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Abortion Liberalization in World Society, 1960-2009

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Abstract

Controversy sets abortion apart from other issues studied by world society theorists, who consider the tendency for policies institutionalized at the global level to diffuse across very different countries. We conduct an event history analysis of the spread (however limited) of abortion liberalization policies from 1960 to 2009. After identifying three dominant frames (a women's rights frame, a medical frame, and a religious, natural family frame), we find that indicators of a scientific, medical frame show consistent association with liberalization of policies specifying acceptable grounds for abortion. Women's leadership roles have a stronger and more consistent liberalizing effect than do countries' links to a global women's rights discourse. Somewhat different patterns emerge around the likelihood of adopting an additional policy, controlling for first policy adoption. Even as support for women's autonomy has grown globally, with respect to abortion liberalization, persistent, powerful frames compete at the global level, preventing robust policy diffusion.

Introduction

Numerous once-controversial issues concerning women (such as property rights, suffrage, equal inheritance, and protection from domestic violence) are now widely accepted around the world. The issue of abortion is not among them. Powerful and effective opposition has countered a modest global trend toward abortion liberalization. Recent policy reforms in the United States, Nicaragua, and many other countries demonstrate that purposely terminating pregnancies remains a highly controversial issue even after 50 years of mobilization.

The disagreement surrounding abortion sets the issue apart from many others studied by world society theorists, who highlight how scripts held in world society and embodied in international organizations and other global actors lead nation-states to adopt very similar policies.¹ One of the primary contributions of world society theory is to explain why ideas and related policies spread rapidly despite vast cultural and resource differences across

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countries. That is, the theory emphasizes how priorities and approaches become taken for granted in the international community. For example, a government today cannot argue that women lack the intellectual capacity of men and therefore should not be allowed to vote, although this type of argument was commonplace a century ago. In the case of abortion, however, very little is taken for granted. Certain ideas concerning the practice have legitimacy because they link to global scripts, yet no single approach dominates. Examining this critical case allows us to better theorize the way world society plays into policymaking in the context of high contestation and weak institutionalization.

In this paper, with information on 128 countries, we examine the initial and subsequent adoption of abortion liberalization policies (allowing abortion in the case of rape, fetal impairment, or to protect the mental health of the pregnant woman). We deploy an event history analysis of the period from 1960 to 2009 to test the importance of three dominant frames concerning abortion: a women's rights frame, a medical frame, and a religious, natural family frame. We find that actors related to the medical frame (health INGOs and physicians) show a consistent association with initial abortion liberalization. This suggests the importance of a professional, scientific discourse when global institutionalization is weak. In addition, women's rights indicators signal the importance of local strategic actors: women in parliament matter more than women's international nongovernmental organizations (WINGOs) and treaty ratification. Finally, a history of Catholicism tends to be negatively associated with abortion liberalization. While this is not surprising to anyone who follows debates concerning abortion, the outsized role of the Catholic Church, which tends to be collectivistic and traditional in its orientation, is not well-explained by the current state of world society theory.

Background

Constructivist scholars show that policies diffuse because key actors invoke the ideational scripts institutionalized in the global system (for a review, see Dobbin, Simmons, and Garrett 2007). Epistemic communities and international organizations transmit these scripts and offer plans of action for states striving for international legitimacy. Further, the diffusion of policies in the world system tends to be rapid, as nation-states are culturally constructed to be homogenous and thus share a common set of purposes (Strang and Meyer 1993). Thus, a single dominant script tends to propel the widespread adoption of similar policies, particularly those policies linked to individualization and rationalization (Frank, Camp, and Boutcher 2010; Mathias 2013; Schofer 2003). Such studies document the existence of a world society—an institutionalized system of understanding that defines actors and actions, problems and solutions. These studies consistently show that country-level membership in international nongovernmental organizations, that is, an INGO effect, predicts policy adoption and other similar outcomes (Schofer et al. 2012). The scope of such diffusions is remarkable, encompassing laws concerning human rights (Cole 2005), sex (Frank et al. 2010), marriage (Kim et al. 2013), female genital cutting (Boyle 2002), chemical weapons

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¹World society theorists emphasize the social construction of the nation, not as a unique edifice crafted by local citizens and interest groups, but as a global actor embedded in an institutionalized system of rules, roles, capacities, and inter-relationships (Meyer et al. 1997). Drawing on Berger and Luckmann (1966), the theory suggests that needs and interests are socially constructed. Consequently, world society theory represents a departure from functional models of policy-making.

(Price 1995), the environment (Frank, Hironaka, and Schofer 2000), the death penalty (Mathias 2013), and many other issues.

The case of abortion is unique, however, because policy models are contested at the global level and multiple ideational frames persist, some of which are contradictory. As a consequence, no single institutionalized script emerges. In particular, abortion politics at the global level include three ideational frames. A *women's rights-based frame* is linked to human rights and their consecration in world society. This framework emerges from the broad principle of individualization because it recognizes women apart from the roles they play in corporate bodies (citizen, mother, Catholic) and views them as existentially equal to each other and to men across collective boundaries (Berkovitch 1999; Donnelly 2002; Frank et al. 2010). An example of the women's rights frame is the International Women's Health Coalition (2008) declaration that: "A woman's ability to exercise her rights to control her body, to self-determination, and to health depends, in part, on her right to determine whether to carry a pregnancy to term."

An alternative *scientific medicalized frame* emerges from the appropriation of abortion discourses by doctors. The medicalization framework is rationalistic, drawing on physicians' professional expertise. It highlights doctors' unique competence in understanding pregnancies and in properly diagnosing and responding to complications related to them. Because doctors ostensibly know best, this frame also highlights the potentially grave consequences of state policies that interfere with doctor-patient relationships or threaten criminal penalties for physicians carrying out their professional duties. For example, when the World Medical Association (WMA 2009) passed an emergency resolution urging Nicaragua to repeal its 2006 anti-abortion law, the WMA highlighted the life and health of women and fetuses, and also expressed concern that the new law improperly placed physicians at risk of imprisonment or suspension from medical practice for following professional guidelines concerning abortions.

Finally, a *natural family frame* arises from the global moral authority of the Catholic Church and is spread through the Church's organizational structure and through transnational evangelical organizations, such as Human Life International. The natural family frame challenges individualization by emphasizing women's essential responsibilities as child-bearers and mothers over their aspirations as individuals. For example, in Pope Paul VI's (1974) letter concerning the United Nation's International Women's Year, he lauds women, not as individuals, but for their importance to families and reproduction:

And since the fundamental and life-giving cell of human society remains the family, according to the very plan of God, woman will preserve and develop, principally in the family community, in full co-responsibility with man, her task of welcoming, giving and raising life, in a growing development of its potential powers.

The natural family frame also challenges rationalization by privileging religious rather than scientific understandings of fetal development. Again quoting Pope Paul VI in 1974:

To all those collaborating in the preparation of International Women's Year..., we indicate as a solid point of reference the figure of the Blessed Virgin.

By drawing women's dignity from her place in the collective family unit and her links to the Blessed Virgin Mary, the Catholic Church (at least initially) adopted a framing of the abortion issue that is very unique from either a rights or a science discourse.

In comparison to the other two frames, this frame is less consistent with general world society principles. Actors deploying the natural family frame appear to be aware of this. Defensive posturing, for example, is evident in a 1994 blog posting by the head of the Catholic League for Religious and Civil Rights: “[W]ould anyone ever have imagined that those opposed to the ruthless decimation of the next generation by abortion—supposedly required on the pretext that the world is, or will be, ‘overpopulated’—would be the ones automatically assumed to be the ‘bad guys’...?” (Whitehead 1994). In addition, these activists today are more likely to frame their arguments in terms more consistent with the other two types of frames, for example, by highlighting a fetus' human right to life and by deploying particular scientific claims concerning fetal development. World society theory implicitly suggests that frames like the natural family frame should lose authority over time with activists seeking alternative frames more closely aligned with global principles.²

In sum, the three frames are organized around different foundational principles, and are promoted by different actors. While the ideas they foster are institutionalized in some realms, their applicability in the abortion sphere is highly contested. In this sphere, no institutionalized script is taken for granted (see Friedland and Alford 1991; Thornton and Ocasio 2008).

The History of Women's Rights, Medical, and Natural Family Framings of Abortion

Contestations among actors deploying the three frames have developed over the course of many decades. Here, we detail the historic interplay of the three major frameworks at the global level. This history suggests that there is no unified global consensus on abortion today because of the intense contestation between those promoting the women's rights frame and those promoting a natural family frame. As we show in our statistical analysis, this has implications for the diffusion of abortion liberalization policies; the less-politicized medical frame ultimately seems most influential.

In the early- to mid-1900s, abortion was not a global issue. In wealthy countries, abortions were generally illegal but doctors could perform them for “therapeutic” reasons (Luker 1985; Rolston and Eggert 1994). Consequently, a medical framework deferential to physicians was dominant in these countries. For example, women's physical and mental health was a major point of discussion in the United States in the decades prior to *Roe v. Wade* (Calderone 1960; Kummer 1967; Ziegler 2009). Furthermore, the *Roe v. Wade* decision itself was rooted in a medical understanding of pregnancy and, in particular, the professional autonomy of physicians (Rhoden 1986; Joffe, Weitz, and Stacey 2004).

²The questions of whether, when, and how anti-abortion activists have increasingly linked into globally-institutionalized concepts of individual rights and science, are important. However, they are outside the scope of this paper, which is addressing the question at a more macro level.

Abortion first entered the global arena indirectly through discourses concerning population control (Greenhalgh 1996; Ziegler 2009). The 1960s and 1970s were fraught with concern over the population “bomb”—the moment at which the human population would outstrip the food supply (Greenhalgh 1996; Barrett and Frank 1999). The U.S. led the charge to spread population control programs throughout the developing world (Green 1993).³ The common understanding was that population reduction was essential for poverty reduction and economic growth (Green 1993). Because the U.S. was a leader in spreading the population control message, the medical framework for understanding abortion appeared early in global discourses and was transmitted to developing countries (Barrett, Kurzman, and Shanahan 2010). The limited targeting of population programs exclusively toward developing countries eventually led to resistance from many of those countries, with charges that population control (and incidentally abortion) was an imperialistic imposition (Ziegler 2009).

The Catholic Church also objected to the new population control efforts. In 1968, Pope Paul VI issued a Papal Encyclical (the *Humanae Vitae*) that reiterated the Catholic Church's view opposing all forms of “artificial” birth control. The Pope (1968) was very clear that “above all, all direct abortion, even for therapeutic reasons, [is] to be absolutely excluded as [a]... means of regulating the number of children.” The message was addressed to “all men of good will” as well as Catholic clergy and individuals and included sections targeting public authorities and scientists. However, because at the time the primary method of sharing the Encyclical was to read or paraphrase it during Catholic Masses, its influence on public policy was most likely indirect.

Women's rights groups, while generally supportive of access to birth control, were also critical of population control initiatives. They objected to the goal of reducing population, believing the more important goal was an individualistic one: enhancing women's abilities to determine the size of their families and the spacing of their children (Friedman 2003; Joachim 2003). Within the women's movement, north/south coalitions were formed emphasizing contraception's potentially positive impact on maternal mortality as well as women's empowerment (Joachim 2003). In general, the 1970s was an important period for women's rights; it was the United Nations Decade of the Woman, and it culminated with the adoption of the international Convention for the Elimination of all forms of Discrimination against Women (CEDAW) in 1979. CEDAW called for the protection of reproductive rights, but did not include specific language on abortion.

An important turning point, which simultaneously undercut the population control agenda and made abortion a global issue in its own right, was the International Conference on Population and Development in Mexico City in 1984. Here, Ronald Reagan's administration announced a new policy prohibiting U.S. funding for any organization outside the U.S. that provided abortions or advice concerning abortions (Green 1993). Reagan had previously dismissed population concerns, expressed skepticism concerning the need for birth control, and declared abortion murder (Finkle and Crane 1985). The United States, which liberalized

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³U.S. officials never explicitly promoted or funded abortions, but were generally not actively opposed to abortion access when it appeared in population control policies at this time (Green 1993).

abortion via *Roe v. Wade* in 1973, began actively discouraging abortion globally in the 1980s. Population control experts and feminists, uneasy allies to be sure (see Greenhalgh 1996), came together in opposition.

Perhaps bolstered by Reagan's actions and an increasingly vocal transnational evangelical movement, the Catholic Church strongly countered abortion liberalization at the next International Conference on Population and Development in Cairo in 1994. Women's rights organizations pushed for language in the conference document relating to abortion (McIntosh and Finkle 1995). However, the Church leveraged the Holy See's position as a Permanent Observer in the United Nations to form strategic alliances with Catholic and Muslim countries and block consensus on the issue (Friedman 2003).⁴ Strong opposition to abortion in the United States Congress ensured that President William "Bill" Clinton stayed out of the controversy and focused more on other issues (Samuel 2007). In contrast to the voices of the Catholic Church and the women's movement, there was no organized input from physicians (McIntosh and Finkle 1995). In the end, the principles emanating from the Cairo Conference included ensuring access to abortion, but only under circumstances where abortion was legal. There was no call to liberalize abortion laws.

Subsequent to the Cairo Conference, the Catholic Church was criticized for its unwillingness to compromise (Abdullah 1996). The contingent from the Holy See attending the Fourth UN Conference on Women held in Beijing the following year operated with more subtlety (Friedman 2003). Nevertheless, its impact was felt. Although the principles articulated at the Beijing Conference singled out unsafe abortion as both a public health and a human rights problem, they once again did not explicitly call for the legalization of abortion. To date, the Cairo and Beijing Conferences represent the pinnacle of the global dispute over abortion.⁵

By the late 1990s, it appears that both transnational religious organizations and women's rights organizations were turning their primary attention to other issues. When Kofi Annan, then-President of the United Nations, created the Millennium Development Goals, reproductive rights were not included (Samuel 2007). There was no International Conference on Population and Development in 2004; lower-profile regional meetings were held instead (Samuel 2007). Within the natural family movement, when conservative religious leaders came together in a World Congress of Families in 2000, they indicated that abortion was only a secondary concern (Buss and Herman 2003). It is impossible to know whether or how the very public discord at the Cairo and Beijing Conferences entered into these later developments, but today there is no cohesive, institutionalized global framework regarding abortion. Nevertheless, many countries did legalize abortion over the period. Thus, the history of abortion policies raises the important questions of how, when, and why policies diffuse when principles are contested in world society.

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⁴The Church has previously blocked language concerning abortion at an expert-only population conference in Bucharest in 1954.

⁵To investigate shifts in global discourse on abortion, we used Google's Ngram function to chart the occurrence of the words "pro-life" and "pro-choice" in books in English from 1960 to 2006. Results showed that both terms increased in prevalence until the mid-1990s, but declined shortly thereafter as terms like "reproductive health" gained in prominence. However, due to the lack of comparable phrases in non-English books and growing concerns over using Google Books metadata for statistical analyses, we have opted not to include the charts here.

Hypotheses on Factors Associated with Abortion Liberalization over Time

It is by now well established that policies embraced by world society tend to spread globally. Nation-states often look to exemplar states, neighbors (either proximally or socio-culturally), or international organizations for models of which “socially acceptable” policies should be implemented and how to implement them (Dobbin et al. 2007). World society scholars take this one step further to argue such policy models are broadly agreed upon in a common global culture (Meyer et al. 1997). World society theorists predict that countries most deeply embedded in the global system are the ones that will adopt policies consistent with the system's core principles (see Figure 1), which include individualization and rationalization (Frank et al. 2010; Mathias 2013; Schofer 2003).

The problem with applying these core ideas to the issue of abortion is that each potential model of regulation has important detractors—no single perspective is embraced or fully institutionalized. It therefore becomes important to theorize *which* perspectives will be most influential and how. Generally, the theory would still predict that those frames most consistent with the core global principles would be influential. However, weak institutionalization represents an opportunity for alternative frames to gain more leverage than would otherwise be the case. World society theory would also predict that, regardless of the low level of institutionalization of abortion policy globally, links to INGOs and treaty ratifications should continue to influence policy outcomes by providing more weight to the core global principles. We now develop these ideas as they relate to each of the three abortion frames.

In terms of content, world society scholars have shown that individualization is one particularly influential frame (Boyle 2002; Frank et al. 2010). Individualization designates autonomous individuals as societies' primary beneficiaries and motivators (Frank and Meyer 2002) and is associated with the spread of capitalism, democracy, and mass education, among other things (Frank et al. 2010). The global rise of human rights is evidence of the new sacredness assigned to individual persons in world society (Cole 2005; Mathias 2013).

Because they are framed in terms of human rights and approach women as individuals rather than as mothers and wives, women's rights is the abortion frame most closely linked to individualization. World society theorists would thus predict that a women's rights discourse at the global level would be particularly influential for the spread of abortion liberalization. The presence of international nongovernmental organizations is one indicator of how tightly linked countries are to world discourses. Thus, from a world society theoretical perspective, one would first expect that *participation in women's INGOs within countries will be positively associated with their liberalization of abortion laws*. Participation in international treaties related to women, most notably CEDAW, also reflects acquiescence to a global women's rights frame and may thus directly facilitate the adoption of a range of policies related to women, including abortion. Therefore, a second hypothesis is that *countries' ratification of the CEDAW Convention will be associated with the liberalization of abortion laws*.

Given that abortion, as a woman's right, is not taken for granted at the global level, we also expect local actors to be influential in predicting abortion liberalization. In particular,

women in parliament may be able to advocate for policies protecting women's rights and provide an important political opportunity for pro-abortion activists. In their cross-sectional analysis of 112 countries, Asal et al. (2008) find that women's political empowerment within countries has a large positive effect on legal abortion (cf. Pillai and Wang 1999). Similarly, Htun and Weldon (2012) show that women's policy agencies and autonomous feminist movements significantly predicted the adoption of anti-violence-against-women policies. We therefore expect that *women's presence in the lawmaking body as evidenced by the number of women in parliament will be associated with abortion liberalization*. It is important to note that, unlike many other human rights, which tend to expand rights typically granted to white male adults to people of color, females, and children, abortion as a right can only apply to women (Asal, Brown, and Figueroa 2008; Ramirez and McEneaney 1997). This may reduce the expected associations of the women-rights-related indicators on policy adoption.

Rationalization is another deeply institutionalized principle within the global system (Drori, Jang, and Meyer 2006; Schofer 2003). Rationalization refers to the systematic pursuit of valued ends (such as health) through clearly specified means (such as a medical treatment). A fully rationalized system applies everywhere; it is not contingent on local circumstances. For example, professional medical associations create statements of “best practices” that can be used by doctors in any location. Because of its links to rationality and the importance of rationalization in the global system, we expect carriers of a medical approach to abortion to also have special legitimacy. At the global level, we hypothesize that *participation in health INGOs within countries will be positively associated with abortion liberalization*. In addition, more physicians within a country indicates the influence of medical discourses there. For example, Joffe et al. (2004) describe how abortion policies in the United States have been largely influenced by physicians' attempts to integrate some abortion services into mainstream medical practices as part of a larger professionalization project. This leads us to hypothesize that *greater numbers of physicians per capita will be associated with abortion liberalization*.

While we expect carriers of the women's right and medical frames to be influential because of their links to key global principles, the weak institutionalization of abortion policy signals the significance of forces counter to liberalization as well. Predominantly Catholic countries will have many carriers of a natural family perspective, including important policymakers. The Catholic Church has been open to partnering with evangelical Christian churches and religiously oriented INGOs. In Nicaragua, for example, the local branch of Human Life International (ANPROVIDA) coordinated with the Catholic Church and the Evangelical Alliance to organize huge anti-abortion rallies in 2006 (Heumann 2007). The result was a repeal of all abortion allowances in that country. It is worth noting that other religions, such as Islam, also prohibit abortion in most cases beyond saving the life of the mother. However, we expect Catholicism to be especially influential because of the prominence of the Church as a global actor. Thus, we anticipate that *Catholic countries will be less likely to adopt abortion liberalization*.⁶

⁶Over the time period we examine, there is little change in the percentage of Catholics within any given country; a Catholic tradition therefore represents a better indicator of ties to the Catholic Church.

Finally, once a threshold is crossed within a country allowing some grounds for abortion, it is more likely that additional policy grounds will follow. Allowing abortion in the case of rape tended to be among the earliest grounds adopted in the 20th Century. We thus expect that *the adoption of rape as a ground for abortion will be associated with the adoption of policies in the case of fetal impairment and to protect the pregnant woman's mental health.*

Methods

Our analysis focuses on laws on the books rather than compliance or evasion of the law. While the latter is critically important, the former has significance as well. Formal law is a symbol of cultural values; observing change and stability in formal laws provides insight into the process of reform and resistance (see Boyle and Meyer 1998; Durkheim 1964 [1893]; Gusfield 1986). In addition, even when the law is not strongly enforced, the threat of enforcement is nevertheless a form of social control, and the law continues to shape debate and provide important cultural capital to some groups and not others (Frank, Hardinge, and Wosick-Correa 2009).

Our analysis is distinct from previous studies of abortion policies that have tended to focus on particular countries, especially the United States. These case studies provide a rich understanding of group contests within national contexts. However, there are certain questions that case studies cannot answer, such as whether the adoption of abortion policies is linked to particular institutionalized frameworks. To answer this question, we must simultaneously consider the actions of the full range of countries within the global system.

Abortion Policy Measures

The dependent variables in our event history analyses are policy adoption events over time. The policies we consider are laws allowing abortion in cases of pregnancy resulting from rape, to protect the mental health of the pregnant woman, and in cases of fetal impairment. We do not analyze policies allowing abortion to save the life and physical health of the pregnant woman because a large percentage of countries adopted these grounds prior to 1960, which is the first year in which we have systematic data for our independent variables. Table 1 is a snapshot of global abortion laws in 2009.⁷

To construct our dependent variables, we began with *Abortion Policies: A Global Review* (United Nations 2002, 2006), which lists grounds for abortion and provides brief historical summaries of legislation for countries up to 1992. We updated this data using various sources to cover the period between 1992-2009, and we cross-checked the UN's coding with the text of national laws reported in the *Annual Review of Population Law* (Harvard Law School 2008) and the Report of the International Federation of Professional Abortion and Contraception Associates, *Abortion Law of Each Nation State* (Rowlands 2012). For 178 countries that existed during all or part of the period between 1920 and 2009, we coded the year of passage of the following abortion grounds, among others: 1) to terminate a pregnancy that resulted from rape or incest; 2) to preserve the mental health of the pregnant

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⁷A visual representation of current abortion laws is available at: <http://worldabortionlaws.com/map/>.

woman; and 3) to terminate a pregnancy in which the fetus is known (or in some countries suspected) to be impaired (“fetal impairment”).

Allowances for rape often include incest in the same provision. Rape allowances sometimes appear without incest allowances, but incest allowances never appear without rape allowances. We therefore treat rape as the primary and common concern across these provisions. Former British colonies may have an allowance for rape based on case law rather than statutory law. In *Rex v. Bourne*, a 1938 criminal case, a British court ruled that a doctor would not be punished for performing an abortion on a girl who had been raped. The doctor testified that bringing the pregnancy to term would have made the girl a “physical and mental wreck” (Anon 1938). *Rex v. Bourne* provided a defense against criminal conviction for doctors if they performed abortions on women who had been raped, which is somewhat narrower than actually making abortion legal in the case of rape. Most countries governed by court cases such as *Rex v. Bourne* eventually adopted statutory language that codified a rape allowance, but others continue to rely on the case precedent. We ran separate statistical models alternatively treating a country as having a rape allowance if it was subject to *Rex v. Bourne* or only at the point that it codified rape as a ground for abortion. There were no notable differences across the models. Here, we show the models based on the measurement of statutory law.

For mental health, we consider a country having mental health as a ground for abortion when the law explicitly mentions the mental health or psychological well-being of the pregnant woman, or official court interpretations specify that mental health is included under the general health considerations. For fetal impairment, a country has a fetal impairment allowance when it permits abortion when either or both parents have genetic disorders, when the pregnant woman is older than a stated age, or when there are actual signs of fetal impairment.

Independent Measures

We include the following independent measures:

Women's International Nongovernmental Organizations (WINGOs)—In order to measure world society linkages, we use citizen ties to international non-governmental organizations (Boli and Thomas 1999). Specifically, we include WINGO linkages measured by the number of individual WINGO memberships held by citizens in a country. This reflects cross-national and over-time variations in a nation's embeddedness in international women's rights movements.⁸ Data from Lee (2012) provide information on annual country-level memberships for 116 WINGOs from 1945.⁹ Data include all INGOs that fall into the “women” category from the *Yearbook of International Organizations* (UIA, various years) and meet four additional criteria: (1) an organization must have members (states, national associations and individuals) in at least three different countries; (2) it must possess a

⁸Because world society transmits many messages that may influence abortion legalization, it is possible that the larger world society, rather than the WINGO faction of the polity, is influencing abortion legalization. To test this, we also included a measure of all INGOs in our models. The results did not change; INGOs, like WINGOs, were not statistically significantly associated with the adoption of abortion allowances.

⁹Lee coded membership data from the *Yearbook of International Organizations* (Union of International Associations various years).

permanent secretariat and corresponding headquarters; (3) it must function autonomously; and (4) it should not be a religious organization given that most religious organizations oppose abortion.¹⁰ We log this measure to account for skew.

CEDAW ratification—We include a time-varying dummy variable denoting the year of CEDAW ratification and years after the ratification (1=ratified).

Percentage of women in parliament—We include the percentage of women in parliament as an indicator of national women's political representation. Data are updated from Paxton, Green, and Hughes (2008) to include women's representation in parliament between 2004 and 2009 (Inter-Parliamentary Union 1995).

Health INGOs—Similar to WINGOs, we include the number of health-related INGOs to which any individual in a country belongs. This measure reflects a nation's embeddedness in international scientific, medical discourses and activities. Data are taken from Union of International Associations (various years).¹¹ We log this measure to account for skew.

Physicians per 1,000—The degree of medicalization is measured by the number of physicians per 1,000 people in a country and is time-varying (World Bank 2010).

Catholicism—We derive information on Catholicism from the Association of Religion Data Archives, which includes a national level dataset of religious adherents compiled from the World Christian Database (WCD) and its predecessor, the *World Christian Encyclopedia* (Maoz and Henderson 2013; Barrett 1982; Barrett, Kurian, and Johnson 2001). We consider a country to have a Catholic tradition if, on average, at least 50 percent of its population was Catholic during the time period; thus, the indicator is non-time varying.¹² With the religion indicator, we are capturing religious cultural traditions. We use Catholic majority rather than a continuous measure of percentage Catholic because the latter would give great weight to relatively small numbers of personal religious conversions (or secularization) rather than the historical influence of the Catholic Church on national culture and domestic institutions. We categorize Catholicism into Catholic and other.¹³

Communist countries—In order to identify countries with a communist legacy, we include a time-varying dummy variable indicating countries with Marxist-Leninist governments inspired by the Soviet Union (1=Communist country). The countries include Afghanistan (1978-1987), Albania (1946-1976), Angola (1975-1992), Benin (1975-1990) Bulgaria (1946-1990), Cambodia (1975-1989), China (1949-current), Republic of Congo (1970-1992), Cuba (1961-current), Czechoslovakia (1948-1990), Ethiopia (1974-1991), Hungary (1949-1989), People's Democratic Republic of Korea (1948-current), Laos (1975-current), Mongolia (1924-1990), Mozambique (1975-1990), Poland (1945-1989), Romania

¹⁰An exception is made for “Catholics for Choice,” an organization advocating women's rights for abortion.

¹¹We would like to thank Nolan Phillips and Kristen Shorette for sharing this data.

¹²With the idea that sizeable but smaller numbers of Catholics within a country could be significant, we tried other, lower thresholds as well. This did not significantly alter the results.

¹³We replicated the models, setting Catholic as the reference category, and including a dummy variable for each of the other major world religions. We did not observe any large overall “religious” effect.

(1947-1989), Somalia (1976-1991), Vietnam (1976-current), and Yugoslavia (1943-1992). We include it primarily as a control, though models without the measure were similar to the ones presented here.

Government consumption as a percentage of Gross Domestic Product (GDP)

—We include annual government spending as an indicator of relative size and capacity of the government. This indicator controls for the possibility that the size of government is influencing both the size of the health sector and abortion policy adoption. Data are measured as general government final consumption expenditure as a percentage of total gross domestic product (World Bank 2010).

Independence—Many newly independent countries adopt a full slate of laws, including those related to abortion, at the time of independence. The timing of these laws is more closely related to how many new countries are created in any given year than to global diffusion processes, and thus needs to be controlled. We include a dummy variable for the year of independence (Correlates of War Project 2008).

GDP per capita—We include GDP per capita to control for national wealth and economic development (World Bank 2010). We log this standard measure to account for skew.

Statistical Analysis

We first present event history models examining the effects of indicators related to the first adoption of any abortion allowance from 1960 to 2009.¹⁴ We focus on policy adoption rates over time. In a separate set of models, we consider differences across the cases of rape, mental health, and fetal impairment allowances. The unit of analysis is the country, and since far and away most countries adopt an allowance only once, we do not treat the adoption of a ground for abortion as a repeatable event. In rare instances where an allowance was adopted, repealed, and adopted again, we focus on the first adoption event. We use Cox proportional hazard models and a partial likelihood function. Using semiparametric methods provides a more general way to control for unobserved temporal variability.¹⁵

Cross-sectional models may be biased due to reverse-causal effects between key variables. Event history models focus on rates rather than levels of the dependent variable, and they allow us to exploit the temporal ordering of independent variables and dependent outcomes in a manner that avoids some of the weaknesses of cross-sectional models (see Blossfeld, Golsch, and Rohwer 2007). We use discrete time models because many of our variables, including abortion policy, change yearly.

In our analysis, time is counted as historical time (Beck, Katz, and Tucker 1998), where risk begins at particular historical dates rather than occurring on a country's internal clock. Countries that have already adopted the relevant allowance prior to 1960 are left censored and are excluded from the analyses relating to that allowance. The extent of left censoring

¹⁴The start and end times of our analyses are constrained by data availability, but cover the period when the vast majority of the mental health, rape, and fetal impairment allowances were adopted.

¹⁵A Cox model assumes an arbitrary baseline hazard and is appropriate when hazard rates may change over time.

differs depending on the dependent variable. For example, 13 countries already had the rape allowance by 1960 while 7 and 6 countries, respectively, experienced left censoring for mental health and fetal impairment. All other countries enter the analysis in 1960 or in their year of independence. Once it adopts an abortion allowance, a country makes an exit from the analysis. Countries that have not yet adopted rape, mental health, and fetal impairment allowances by 2009 are right censored. The extent of right censoring also varies by the dependent variable. Eighty-three countries still did not have a rape allowance by 2009 while 96 and 86 countries, respectively, remained without a mental health or fetal impairment allowance.

Results

In 1970, just 10 to 15 percent of countries had laws that permitted abortions in the cases of rape, mental health, or fetal impairment (see Figure 2). That percentage had increased to around 50 percent of countries for each allowance by 2009. Although this is consistent with the idea that policies diffuse globally as they become institutionalized, in some ways, the spread of abortion policies is atypical. Specifically, the rates at which countries were adopting abortion allowances were much faster from 1970 to 1987 than from 1991 to present.¹⁶

The decreasing rate of adoption over time suggests that the trend toward abortion liberalization may be slowing rather than turning into a “norm cascade” (Finnemore and Sikkink 1998). Allowing abortion on the grounds of the woman's mental health is especially notable; the percentage of countries that allow abortions to protect the mental health of the woman has actually decreased in recent years. For example, in 2009, Fiji's new Crime Code explicitly eliminated the mental health consideration for abortion. Stories from other countries also imply some retrenchment away from abortion liberalization, but in ways that are too subtle to be captured by our dependent variables. For example, in 2003, Russian president Vladimir Putin reduced the number of possible socioeconomic justifications for abortion (e.g., if the father is disabled or deceased) from thirteen to four (Ivanova 2006). Whether these policy changes are isolated incidents or signal a new trend remains to be seen.

Table 2 shows associations with the first adoption of any of the three abortion allowances (the rape allowance was typically adopted first). Considering the women's rights frame first, the ratification of CEDAW is not associated with the first adoption of any of the three grounds for abortion (rape, mental health, fetal impairment).¹⁷ WINGO linkages are positively associated with the adoption of the first abortion allowance (Model 1), but this effect disappears when additional controls are entered into the models. Women's domestic political representation is consistently associated with the first adoption of one of the abortion allowances (Models 2 and 5). Model 2 indicates that each increase in the percentage of female representatives in parliament results in a four percent ($\exp(.04) = 1.04$)

¹⁶The sudden increase in 1989 seen in Figure 3 is due to the breakup of the Soviet Union, which historically had liberal abortion policies. This is controlled for in the analysis with the year-of-independence indicator.

¹⁷Concerned that a WINGO effect might be masked by countries' wealth or highly correlated with women in parliament, we ran the same models without these other indicators. There was still no WINGO effect.

increase in the rate at which a country will adopt a rape allowance for abortions. In other words, an increase from 10 percent to 20 percent of female representatives in parliament is associated with a 40 percent increase in the likelihood of adopting an allowance for abortions.

In terms of the scientific medical frame, health INGOs (Model 3) and physicians per thousand (Models 4 and 5) were both significantly associated with the first adoption of one of the three allowances. Every additional increase in the logged country membership to health INGOs indicated a country will be 1.7 times ($\exp(.52) = 1.68$) more likely to liberalize its abortion policy (Model 3). For each additional physician per thousand people, there is a 27 percent ($\exp(.24) = 1.27$) increase in the rate of liberalization (Model 4). In models not shown, we included the number of domestic medical associations instead of physicians per thousand. The results were similar for the two indicators. Altogether, these indicators support our hypothesis that the medical frame is a powerful basis for liberalizing abortion policies within countries.

In terms of the natural family frame, our prediction that Catholic countries would be less likely to adopt any of the allowances was unsupported with respect to the adoption of the first of the three grounds for abortion. A country's Catholic tradition had no statistically significant association with first abortion-policy adoption. This finding is consistent with world society theory, in that frames less closely aligned with core global principles carry less weight. Combined with the minimal impact of WINGOs and CEDAW, this could imply that too much visible conflict at the global level impedes the success of all frames involved. The explicit and public disagreement between the Church and women's rights groups at Cairo may have undercut the legitimacy and impact of both. The finding may also signal the unique position of the Catholic Church. As noted above, the first of the three grounds adopted is usually to allow abortion in the case of rape. Just as the Roman Catholic Church condemns the "killing of the innocent child," it also condemns rape.¹⁸ While the Church is clearly opposed to abortion, even when pregnancies result from rape, Church officials may be less vocal in their opposition to this allowance compared to others. For example, in Brazil, where the majority of population is Catholic, abortion is illegal except in cases of rape or when the mother's life is in danger.

We ran additional analyses to further investigate the effect of women in parliament. One possibility is that women in parliament are a proxy for women's general empowerment within a country. We explore this in Table 3, where we test the relationship between two indicators of women's general empowerment—female labor force participation and female secondary enrollment—on the liberalization of abortion. The results in Table 3 show that these other measures of women's empowerment are not significantly associated with the first adoption of an abortion allowance, nor does either variable nullify the effect of women in parliament.¹⁹ Thus, it appears the strategic placement of women in the political sphere

¹⁸(http://www.vatican.va/archive/ccc_css/archive/catechism/p3s2c2a6.htm)

¹⁹We also examined whether autonomous feminist movements were associated with liberalization using data from Htun and Weldon (2012). Again, we found no significant effect. We do not report those results here due to a significant drop in our sample size.

matters for abortion liberalization rather than women's overall access to resources and status within a society.

To determine whether different factors are associated with each of the three legal grounds for abortion, we also ran models predicting each policy independently (Table 4). Taken together, the models in Table 4 show some important variation in the factors associated with different grounds for abortion. Specifically, although a Catholic tradition was not associated with the first liberalization of an abortion policy (Table 2) or abortion on the basis of rape (Model 10 in Table 4), Catholic countries were significantly less likely to legalize abortion on the grounds of mental health or fetal impairment (Models 11 through 14 in Table 4).

As one would expect, Models 12 and 14 show that the initial adoption of rape as a ground for abortion is a very strong predictor of the adoption of subsequent grounds for abortion, i.e., mental health or fetal impairment. Beyond this, a strongly negative effect of being a Catholic country emerges. For the mental health allowance (Model 12), the effects of women in parliament and physicians become non-significant while the effect of WINGOs actually become significantly negative. For fetal impairment, when the prior adoption of a rape allowance is controlled (Model 14), only a Catholic tradition is associated with liberalization at the probability of .05. An association with the global women's rights movement (represented by WINGOs) may have a detrimental effect; perhaps global women activists are seen as outsiders. The effect of physicians and women in parliament are indirect, operating through their effects on the adoption of the rape allowance but not subsequent allowances.

Turning next to our control variables, communist countries were no more likely to adopt each type of allowance. Acquiring independence between 1960 and 2009 is strongly associated with a higher likelihood of legalizing grounds for abortion but only when the prior rape allowance is considered. Government consumption is positively associated with mental health and fetal impairment allowances (Models 12 and 14) but not the rape allowance (Model 10). Given that the detection of mental health and fetal impairment issues requires medical capacity, a larger state, which may also have a larger welfare state, may be more likely to permit abortion in conjunction with other welfare concerns. Economic development is not associated with the adoption of rape as a ground for abortion but is associated with the mental health and fetal impairment allowances when the prior adoption of a rape allowance is controlled.

We had initially anticipated that other factors might be consequential in the spread of abortion policies. In particular, we thought that population control discourses, U.S. financial aid, and democracy might be influential. None of the indicators for these factors ever reached statistical significance in any of our models, however, and we do not include those results here. The U.S. has been inconsistent over time in its position on abortion, and this helps to explain the lack of associations for the aid indicator. Even when U.S. administrations interpreted abortion as a women's rights issue, domestic conflict over the issue appears to have kept them from making abortion liberalization a high priority. We did not have a strong hypothesis as to why democracy would affect abortion policy; the lack of effect for democracy was thus not surprising.

Discussion and Conclusion

Drawing upon an event history analysis of abortion liberalization from 1960 to 2009, we assess when and how policies relating to a highly-contested issue diffuse. We summarize our findings in Figure 3. Indicators of a scientific, rationalized frame at both the global and national levels show a consistent association with initial abortion allowances. At the global level, health INGOs were strongly correlated with the adoption of any of the three forms of abortion liberalization (in the case of rape, to protect the pregnant woman's mental health, or because of fetal impairment), signaling a connection between embeddedness in a global scientific network and policy diffusion. At the national level, abortion liberalization policies were associated with the number of physicians in a country. Women in parliament also appear influential in the adoption of allowances liberalizing abortion. This domestic indicator of women's empowerment was more influential in predicting abortion liberalization than global women's rights networks.

Historically, government officials have accepted medical justifications as a nonpolitical basis for intervention in nation-state affairs (Boyle 2002). Indeed, in the case of abortion, the scientific discourse of medicine has been less politicized and less controversial than either the women's rights or religious frames. For example, while representatives of the International Planned Parenthood Federation and the Catholic Church were in open opposition to each other at the Cairo Conference in 1994, physicians stayed mostly on the sidelines. Within countries, physicians have portrayed modest abortion liberalization as a reasonable compromise between two intransigent positions, such as when Chilean doctors Faúndes and Barzelatto (2006) wrote *The Human Drama of Abortion*. In light of our findings, it would be fruitful for future research to consider whether the impact of science-related discourses is primarily about professional expertise (see Barrett, Kurzman, and Shanahan 2010; DiMaggio 1991), the unique legitimacy of physicians, perceptions that medicine is noncontroversial, or some combination of these factors. It will also be important to determine whether the effect of physicians and health INGOs is mediated by institutionalized relationships within countries between doctors and the state (Halfmann 2011).

Turning to the next factor, the impact of women's rights indicators points to the importance of interested actors in local positions of authority. Women's rights matter for abortion liberalization, but primarily when linked to domestic political opportunities through women in parliament.²⁰ The ratification of CEDAW had no impact on the adoption of abortion policies. WINGOs were influential, but not independently of women in parliament. This suggests, first, that local strategic actors are the most effective carriers of a women's rights discourse on this controversial issue. In other words, a women's rights perspective on abortion is not so taken for granted that national policymakers unthinkingly incorporate it into their legal codes. Although the principle of women's rights is institutionalized in the global system (Berkovitch 1999; Ramirez, Soysal, and Shanahan 1997), our findings suggest

²⁰Previous work has not found strong evidence of world society effects on women's political representation. For example, Fallon, Swiss, and Viterna (2012) found no effects of WINGOs on women in parliament; rather, women's political representation can be tied to the democratization process.

that local actors and strategic action are more influential in actually affecting policy. Second, our results add weight to previous findings that the presence of female policymakers increases the likelihood that decision-making bodies will address women's issues (Chattopadhyay and Duflo 2004). This may be especially important in the case of abortion politics because abortion rights are uniquely female.

Surprisingly, nations' historic ties to the Catholic Church were not associated with the adoption of the first allowance beyond saving the life of the pregnant woman. This first allowance was typically an allowance for abortion in the case of rape.²¹ Catholic countries were as likely as other countries to adopt rape as a ground for abortion when other factors were controlled. There are a number of possible explanations for this. One is that, since the Catholic Church forbids both rape and abortion, Church officials in some countries express stronger opposition to grounds for abortion other than rape. Another possibility is that the Church's opposition to abortion in the case of rape has somewhat less legitimacy than its position on other types of abortion allowances. In international discussions of rape as a war crime, the Church has been a highly visible opponent of access to abortion for the rape victims (Chappell 2008). Local abortion advocates may use this position to portray the Church as unsympathetic to rape victims, reducing the impact of the Church's policy position for this policy.

Overall, because controversy at the global level has prevented a single institutionalized script from emerging, we find that local contextual factors are salient when it comes to abortion allowances. The multiple ideational frames – women's rights, scientific/medical, and natural family – appear to affect countries differently depending on which frames are most closely linked to key domestic actors. Our findings extend the theory of institutional logics (Thornton and Ocasio 2008) by suggesting that local actors are especially powerful when no single understanding holds sway.

The previous patterns emerged when we considered the adoption of any grounds allowing abortion. Somewhat different patterns emerged when we considered the likelihood of adopting additional grounds for abortion after a rape allowance was on the books. Liberalizing abortion in the case of rape greatly increased the chances of adopting grounds based on mental health and fetal impairment. Beyond this, indicators related to medical and women's rights discourses were no longer significantly associated with policy change. This means that they influence subsequent policy adoption only indirectly, by influencing the adoption of the rape allowance.

Although some Catholic countries were willing to adopt rape as a ground for abortion, Church allies were apparently able to keep that allowance from cascading into other grounds for abortion. Being a Catholic country was strongly and negatively associated with the adoption of subsequent abortion allowances when the adoption of a rape policy was controlled. The diminished impact of women in parliament and the stronger effect of Catholicism may reflect the more polarized views of women's rights activists and Catholic Church officials relative to physicians. Women's rights activists tend to call for abortion on

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²¹Or the first adoption of any of the three grounds for abortion, which is largely driven by the adoption of a rape allowance.

demand while the Catholic Church position is a complete ban on all abortions. While physicians may be satisfied with middle ground policies,²² these other actors may not be. These findings signal that the natural family frame gains salience as policies move further away from it. Church officials may be less persuasive in fighting initial policy changes than later ones that appear more “radical.”

Our results are relevant to recent discussions concerning the ascendance of individualism and the related decline of collectivism in world society. Specifically, they suggest that the collectivistic discourses promoted by the Catholic Church are still salient in some circumstances, preventing the full institutionalization of certain principles. Although the Church's discourse has become more individualistic over time, for example, discussing the human rights of the fetus, the Church has always emphasized family as the core unit of society and reproduction as the natural purpose of a family. In this framing, women's appropriate roles and aspirations are derived from the collective family unit. Thus, while world society scholars have documented a dramatic denouement in “collectivism” and a related ascendance in “individualization” (Frank, Camp, and Boucher 2010; Boyle 2002), we find that collectivist frames continue to play a role in shaping abortion policies around the world. Rather than treating the historical corporatist characteristics of states as a side note, we suggest that the question of when, why, and how corporatist orientations remain vibrant is an important area for future research.

Our findings have implications for the core premise of world society theory: that policies diffuse. Scholars consistently find that policy diffusion derives from the contours of an individualized and rationalized world society, whereby nation-states draw from the culture of the global system and thus adopt similar policies to one another (much like Frank, Hironaka, and Schofer 2000; Frank, Hardinge, Wossick-Corea 2009; Torfason and Ingram 2010; and others). Following these trends for other issues, we expected abortion to be liberalized in countries deeply embedded in world society as measured through participation in women's rights INGOs and treaties (especially in the case of rape). However, we found inconsistent support for this effect. Connectedness to world society through international women's rights treaties had no statistically significant effect on liberalization in nearly all models, and WINGOs had no effect once women in parliament was controlled. In addition, only a slight majority of countries have liberalized abortion at all beyond saving the life of the pregnant woman, and domestic factors are at least as predictive as global connections.

Why the weak world society effect? We suggest several possible reasons. First, the idea that women have the right to terminate pregnancies has simply not reached the level of global institutionalization that other rights, such as women's suffrage or education, have achieved. The highly charged nature of abortion in both the global arena and domestic contexts makes “ceremonial” adoption more difficult, that is, adoption to express conformity or deflect criticism but with no intent to fully implement a policy (Hafner-Burton and Tsutsui 2005).

²²Doctors tend to be skeptical of both total bans on abortion and abortion on demand. For example, the book cover of Faúndes and Barzelatto (2006) describes how the authors “reject the idea that the world is made up of only two types of people: those in favor of abortion and those against abortion. The authors...have found that the great majority of people believe that a world without abortion would be a better place for everybody, but at the same time accept that induced abortion can be a moral decision under certain circumstances...” (bold removed).

The expressive adoption of a controversial policy likely invites unwanted opposition to key decision makers and instigates fierce battles over resources, particularly if opposition groups force policymakers to “show their hand” by enforcing an unpopular policy. In addition, the lack of consensus or coherency in world society on abortion points to multiple sources of legitimacy to be conferred upon states (Halliday and Shaffer 2015), thus rendering ceremonial adoption of any single policy unnecessary. A second possibility is that the world is still early in the abortion-liberalization institutionalization process, and that a more typical diffusion story will ultimately be evident. The fact that the trends in adopting grounds for abortion rose and then plateaued, however, cuts against this expectation—at least in terms of this “spell” of reform activity (Halliday 2009).

Finally, some cautionary notes are in order. This analysis only looks at policy-level changes. It does not provide any direct evidence concerning access to abortions or rates of abortion. Although we suspect that there is a connection between policy and practice, we also know that abortions are inaccessible for many women in countries and regions where they are formally legal, and accessible in other countries and regions where they are formally illegal. In addition, our analysis had to end at a particular moment in time although abortion politics are ongoing. There has been some retrenchment of abortion liberalization in a few countries in recent years. These changes tend to occur in countries where abortion policies were already very restricted (e.g., Chile) or to modify policies at the margin (as in Russia, where the number of “social” allowances for abortion were reduced). At this point, these changes appear more aberrational than the signal of a new counter-trend. If retrenchment continues and intensifies, at some point in the future it would be important to see if the same factors explored here matter in reverse or if completely different processes are at work.

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References

- Abdullah, Yasmin. The Holy See at United Nations Conferences: State or Church? *Columbia Law Review*. 1996; 96:1835–75.
- Anon. A Charge of Illegal Abortion – *Rex v. Bourne*. *Lancet*. 1938; 232:220–26.
- Asal, Victor; Brown, Mitchell; Gibson Figueroa, Renee. Structure, Empowerment and the Liberalization of Cross-National Abortion Rights. *Politics & Gender*. 2008; 4(2):265–84.
- Barrett, David B. *World Christian Encyclopedia: A Comparative Study of Churches and Religions in the Modern World, AD 1900-2000*. New York: Oxford University Press; 1982.
- Barrett, David B.; Kurian, George T.; Johnson, Todd M. *World Christian Encyclopedia*. New York: Oxford University Press; 2001.

- Barrett, Deborah; John Frank, David. Population Control for National Development: From World Discourse to National Policies Pp 198–221. In: Boli, John; Thomas, George, editors. *Constructing World Culture: International Nongovernmental Organizations Since 1875*. Stanford, CA: Stanford University Press; 1999.
- Barrett, Deborah; Kurzman, Charles; Shanahan, Suzanne. For Export Only: Diffusion Professionals and Population Policy. *Social Forces*. 2010; 88(3):1183–1207.
- Beck, Nathaniel; Katz, Jonathan N.; Tucker, Richard. Taking Time Seriously: Time-Series-Cross-Section Analysis with a Binary Dependent Variable. *American Journal of Political Science*. 1998; 42(4):1260–88.
- Berger, Peter; Luckmann, Thomas. *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City, NY: Doubleday; 1966.
- Berkovitch, Nitza. *From Motherhood to Citizenship: Women's Rights and International Organizations*. Baltimore, MD: Johns Hopkins Press; 1999.
- Blossfeld, Hans-Peter; Golsch, Katrin; Rohwer, Gotz. *Event History Analysis with Stata*. New York: Psychology Press, Taylor and Francis Group; 2007.
- Boli, John; Thomas, George, editors. *Constructing World Culture: International Non-Governmental Organizations since 1875*. Stanford: Stanford University Press; 1999.
- Boyle, Elizabeth Heger. *Female Genital Cutting: Cultural Conflict in the Global Community*. Baltimore, MD: Johns Hopkins University Press; 2002.
- Boyle, Elizabeth Heger; Meyer, John W. Modern Law as a Secularized and Global Model: Implications for the Sociology of Law. *Soziale Welt*. 1998; 49:275–94.
- Buss, Doris; Herman, Didi. *Globalizing Family Values: The Christian Right in International Politics*. Minneapolis: University of Minnesota Press; 2003.
- Calderone, Mary S. Illegal Abortion as a Public Health Problem. *American Journal of Public Health*. 1960; 50:948–54. [PubMed: 13806906]
- Chappell, Louise. Opposition: The Politics of Gender at the International Criminal Court. In: Abu-Laban, Yasmeen, editor. *Gendering the Nation-State: Canadian and Comparative Perspectives*. New York: Cambridge University Press; 2008. p. 139
- Chattopadhyay, Raghabendra; Duflo, Esther. Women as Policy Makers: Evidence from a Randomized Policy Experiment in India. *Econometrica*. 2004; 72(5):1409–43.
- Cole, Wade M. Sovereignty Relinquished? Explaining Commitment to the International Human Rights Covenants, 1966-1999. *American Sociological Review*. 2005; 70(3):472–95.
- Correlates of War Project. State System Membership List, v2008.1. 2008. Retrieved (correlatesofwar.org)
- DiMaggio, Paul J. Constructing an Organizational Field as a Professional Project: U.S. Art Museums, 1920-1940. In: Powell, Walter W.; DiMaggio, Paul J., editors. *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press; 1991. p. 267-9.
- Dobbin, Frank; Simmons, Beth A.; Garrett, Geoffrey. The Global Diffusion of Public Policies: Social Construction, Coercion, Competition, or Learning? *Annual Review of Sociology*. 2007; 33:449–72.
- Donnelly, Jack. *Universal Rights in Theory and Practice*. Ithaca: Cornell University Press; 2002.
- Drori, Gili S.; Jang, Yong Suk; Meyer, John W. Sources of Rationalized Governance: Cross-National Longitudinal Analyses, 1985-2002. *Administrative Science Quarterly*. 2006; 51(2):205–229.
- Durkheim, Emile. *The Division of Labor in Society*. New York: Free Press; 1964.
- Fallon, Kathleen M.; Swiss, Liam; Viterna, Jocelyn. Resolving the Democracy Paradox: Democratization and Women's Legislative Representation in Developing Nations, 1975 to 2009. *American Sociological Review*. 2012; 77(3):380–408.
- Faundes, Anibal; Barzelatto, Jose S. *The Human Drama of Abortion: A Global Search for Consensus*. Nashville: Vanderbilt University Press; 2006.
- Finkle, Jason L.; Crane, Barbara B. Ideology and Politics at Mexico City: The United States at the 1984 International Conference on Population. *Population and Development Review*. 1985; 11(1): 1–28.

- Finnemore, Martha; Sikkink, Kathryn. International norm dynamics and political change. *International Organization*. 1998; 52(4):887–917.
- Frank, David John; Camp, Bayliss J.; Boutcher, Steven A. Worldwide Trends in the Criminal Regulation of Sex, 1945 to 2005. *American Sociological Review*. 2010; 75(6):867–93.
- Frank, David John; Hironaka, Ann; Schofer, Evan. The Nation-State and the Natural Environment over the Twentieth Century. *American Sociological Review*. 2000; 65:96–116.
- Frank, David John; Hardinge, Tara; Wosick-Correa, Kassia. The Global Dimensions of Rape-Law Reform: A Cross-National Study of Policy Outcomes. *American Sociological Review*. 2009; 74(2):272–90.
- Frank, David John; Meyer, John W. The Profusion of Individual Roles and Identities in the Postwar Period. *Sociological Theory*. 2002; 20(1):86–105.
- Friedland, Roger; Alford, Robert R. Bringing Society Back In: Symbols, Practices and Institutional Contradictions. In: Powell, Walter W.; DiMaggio, Paul, editors. *The New Institutionalism in Organizational Analysis*. Chicago: University of Chicago Press; 1991. p. 232–63.
- Friedman EJ. Gendering the Agenda: The Impact of the Transnational Women's Rights Movement at the UN Conferences of the 1990s. *Women's Studies International Forum*. 2003; 26:313–31.
- Greenhalgh, Susan. The Social Construction of Population Science: An Intellectual, Institutional, and Political History of Twentieth-Century Demography. *Comparative Studies in Society and History*. 1996; 38(01):26–66.
- Green, Marshall. The Evolution of US International Population Policy, 1965–92: A Chronological Account. *Population and Development Review*. 1993; 19(2):303–21.
- Gusfield, Joseph R. *Symbolic Crusade: Status Politics and the American Temperance Movement*. Champaign, IL: University of Illinois Press; 1986.
- Hafner-Burton, Emilie; Tsutsui, Kiyoteru. Human Rights in a Globalizing World: The Paradox of Empty Promises. *American Journal of Sociology*. 2005; 110:1373–1411.
- Halfmann, Drew. *Doctors and Demonstrators: How Political Institutions Shape Abortion Law in the United States, Britain, and Canada*. Chicago: University of Chicago Press; 2011.
- Halliday, Terence C. Recursivity of Global Normmaking: A Sociolegal Agenda. *Annual Review of Law and Social Science*. 2009; 5:263–89.
- Halliday, Terence C.; Shaffer, Gregory. Transnational Legal Orders. In: Halliday, Terence C.; Shaffer, Gregory, editors. *Transnational Legal Orders*. Cambridge: Cambridge University Press; 2015. p. 3–74.
- Harvard Law School. *Abortion Laws of the World*. *Annual Review of Population Policy*. 2008. Retrieved October 18, 2013 (<http://www.hsph.harvard.edu/population/abortion/abortionlaws.htm>)
- Heumann, Silke G. Abortion and Politics in Nicaragua: The Women's Movement in the Debate on the Abortion Law Reform 1999–2002. *Culture, Health & Sexuality*. 2007; 9(3):217–31.
- Htun, Mala; Weldon, S Laurel. The Civic Origins of Progressive Policy Change: Combating Violence against Women in Global Perspective, 1975–2005. *American Political Science Review*. 2012; 106:548–69.
- International Women's Health Coalition. *Access to Safe Abortion Is a Human Right*. 2008. Retrieved April 18, 2013 (<http://www.iwhc.org/>)
- Inter-Parliamentary Union. *Women in Parliaments*. 1995. Retrieved (<http://www.ipu.org/wmn-e/classif-arc.htm>)
- Ivanova, Elena. Meeting the Challenge of New Teenage Reproductive Behaviour in Russia. In: Daguerre, A.; Nativel, C., editors. *When Children Become Parents: Welfare State Responses to Teenage Pregnancy*. Chicago: University of Chicago Press; 2006. p. 185–99.
- Joachim, Jutta. Framing Issues and Seizing Opportunities: The UN, NGOs, and Women's Rights. *International Studies Quarterly*. 2003; 47(2):247–74.
- Joffe, Carole E.; Weitz, TA.; Stacey, CL. Uneasy allies: pro-choice physicians, feminist health activists and the struggle for abortion rights. *Sociology of Health & Illness*. 2004; 26:775–96. [PubMed: 15383041]

- Kim, Minzee; Longhofer, Wesley; Boyle, Elizabeth Heger; Brehm, Hollie Nyseth. When Do Laws Matter? National Minimum-Age-of-Marriage Laws, Child Rights, and Adolescent Fertility, 1987-2009. *Law & Society Review*. 2013; 47(3) TBD.
- Kummer, Jerome M., editor. *Abortion: Legal and Illegal (A Dialogue Between Attorneys and Psychiatrists)*. Santa Monica, CA: Pamphlet published by the editor; 1967.
- Lee, Dong-Ju. Paper presented at the Annual Meeting of the American Sociological Association. Denver: 2011. International Linkages and Liberalization of Abortion—Competing Institutional Logics and International Organization Networks.
- Luker, Kristin. *Abortion and the Politics of Motherhood*. Berkeley, CA: University of California Press; 1985.
- Maoz, Zeevand; Henderson, Errol A. The World Religion Dataset, 1945-2010: Logic, Estimates, and Trends. *International Interactions*. 2013; 39:265–91.
- Mathias, Matthew D. The Sacralization of the Individual: Human Rights and the Abolition of the Death Penalty. *American Journal of Sociology*. 2013; 118(5):1246–83.
- McIntosh, C Alison; Finkle, Jason L. The Cairo Conference on Population and Development: A New Paradigm? *Population and Development Review*. 1995; 21(2):223–60.
- Meyer, John W.; Boli, John; Thomas, George; Ramirez, Francisco O. *World Society and the Nation-State*. *American Journal of Sociology*. 1997; 103:144–81.
- Paxton, Pamela; Green, Jennifer; Hughes, Melanie. *Women in Parliament, 1945-2003: Cross-National Dataset [Computer File] ICPSR24340-v1*. Ann Arbor, MI: Interuniversity Consortium for Political and Social Research; 2008.
- Pillai, Vijayan K.; Wang, Guang-zhen. *Women's Reproductive Rights in Developing Countries*. Burlington, VT: Ashgate Publishing; 1999.
- Pope, Paul, VI. *Humanae Vitae* [Encyclical Letter]. 1968. Retrieved October 9, 2013 (http://www.vatican.va/holy_father/paul_vi/encyclicals/documents/hf_p-vi_enc_25071968_humanae-vitae_en.html)
- Pope, Paul, VI. Address of the Holy Father Paul VI to the General Secretary of the United Nations Concerning 'International Women's Year'. 1974. Retrieved (<http://www.clerus.org/bibliaclerusonline/en/grc.htm#bx>)
- Ramirez, Francisco O.; McEneaney, Elizabeth H. From Women's Suffrage to Reproduction Rights? Cross-National Considerations. *International Journal of Comparative Sociology*. 1997; 38(1-2):1–2.
- Ramirez, Francisco O.; Soysal, Yasemin; Shanahan, Suzanne. The Changing Logic of Political Citizenship: Cross-National Acquisition of Women's Suffrage Rights, 1890-1990. *American Sociological Review*. 1997; 62:735–45.
- Rhoden, Nancy K. Trimesters and Technology: Revamping Roe v. Wade. *The Yale Law Journal*. 1986; 95(4):369–97.
- Rolston, Bill; Eggert, Anna, editors. *Abortion in the New Europe: A Comparative Handbook*. Westport, CT: Greenwood; 1994.
- Rowlands, Sam. *Abortion Law of Each Nation State*. 2012. Retrieved October 16, 2013 (<http://www.fiapac.org/>)
- Samuel, June. PhD Dissertation. Department of Government and Politics, University of Maryland, College Park; 2007. Adapting to Norms at the United Nations: The Abortion Rights and Anti-Abortion Networks.
- Schofer, Evan. The Global Institutionalization of Geological Science, 1800 to 1990. *American Sociological Review*. 2003; 68(5):730–59.
- Schofer, Evan; Hironaka, Ann; Frank, David; Longhofer, Wesley. Sociological Institutionalism and World Society. In: Nash, K.; Scott, A.; Amenata, E., editors. *The New Blackwell Companion to Political Sociology*. Oxford, UK: Blackwell Publishing Ltd; 2012.
- Strang, David; Meyer, John W. Institutional Conditions for Diffusion. *Theory and Society*. 1993; 22(4):487–511.
- Thornton, Patricia H.; Ocasio, William. Institutional Logics. In: Thornton, P.; Ocasio, W.; Greenwood, R.; Suddaby, R.; Sahlim-Anderson, K., editors. *The Handbook of Organizational Institutionalism*. Thousand Oaks, CA: Sage Publications; 2008. p. 99-129.

- Torfason, Magnus T.; Ingram, Paul. The Rise of Global Democracy: A Network Account. *American Sociological Review*. 2010; 75:355–77.
- Union of International Associations. *Yearbook of International Organizations*. Brussels: UIA; various years
- United Nations. *Abortion Policies: A Global Review*. New York: United Nations; 2002.
- United Nations. *Abortion Policies: A Global Review*. New York: United Nations; 2006.
- Whitehead, KD. Abortion, the U.S Government and the Pope. *Catalyst Online*. 1994 Nov 2. Retrieved April 21, 2013 (<http://www.catholicleague.org/abortion-the-u-s-government-and-the-pope/>)
- World Bank. *World Development Indicators 2010*. Washington, D.C.: World Bank; 2010.
- World Medical Association. *Emergency Resolution on Legislation against Abortion in Nicaragua*. 2009. Retrieved April 18, 2013 (<http://www.wma.net/en/30publications/10policies/a14/>)
- Ziegler, Mary. The Framing of a Right to Choose: *Roe v. Wade* and the Changing Debate on Abortion Law. *Law and History Review*. 2009; 27(2):281–330.

Figure 1. Strong Institutionalized Prediction of Policy Diffusion

Figure 2. Percent Sovereign Nations Legalizing Grounds for Abortion

Figure 3. Weak Institutionalization in the Case of Abortion Policy Diffusion

Table 1
Abortion Policies in 2009

None or only to save the life or physical health of the pregnant woman			
Afghanistan	Ecuador	Lebanon	San Marino
Andorra	El Salvador	Lesotho	Sao Tome and Principe
Angola	Equatorial Guinea	Liechtenstein	Saudi Arabia
Antigua and Barbuda	Eritrea	Madagascar	Senegal
Argentina	Gabon	Malawi	Solomon Islands
Bahamas	Gambia	Malta	Somalia
Bangladesh	Guatemala	Marshall Islands	Sri Lanka
Brunei	Guinea-Bissau	Mauritania	St. Kitts and Nevis
Burma	Haiti	Mauritius	Suriname
Burundi	Honduras	Monaco	Syrian Arab Republic
Central Afr. Rep.	Indonesia	Morocco	Tanzania
Chile	Ireland	Oman	Tonga
Comoros	Ivory Coast	Pakistan	Trinidad and Tobago
Congo, Dem. Rep.	Jamaica	Palau	Uganda
Congo, Rep.	Jordan	Paraguay	United Arab Emirates
Costa Rica	Kenya	Philippines	Vanuatu
Djibouti	Kiribati	Rwanda	Venezuela
Dominica	Laos	Samoa	Yemen
To save the life or physical health of the pregnant woman and in the case of rape			
Bolivia	Japan	Panama	Fiji
Brazil	Mali	Sudan	
Cameroon	Mexico	Uruguay	
To save the life or physical health of the pregnant woman and in the case of mental health			
Algeria	Malaysia	Papua New Guinea	
To save the life or physical health of the pregnant woman and in the case of fetal impairment			
Chad	Kuwait	Niger	
Iran	Nauru	Qatar	
To save the life or physical health of the pregnant woman and at least two of the above exceptions			
Barbados	Finland	Korea, Dem.Rep.	Seychelles
Belize	Ghana	Korea, Rep.	St. Lucia
Benin	Guinea	Liberia	St. Vincent
Bhutan	Hungary	Luxembourg	Swaziland
Botswana	India	Namibia	Thailand
Burkina Faso	Iraq	New Zealand	Togo
Cyprus	Indonesia	Norway	United Kingdom

None or only to save the life or physical health of the pregnant woman			
Colombia	Israel	Poland	Zambia
Ethiopia	Italy	Portugal	
On demand			
Albania	Cape Verde	Kazakhstan	Sweden
Armenia	China	Kyrgyz Republic	Switzerland
Austria	Croatia	Latvia	Tajikistan
Azerbaijan	Cuba	Lithuania	Tunisia
Bahrain	Czech Republic	Moldova	Turkey
Belarus	Estonia	Mongolia	Turkmenistan
Belgium	Georgia	Nepal	Ukraine
Bosnia	Germany	Netherlands	United States
Bulgaria	Greece	Singapore	Uzbekistan
Cambodia	Guyana	Slovak Republic	Yugoslavia
Canada	Iceland	South Africa	

Table 2
Event History Analysis of First Liberalized Abortion Policy, 1960-2009

	Model 1	Model 2	Model 3	Model 4	Model 5
Controls					
GDP per capita	0.24* (0.10)	0.26** (0.09)	0.12 (0.12)	0.20+ (0.10)	0.12 (0.12)
Government expenditure	0.00 (0.02)	-0.00 (0.02)	0.01 (0.02)	-0.00 (0.02)	-0.00 (0.02)
Independence	3.65*** (0.52)	2.90*** (0.39)	3.02*** (0.39)	2.48*** (0.47)	3.11*** (0.53)
Communist	0.49 (0.72)	-0.12 (0.58)	0.42 (0.68)	-0.09 (0.73)	-0.24 (0.71)
Natural Family					
Catholic	-0.45 (0.31)	-0.41 (0.31)	-0.49 (0.32)	-0.38 (0.32)	-0.44 (0.32)
Women's Rights					
WINGOs	0.45* (0.23)				0.33 (0.24)
CEDAW	0.00 (0.32)				-0.01 (0.32)
Women in parliament		0.04** (0.01)			0.03** (0.01)
Medicalization					
HINGOs			0.52* (0.21)		
Physicians				0.24* (0.10)	0.21* (0.10)
Observations	2635	2635	2635	2635	2635
Number of countries	117	117	117	117	117
Number of events	58	58	58	58	58
Wald chi-square	83.77***	92.42***	84.26***	59.19***	95.88***

Note: Cox Model

Unstandardized coefficients, standard errors in parentheses.

+ < .10;

* $p < .05$;

** $p < .01$;

*** $p < .001$ (two-tailed tests).

Table 3
Effects of Female Empowerment on First Liberalized Abortion Policy, 1960-2009

	Model 6	Model 7	Model 8	Model 9
Controls				
GDP per capita	0.11 (0.13)	0.09 (0.13)	0.09 (0.14)	0.09 (0.14)
Government expenditure	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)	-0.01 (0.02)
Independence	3.32*** (0.62)	3.28*** (0.64)	3.21*** (0.61)	3.17*** (0.63)
Communist	0.25 (0.79)	-0.05 (0.73)	0.19 (0.77)	-0.11 (0.72)
Natural Family				
Catholic	-0.71 ⁺ (0.40)	-0.69 ⁺ (0.40)	-0.68 ⁺ (0.37)	-0.63 ⁺ (0.38)
Women's Rights				
WINGOs	0.54* (0.26)	0.45 ⁺ (0.27)	0.51 ⁺ (0.26)	0.42 (0.27)
CEDAW	0.17 (0.39)	0.15 (0.39)	0.15 (0.39)	0.13 (0.39)
Women in parliament		0.03** (0.01)		0.03** (0.01)
Female labor force participation	-0.00 (0.01)	-0.01 (0.01)		
Female secondary education			0.00 (0.01)	0.00 (0.01)
Medicalization				
Physicians	0.22* (0.11)	0.20 ⁺ (0.11)	0.20 (0.13)	0.19 (0.13)
Observations	2423	2423	2423	2423
Number of countries	105	105	105	105
Number of events	49	49	49	49
Wald chi-square	78.16***	90.16***	77.96***	88.85***

Note: Cox Model

Unstandardized coefficients, standard errors in parentheses.

⁺ < .10;

* $p < .05$;

** $p < .01$;

*** $p < .001$ (two-tailed tests).

Table 4

Event History Analysis of Three Liberalized Abortion Policies, 1960-2009

<i>Policy</i>	<i>Model 10 Rape</i>	<i>Model 11 Men, Health</i>	<i>Model 12 Men, Health</i>	<i>Model 13 Fetal Impair.</i>	<i>Model 14 Fetal Impair.</i>
Controls					
GDP per capita	0.07 (0.14)	0.24 ⁺ (0.13)	0.53 ^{***} (0.15)	0.21 (0.13)	0.35 [*] (0.17)
Government expenditure	-0.01 (0.02)	0.01 (0.02)	0.05 ^{**} (0.02)	0.01 (0.02)	0.06 ^{***} (0.02)
Independence	3.80 ^{***} (0.65)	3.16 ^{***} (0.59)	0.04 (1.13)	3.36 ^{***} (0.55)	0.25 (0.91)
Communist	-0.22 (0.85)	-0.41 (0.94)	-1.68 ⁺ (1.01)	-0.03 (0.88)	-0.28 (0.68)
Natural Family					
Catholic	-0.18 (0.33)	-0.73 [*] (0.32)	-2.08 ^{***} (0.46)	-0.61 ⁺ (0.33)	-1.56 ^{***} (0.50)
Women's Rights					
WINGOs	0.48 ⁺ (0.27)	0.17 -0.25	-0.75 [*] (0.34)	0.25 (0.22)	-0.66 ⁺ (0.34)
CEDAW	0.10 (0.35)	-0.01 -0.33	0.17 (0.33)	0.14 (0.32)	0.51 ⁺ (0.29)
Women in parliament	0.05 ^{**} (0.02)	0.04 [*] -0.02	0.04 (0.03)	0.04 [*] (0.02)	0.03 ⁺ (0.02)
Medicalization					
Physicians	0.26 [*] (0.13)	0.26 [*] -0.11	0.24 (0.21)	0.24 [*] (0.11)	0.10 (0.18)
Prior rape allowance			4.92 ^{***} (0.68)		4.98 ^{***} (0.61)
Observations	2915	3123	3123	3068	3068
Number of countries	123	127	127	128	128
Number of events	54	48	48	53	53
Wald chi-square	83.23 ^{***}	132.62 ^{***}	150.84 ^{***}	124.20 ^{***}	155.85 ^{***}

Note: Cox Model

Unstandardized coefficients, standard errors in parentheses.

⁺ < .10;^{*} $p < .05$;^{**} $p < .01$;^{***} $p < .001$ (two-tailed tests).