2008, and New Jersey in 2013, they

prompted state law that extra yard from existing domestic partnerships or civil unions to allow it to eventually introduce same sex marriage.

Yet, except in the Massachusetts and Iowa cases noted above, every other state with some form of relationship recognition for same sex couples has involved the state legislature. In such cases, the legislature has been a key player in, at least initially, determining the form, the substance, and the timing of such relationship recognition. Moreover, for most states, judicial action has occurred in the same direction and in close temporal proximity to any state legislative activity on marriage equality (e.g., Barclay 2010). These last two aspects – the shared directionality and the close temporal proximity -- raise the prospect that the action of states' highest courts around marriage equality is simply becoming temporally and directionally conflated in the current data with legislative action in ways that are statistically reflected in the apparent null effect evident in the current regression's results.

2) *Immediately after the newly introduced law takes effect, there is a discernible effect on the expected level of popular support in a state.*

This effect is evident whether the new law proscribes same sex marriage or alternatively, permits same sex marriage. Accordingly, the regression equation posited a 3.25% decline in popular support for marriage equality in states that had introduced a proscriptive amendment to their state constitution. As noted earlier, thirty states passed such amendments to their state constitutions. Similarly, the regression equation posited a 2.21% increase in popular support for marriage equality in states that initially introduced civil unions. Nine states introduced Civil Unions during the period under consideration.

3) *Over the long-term, a new state law matters in regards to the expected level of popular support in a state.*

Key to the question of the appropriate model of the effects of policy incorporation into law, the regression equation supports that a new state law matters over the long-term in regards to the expected level of popular support in a state. For example, for each additional year that a state maintains a constitutional amendment proscribing marriage

equality, the regression equation posits a 0.27% *increase* in popular support for marriage equality – note the difference in expected direction of the effect (emphasized in text) in relation to this state constitutional *prohibition* on same sex marriage. Although just over a quarter of a percentage point increase per year might seem a small effect, it is worth noting that the state with earliest introduction of a state constitutional amendment, Alaska, passed it in 1998; equivalent through 2014 of a 4.3% increase in expected popular support according to the current equation.

Similarly, for each additional year that a state maintains marriage equality as the law, the regression equation posits a 1.10% increase in popular support for marriage equality. In this case, the direction of the effect is as expected. More interesting is the size of the current effect. It represents a substantial effect because this 1.10% increase in support is occurring as a product of incorporating the law itself and it operates in addition to existing support already manifesting in the state in relation to same sex marriage. For example, this finding would propose that, by 2014, Massachusetts' population might be expected to be 11% more supportive of marriage equality than it might otherwise have been, merely because it introduced marriage equality into law in 2004 and has maintained it as the law in the decade since that action.

4) *Policy shifts by neighboring and nearby states act to influence the expected level of support for marriage equality in a state.*

The results from the regression equation support the idea that the policy shifts incorporated into law by neighboring and nearby states act to influence the expected level of support for marriage equality in a state. For example, for each additional state with marriage equality that is contiguous to a state, there is an expectation of a 0.68% increase in support for marriage equality amongst the state's general population. Similarly, for each additional state in the same region with marriage equality, there is an expectation of a 0.85% increase in support for marriage equality.

This finding may explain, in part, why states with marriage equality and civil unions often appear in close geographical proximity to one another. This occurs in New

England where all six of the states in that region presently have marriage equality as the law. Similarly, it occurs on the West Coast, where California, Nevada, Oregon, and Washington all possessed some form of relationship recognition for same sex couples. Beyond any similarities in social demographic characteristics and common cultural heritages shared across these locations, the actions of neighboring states might be thought to influence public opinion through a variety of means, including shared media markets and the heightened salience accorded the policy actions of neighboring states within local news reporting. In addition, the popular awareness of the effects on individuals from policy incongruence across states may be accentuated

5) *The accumulated policy shifts of all other states act to influence the expected level of support for marriage equality within a state.*

The regression equation confirms that the national legal picture, pieced together from the policy actions of individual states, influences the expected trend in public opinion within each state. For example, for each additional state that passed a state constitutional amendment proscribing marriage equality, there was an expectation of 0.23% decline in popular support within a state. Although the individual effect appears small, 30 states passed such prohibitions during the period under consideration to a combined effect, at its height, of a nearly 7% decline in the otherwise expected level of popular support evidenced in each state.

Similarly, for each additional state that introduced civil unions or an equivalent, there was an expectation of 2.08% increase in popular support within a state. Nine states introduced civil unions after 1999, reflecting an expected increase in support of 18.7% at the height of this activity.

As noted earlier, these numbers, along with the equation's constant, generally reflect the background environment at the national level on this policy issue. The larger national discussion of marriage equality was occurring throughout this period and the state policy shifts are simply indicators in the present equation for the back-and-forth dynamics of movement and counter-movement around this policy issue.

Applying the Findings to the Three Competing Models:

The findings from the regression equation speak directly to the possible validity of the three competing models in the current context.

Consensus Model:

The present findings challenge the validity of the Consensus Model. For policy shifts proscribing same sex marriages and those permitting same sex marriages, incorporation into law operated to infuse the respective policy shift in ways that, over time, went beyond any existing trend created by social movement and interest group activity. In both policy shifts, the noted additional effects were important in shaping the subsequent level of public support -- this finding was supported by the fact that they were statistically significant in the regression equation.

Overall, it is clear that for high salience issues, such as marriage equality, the act of incorporating a policy shift into law matters in terms of the expected levels of subsequent public opinion. However, given the chosen policy issue and the chosen time-frame, it is still possible that in low salience issues, the consensus model might still be the appropriate model for modeling subsequent opinion shift around the incorporation law of some policy issues.

Naturalization Model:

The Naturalization Model is supported by the findings offered by the current regression equation. For each additional year that a state maintains marriage equality as the law, the regression equation posits a 1.10% increase in popular support for marriage equality within that state. And, this effect is operating in addition to any existing trend in public opinion created by the ongoing activity of social movements and interest groups around the policy issue. As Barnes and Burke (2006) previously noted, policies that become embedded within law can sometimes allow organizational practices to realize and manifest the law in ways that hide its origins and act to naturalize its implementation for the general population.

Yet, the present findings also raise questions about the universal application of the Naturalization Model. As was noted above, one policy shift did not appear to be naturalized by its incorporation into law -- for each additional year that a state maintained a constitutional amendment proscribing marriage equality, the regression equation posits a 0.27% *increase* in popular support for marriage equality. The Naturalization Model incorporates a presumption that the policy shift garners additional support for the policy through its incorporation into law. Accordingly, the model would propose that laws advocating proscription of same sex marriage should lead over time to an increase in support for the policy position of this law, which, in the present case, would be evidenced by a decrease in the level of popular support for the policy's complement, marriage equality. Instead, as the apparent response to the presence of this proscriptive law, we find an *increase* of 0.27% per year in popular support for marriage equality within states with such constitutional prohibitions. This last finding might occur for two reasons.

One reason is that the discernible effect of naturalization might decay over time until it is no longer is overtly operative. In most cases, proscriptive laws and restrictive state constitutional amendments were introduced slightly earlier than laws that permitted marriage. It is possible that the effects from incorporation into law become so dominant that the actual effects from law become null as the law itself disappears into the everyday portfolio of social practices and social norms – this idea is consistent with the manner in which the naturalization model envisions law acting to mask much of the social control exercised and the social inequality encapsulated within everyday law (e.g., Ewick & Silbey 2003).

Second, the current result might also be a direct artifact of considering complementary policy shifts. As the tide of opinion slowly amasses toward the second policy shift, states permitting same sex marriage, it must by definition slowly depart from the first policy shift, states proscribing same sex marriage. The current result might simply be evidencing this change in the tide of public opinion.

Backlash Model:

By far, are most interesting part of the current results occur in relation to the Backlash Model. The present findings support the Backlash Model, but not in ways that are traditionally considered in relation to the issue of marriage equality. As noted above, for each additional year that a state maintained a constitutional amendment proscribing marriage equality, the regression equation posits a 0.27% *increase* in popular support for marriage equality. That is, the incorporation of a proscription on same sex marriage into law seems to have facilitated a backlash toward that policy in ways that lead to an increase in support for marriage equality.

The current finding is in complete contradiction to the traditional assumption that the introduction of marriage equality into law by a state will lead to a crystallization of opinion amongst the general population that leads to greater support for restricting marriage equality (e.g., Rosenberg 2008; Mucciaroni 2008; Klarman 2013). This existing assumption in the literature is not supported by the current regression results – there are no examples in our results of the incorporation of pro-same sex marriage laws leading to a decline in the subsequent levels of popular support for marriage equality. And, on this point, our findings seem consistent with the recent historical research around supposed backlash effects by Keck (2009) and Price and Keck (2013).

In addition, the very fact that the current findings (noted above) also support the Naturalization Model, which operates largely as a complement to the Backlash Model, indicates that the Backlash Model may be limited in its application similar to its Naturalization Model counterpart. The results support the idea that, just as the Naturalization Model may only generate effects for a limited time period, the Backlash Model may similarly occur in only some circumstances.

As we noted above, the current backlash may also be a simple artifact of considering policy shifts that are complementary. Yet, this finding would also be important, given that a hallmark of many social movement struggles is such

complementarities. Further, the legal arena has long been identified as an important site of observing contestation in the competition for dominance between pre-existing social norms and a contrary social norm (e.g., McCann 1998).

Figure Four: Expected Trends in Popular Support for Marriage Equality—New York and Alabama 2009-2015

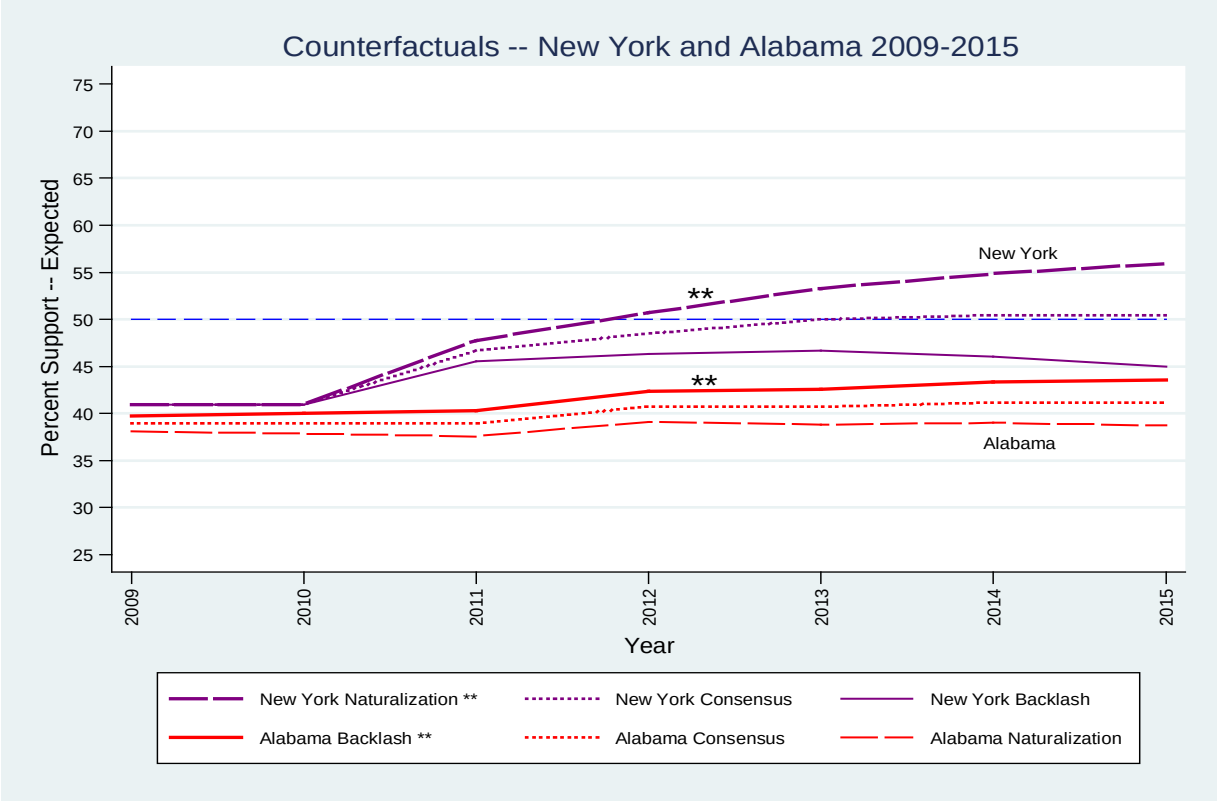


Figure Four graphically represents these three competing models using the underlying real data and the regression equation results as applied to counterfactuals. In this graphic, Alabama represents an apt example of a state with prohibitions on marriage equality embedded into state law through statute and constitutional amendment. New York represents an apt example of a state with prohibitions on marriage equality embedded into law through statute. For each state, their real position on each of the characteristics in the regression was replicated for the period 2000 through 2015, except for the difference in expected change in opinion over time, which was adjusted to reflect

the three competing models. The two asterisks (**) designate the two models, which were definitive in each location: Naturalization and Backlash.

These graphical representations of the models highlight some tantalizing prospects when one envisions two complementary policy shifts, as occurs in the case of marriage equality in which states are contemporaneously proscribing and permitting such relationship recognition. For example, naturalization of each policy shift – that is, for some states, naturalization of a policy that proscribes marriage equality and for other states, naturalization of a policy that permits marriage equality – could create a truly divergent set of paths by states around a singular policy issue. For states with same sex marriage proscribed, popular support for marriage would be in a slow decline through naturalization effects (as graphically represented by Alabama's dashed, red line in Figure Four). In contrast, for states with same sex marriage permitted, popular support for marriage would be slowly increasing (as graphically represented by New York's dashed, purple line in Figure Four). As can be observed from the divergence in these two lines over time, states would have created two distinctly separate policy paths with no possibility of future convergence.

In federal systems like the United States, these two distinctly separate policy paths at the state-level can also have important effects for interpreting the possibilities for policy diffusion from national-level information. *If* the collections of states that initially incorporate a policy shift into law subsequently evince a more rapid rate of popular support as proposed by the naturalization model *and if* these same states together represent a substantial percentage of the national population, they can lead subsequently to an increased rate in the trend of popular support at the national-level. Yet, this national trend could effectively mask a duality in approaches when considering opinion at the state-level. Since only states that incorporated the policy shift into law subsequently are now reflecting a more rapid rate of popular support, popular support in the states that did not act on the policy shift could easily be changing only minimally. Or, if these states enacted the complementary policy shift, these locations could even be manifesting declining support for the policy issue over time. Notwithstanding the appearance in

national-level polls of increasing support, these two completely different trends in opinion shift could be occurring across the states with a resultant divergence in the political chances of incorporating the policy shift into new locations.

Further, there is an inherent path dependency, given that these very trends in popular opinion would likely act to dissuade state action by elected officials, or even appointed judges (e.g., Casillas, Enns & Wohlfarth 2011), from enacting contrary policy. This may explain why a select set of states appear to consistently find themselves maintaining policies, such as segregation, prohibitions on consensual sodomy, and fornication laws, long after opinion and state law has markedly shifted on these policy issues in most other locations. They states may have allowed law to naturalize these policies in ways that entrench and embed them, even as their counterparts repudiate the policies and effectively embed their policy shift (e.g., Barclay & Fisher 2003). And, it may also explain why federal courts, rather than state policymakers, eventually act to bring these states into line behind a single consistent national position.

This possibility was notably not evident in the current findings, as shown by the presence of both Naturalization and Backlash Models. Taken together (as can be noted by comparison of the trend lines with two asterisks [**] in Figure Four), the two models managed to shepherd opinion in the same positive direction, even if their respective trend lines were increasing in support at very different rates.

Conclusion:

The simplest conclusion of the current research is that incorporation of a policy shift into law matters in terms of future opinion on the policy in the same state. It influences the attitudes of the population within each state and it does so well beyond any existing effects from the activities of social movements and interest groups. It also goes beyond the discursive elements offered by any public discussion that might occur in the legislative debate or during related court cases. Law literally has its own heft on public opinion in this process.

And, although we have long known that law operates to give authority and legitimacy to policy shifts in ways that act to social movements' advantage in persuading government agencies and state institutions to adjust their position (e.g., Scheingold 1974), the current findings identify another mechanism associated with the power of law that potentially assists social movements in altering pre-existing attitudes and behavior. Embedding them in law can make policy shifts "sticky" in ways that can make them harder to repeal. Nevertheless, it is apparently neither a permanent nor a foolproof approach. As the current findings demonstrate, policies once embedded in law can over time turn out to generate contrary effects in the face of ongoing contestation around a single social norm.

Furthermore, each state's action in incorporating a policy shift into law helps to craft a larger picture of legal change that acts to influence the opinion that occurs in other states. Through these effects on public opinion, legal action by a few states can subtly facilitate the cascading wave of change over a short period of time that seems to be the signature of so many policy shifts and is evident in the dynamics of the two current policy shifts.

Finally, the current research highlights that law operates at many levels. The results recognize immediate, short-term and long-terms from incorporating policy into law. They note that the source of law can potentially shape the reception of law. And, that the actions of other locations around law can act to shift our own opinions within a state as we grapple with similar policy issues. Overall, it reinforces the complexity that operates in the interchange between policy shift and law.

References:

Banaszak-Holl, Jane C., Sandra R. Levitsky, Mayer N. Zald, eds. 2010. *Social Movements and the Transformation of American Health Care.* New York: Oxford University Press.

Barclay, Scott. 2010. "In Search of Judicial Activism in the Same Sex Marriage Cases: Sorting the Evidence from Courts, Legislatures, Initiatives and Amendments." *Perspectives on Politics* 8(1): 111-126.

Barclay, Scott, and Shauna F. Fisher. 2003. "The States and Differing Impetus for Divergent Paths on Gay Rights, 1990-2001." *Policy Studies Journal* 31: 331-352.

Barclay, Scott, and Shauna F. Fisher. 2006. "Cause Lawyers and Social Movements, Failure and Success: Comparing the Two Waves of Same Sex Marriage Litigation," in Austin Sarat and Stuart Scheingold (eds), *Cause Lawyers and Social Movements.* Palo Alto: Stanford University Press. pp. 84-100.

Barnes, Jeb, and Thomas F. Burke. 2006. "The Diffusion of Rights: From Law on the Books to Organizational Practices." *Law & Society Review* 40(3): 493-524

Birkland, Thomas A. 1997. *After Disaster: Agenda Setting, Public Policy, and Focusing Events*. Washington, DC: Georgetown University Press.

Birkland, Thomas A. 2006. *Lessons of Disaster: Policy Change after Catastrophic Events.* Washington, DC: Georgetown University Press.

Buttice, Matthew K., and Benjamin Highton. 2013. "How Does Multilevel Regression and Poststratification Perform with Conventional National Surveys?" *Political Analysis* 21: 449–467.

Casillas, Christopher, Peter K. Enns and Patrick C. Wohlfarth. 2011. "How Public Opinion Constrains the U.S. Supreme Court." *American Journal of Political Science* 55(1): 74–88.

Eskridge, William N. Jr. 1993. "A History of Same-Sex Marriage." *Virginia Law Review* 79: 1419-1513.

Eskridge, William N. Jr. 2002. *Equality Practice: Civil Unions and the Future of Gay Rights*. New York: Routledge.

Ewick, Patricia, and Silbey, Susan S. 1995. "Subversive stories and hegemonic tales: toward a sociology of narrative." *Law & Society Review* 29(2): 197–226.

Ewick, Patricia, and Silbey, Susan S. 1998. *The Common Place of Law: Stories from Everyday Life.* Chicago: University of Chicago Press.

Ewick, Patricia, and Silbey, Susan S. 2003. “Narrating social structure: stories of resistance to law.” *American Journal of Sociology* 108(6): 1328–1372.

Habermas, Jurgen. 1998. *Between Facts and Norms: Contributions to a Discourse Theory of Law and Democracy*. Cambridge, MA: MIT Press.

Haider-Markel, Donald P. 2007. “Representation and Backlash: The positive and negative influence of descriptive representation.” *Legislative Studies Quarterly* 32(1): 107-133.

Keck, Thomas M. 2009. “Beyond Backlash: Assessing the Impact of Judicial Decisions on LGBT Rights.” *Law & Society Review* 43(1): 151-185.

Klarman, Michael J. 2013. *From the Closet to the Altar: Courts, Backlash, and the Struggle for Same-Sex Marriage*. New York: Oxford University Press.

Klarman, Michael J. 2005. “Brown and Lawrence (and Goodridge).” *Michigan Law Review* 104(3): 431-489.

Lax, Jeffrey R., and Justin H. Phillips. 2009a. “Gay rights in the states: Public opinion and policy responsiveness.” *American Political Science Review* 103(3): 367–386.

Lax, Jeffrey R., and Justin H. Phillips. 2009b. “How should we estimate public opinion in the states?” American Journal of Political Science 53(1):107–121.

Lax, Jeffrey R., and Justin H. Phillips. 2012. The democratic deficit in the states. American Journal of Political Science 56(1):148–166.

Linzer, Drew A. 2013. “Dynamic Bayesian Forecasting of Presidential Elections in the States." *Journal of the American Statistical Association* 108(501): 124-134.

Mayhew, David R. 2004. *Congress: The Electoral Connection*. 2nd Ed. New Haven: Yale University Press.

McCann, Michael. 1994. *Rights at work: Pay equity reform and the politics of legal mobilization*. Chicago: University of Chicago Press.

Mucciaroni, Gary. 2008. *Same Sex, Different Politics: Success and Failure in Struggles over Gay Rights*. Chicago: University of Chicago Press.

Muir, William K. 1967. *Prayer in the Public Schools: Law and Attitude Change.* Chicago: University of Chicago Press.

Pacheco, Julianna. 2011. “Using national surveys to measure dynamic U.S. state public opinion: A guideline for scholars and an application.” *State Politics and Policy Quarterly* 11: 415–439.

Park, David K., Andrew Gelman, and Joseph Bafumi. 2004. “Bayesian multilevel estimation with poststratification: State level estimates from national polls.” *Political Analysis* 12: 375–385.

Pralle, Sarah. 2006. “The Mouse that Roared: Agenda-Setting in Canadian Pesticides Politics.” *Policy Studies Journal* 34(2): 171-194.

Price, Richard S. and Thomas M. Keck. 2013. “Movement Litigation and Unilateral Disarmament.” Paper presented at Annual Meeting of the Western Political Science Association, Hollywood CA, March 2013

Rosenberg, Gerald N. 2008. *The Hollow Hope: Can Courts Bring About Social Change?* 2nd Ed. Chicago: University of Chicago Press.

Sarat, Austin. 1990. ".. The Law Is All Over": Power, Resistance and the Legal Consciousness of the Welfare Poor.” *Yale Journal of Law & the Humanities* 2(2) :343-379.

Scheingold, Stuart. 1974. *The politics of rights: Lawyers, public policy and political change*. New Haven: Yale University Press

Silver, Nate. 2013. “How Opinion on Same-Sex Marriage Is Changing, and What It Means.” *New York Times*, March 26, 2013: (http://fivethirtyeight.blogs.nytimes.com/2013/03/26/how-opinion-on-same-sex-marriage-is-changing-and-what-it-means/?_php=true&_type=blogs&_r=0)

Sunstein, Cass R.1999. *One Case at a Time: Judicial Minimalism on the Supreme Court*. Cambridge: Harvard University Press.

Warshaw, Christopher, and Jonathan Rodden. 2012. “How should we measure district-level public opinion on individual issues?” *Journal of Politics* 74(1): 203–219.

Reviewers' Appendix: MRP and Forecast Overview

In order to examine public attitudes on same-sex marriage in the states over the course of several years requires a substantial amount of survey data.

To generate sufficient sample sizes, we first combine many national surveys by year in order to generate a sizeable sample of respondents who are geocoded by state. We list the sample sizes from the surveys we used for this estimation procedure in Table Two. The geo-coded, national-level polling data was accumulated from proprietary data obtained by the Williams Institute as well as all applicable public opinion data from public sources, such as the data held by the Roper Center and ICPSR data archives.

Table Two. Sample size of national survey data by year used in the MRP estimation

Year	Sample Size	Year	Sample Size
1992	1,216	**2003**	**14,467**
1993	2,644	**2004**	**18,727**
1994	3,075	**2005**	**2,183**
1995	801	**2006**	**6,453**
1996	6,012	**2007**	**5,556**
1997	1,392	**2008**	**11,298**
1998	1,521	**2009**	**6,293**
1999	1,951	**2010**	**7,975**
2000	4,297	**2011**	**10,310**
2001	3,530	**2012**	**19,740**
2002	3,527	**2013**	**3,950**

The first step in MRP is to estimate a mixed effects logistic regression model, to measure the effect of individual demographic attributes and regional contexts. As in Equation 1, the model estimates opinions in favor of same-sex marriage:

$$\Pr(y_i = 1) = \text{logit}^{-1}(\beta_0 + \beta_1 * \text{female}_i + \beta_2 * \text{black}_i + \beta_{12} * \text{female}_i * \text{black}_i + \alpha_{j[i]}^{\text{age}} + \alpha_{k[i]}^{\text{edu}} + \alpha_{s[i]}^{\text{state}}); \quad \textbf{(1)}$$

$$\alpha_j^{\text{age}} \sim \text{N}(0, \sigma_{\text{age}}^2), \text{ for } j = 1, \ldots, 4;$$

$$\alpha_k^{\text{edu}} \sim \text{N}(0, \sigma_{\text{edu}}^2), \text{ for } k = 1, \ldots, 4;$$

$$\alpha_s^{\text{state}} \sim \text{N}\left(\alpha_{m[s]}^{\text{region}} + \beta_3 * \text{prev.vote}_s, \sigma_{\text{state}}^2\right), \text{ for } s = 1, \ldots, 51;$$

$$\alpha_m^{\text{region}} \sim \text{N}(0, \sigma_{\text{region}}^2), \text{ for } m = 1, \ldots, 5.$$

We nest states (including the District of Columbia) within their respective Census regions, except for the District of Columbia, which is given its own regional effect.[1] The effect of states is also predicted by the previous vote share received for the Republican

[1] This is common practice in MRP estimation (Lax and Phillips 2009a), because D.C. has been known to have distinctive political positions than the rest of the country.

presidential candidate in the most previous election. This predictor provides an amount of information that helps produce more distinctive state effects, which is also how MRP overcomes other estimation procedures, such as, disaggregation (Lax and Phillips 2013).

The model estimates can now be used to estimate public support for same-sex marriage for each intersection of the demographic and regional characteristics (e.g., the probability of supporting same-sex marriage among men, aged 18-29 with a college degree who reside in California). By grouping these probabilities by state, we compute weighted averages of the probability of support by state, π_c. We use population estimates (N_c) from the Current Population Survey for each of 3,264 cross-classifications of demographics and states and computer the weighted number of respondents who support same-sex marriage in a state (θ_s). This is the weighted sum of the expected probability of support for each cross-classified group by state:

$$\theta_s = \sum_{c \epsilon s} N_c * \pi_c. \quad (3)$$

Equation 3 provides the number of respondents who support same-sex marriage in a state. We perform this estimation for every year. Once we have the population of supporters of same-sex marriage in the state over the years (θ_{st}). We then model a forecast to incorporate state-level survey data and our annual estimates to provide robust trends in public opinion.

The forecast is based on the model developed by Linzer (2013). We start by taking the population of same-sex marriage supporters in each state-year-poll (θ_v), which includes the MRP estimates and any state-level poll we were able to find from news agencies, polling reports, and data archives such as the Odum Institute. We model the proportion in a state every year that is supportive of same-sex marriage (π_{st}). The first year with estimates is defined as $t = 1$, and the final quarter is the last time-point to which we forecast $t = T$. We model opinions as follows:

$$\theta_v \sim \text{Binomial}\left(\pi_{s[v]t[v]}, \sum_{v \epsilon s} N_v\right). \quad (4)$$

The proportion in favor of same-sex marriage (π_{st}) is estimated for all time periods, and is decomposed to state-year effects (β_{st}) and national-year effects (δ_t) on a logit scale:

$$\pi_{st} = \text{logit}^{-1}(\beta_{st} + \delta_t)$$

The model is identified by anchoring the national effect for the final year to zero. A previous forecast model developed by Silver (2013) is used as an informative forecast for our target year:

$$\beta_{sT} \sim \text{N}(\text{logit}(h_s), s_s^2)$$

where h_s are the predictions of the Silver (2013) model. The precision parameter, $\tau = s_s^{-2}$, constrains how much reliance the model will have on these forecasts. Linzer (2013) recommends that $\tau_s = 10$, which does not constrain the estimates to rely heavily on the state estimates Silver produced.

The remaining estimates for the state and national effects are modeled with reverse random-walking priors, which "begins" on T. Each state and national effect is given the prior distribution:

$$\beta_{st}|\beta_{s,t+1} \sim \mathrm{N}\left(\beta_{s,t+1}, \sigma_{\beta}^{2}\right)$$
$$\delta_{t}|\delta_{t+1} \sim \mathrm{N}\left(\delta_{t+1}, \sigma_{\delta}^{2}\right)$$

The rate of annual state change is provided by σ_{β}^{2} and rate of annual change is σ_{δ}^{2}. We estimate this model to generate estimates up to 2015.