

The Rise of Global Democracy: A Network Account

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Abstract

We examine the influence of an interstate network created by intergovernmental organizations (IGOs) on the global diffusion of democracy. We propose that IGOs facilitate this diffusion by transmitting information between their member states and by interpreting that information according to prevailing norms in the world society, where democracy is viewed as the legitimate form of government. We employ a network autocorrelation model to track changes in democracy among all of the world's countries from 1815 to 2000. We find that democracy does diffuse through the IGO network and that the influence of democratic countries is stronger than that of undemocratic ones. The evidence indicates that the IGO network serves as a basis for normative diffusion and is an important contribution to sociological accounts of globalization that have tended to emphasize diffusion divorced from network structure or diffusion dependent on the coercive influence of a small set of international organizations.

The Global Rise of Democracy: A Network Account

Institutionally oriented accounts of globalization offer two very different characterizations of the role of organizations. World polity arguments see globalization as a diffuse cultural phenomenon that is not particularly dependent on network structure. The organizations that matter most are non-governmental organizations and others that contribute to and broadcast the model of what a state should look like and how it should behave. According to the theory's seminal statement, all states are subject to these diffuse cultural influences, even that of a new society discovered on a previously unknown island (Meyer et al. 1997). In contrast, coercive isomorphism arguments emphasize specific inter-governmental organizations as active agents that impose neoliberal policies on dependent states. Whereas world polity scholars are motivated by the perception of cross-national convergence, the coercive isomorphism school begins with the question, "Why do countries differ so much in the extent to which they adopt neoliberal, market-oriented reform... (Henisz, Zelner and Guillén 2005: 871)."

We offer a network argument that navigates between the weak- and strong-form structural positions of the world-polity and coercive-isomorphism approaches. We focus on normative rather than cultural or coercive mechanisms of influence. We use normative in the sense of Homans (1950) as an "ought" rule that is embedded in a specific social structure. The structure we focus on is the network between states forged by joint memberships in inter-governmental organizations, or IGOs. Our core argument is that this network has been fundamental in the diffusion of democracy, such that states that come into contact with more democratic states in the IGO network are themselves more likely to democratize. And while our analyses yield evidence of coercive isomorphism outside of IGOs, within the IGO network the mechanism is normative: Contrary to accounts that see IGOs primarily as arenas for coercion,

power differences between the states that meet in the IGO network are unimportant for convergence on democracy between them.

While our examination of the IGO network as the basis of normative diffusion differs in emphasis from world-polity and coercive-isomorphic accounts of globalization, we see it as firmly within the tradition of sociological neo-institutionalism. Indeed, we follow Henisz et al. (2005) by analyzing each of normative, coercive and mimetic isomorphism—the three mechanisms of diffusion that define that approach (DiMaggio and Powell 1983). Our point of departure with the leading theories is not in terms of the grand institutional mechanisms but the specifics of the social structure through which they operate, particularly the role of IGOs as the foundation of an interstate network. This network is administratively weak but normatively strong, a global parallel to the domestic normative capacity that Dobbin and Sutton (1998) labeled the “strength of a weak state.”

World polity theorists recognize IGOs as interdependent with international non-governmental organizations (INGOs), as “primarily instruments of shared modernity” (Meyer et al., 1997: 164). They acknowledge that world stratification helps determine which models prevail, but overall, they treat the influence of these organizations as universal, emphasizing the contrast with the networked world of the rationalists. Regarding their fictitious, newly discovered island society, Meyer et al. predict that it “would quickly come under the scrutiny of *all* these organizations (p. 165, emphasis ours).” Yet, recent work shows that despite the massive proliferation of IGOs and INGOs in the second half of the twentieth century, the binds of this associational system are still uneven (Beckfield 2003; Hafner-Burton and Montgomery 2007; Hughes, Peterson, et al. 2008).

By considering the IGO network as channeling global normative influence, we do not reject world polity claims as to the origins of the norms. Indeed, we agree with Boli and Thomas (1997) that INGOs have promoted “world citizenship,” an individualistic, egalitarian construct that justifies democratic governance and de-legitimizes autocracy. The direct normative contributions of INGOs and IGOs to the legitimacy of democracy as a governmental form serve as a starting point for our analysis of diffusion through the IGO network. However, our emphasis on the pattern of IGO ties marks a departure from prior work, and our methodology makes explicit the distinction between general exposure to world culture, and the potentially heterogeneous influence conveyed by structured interaction between states.

Compared to world polity theorists, scholars of coercive isomorphism have been more focused on the role of IGOs. Indeed, two IGOs in particular, the World Bank and the IMF, are presented as key agents behind the coercive diffusion of neo-liberal economic policies (Polillo and Guillén 2005; Henisz et al. 2005). To this position we add three ideas. First, that the influence of IGOs is not restricted to a select few. There are now more than 300 of these organizations, and while they vary widely in terms of renown and power, even obscure and weak IGOs have been shown to affect important outcomes (Ingram, Robinson and Busch 2005). Second, that IGOs may exert influence through mechanisms other than coercion, as many promote cross-cultural understanding and cooperation and may therefore serve as foundations for normative influence. Third, that the key influence is not from the IGO to its members, but from member to member, mediated by the interpretive structure the IGO provides. It is for this reason that we examine the network of bilateral connections through joint IGO memberships, in contrast to others who have looked for the influence of IGOs on democratization by counting a country’s memberships in various IGOs (Wejnert 2005; Pevehouse 2005; Gleditsch and Ward 2006).

The world polity and coercive isomorphism schools both recognize a role for international organizations and agree on the significance of a set of diffusion mechanisms. However, these institutionally oriented accounts of globalization are directly and increasingly challenged by realist theories from political science. For example, a recent paper by Mukherjee and Singer (2007) analyzes neo-liberal reform and concludes that extant sociological theories of global diffusion explain little of that process. Sociological world-systems theorists are more sympathetic to global mechanisms, but their realist emphasis focuses on formal agreements based on geopolitical power interests, and where international networks are examined, the focus is firmly on trade, war, and related power networks, rather than international organizational structures (e.g., Boswell and Chase-Dunn 2000). Faced with such starkly alternative theories, we think it is time for sociological institutionalists to brace the foundation of their place in the globalization debate by documenting the concrete and massive influence that diffusion through international organizations has on the most notable global developments. With this motivation, we turn to the IGO network and its influence on democracy.

IGOS AND ISOMORPHIC PROCESSES

IGOs are operationally defined as organizations that meet regularly, are formed by treaty and have three or more states as members (Pevehouse, Nordstrom and Warnke 2004). Around 500 have been founded since the early nineteenth century, some have subsequently failed. IGOs focus on issues as diverse as defense, education, trade, standardization, labor rights and law enforcement. Underlying the operation of a given IGO are goals and expectations regarding how to align the member states with regard to the relevant issues. When goals are contested, IGOs provide a forum where different expectations and norms are brought to light, and conflicts get resolved. IGOs reduce the incidence of military disputes (Russett and Oneal 2001), and

Pevehouse and Russett (2006) showed that this effect is stronger for democratic IGOs. In addition to providing information about norms, IGOs provide the hands-on expertise required to establish the structures of conformity with those norms (Finnemore 1993), and to evaluate compliance.

Some IGOs, such as the Central European Initiative (CEI), were founded explicitly to encourage reform and convergence. The CEI was founded in 1989 to “bring the countries of Central and Eastern Europe closer together and assist them in their preparation process for EU membership” and to “help transitioning countries in Central Europe come closer to the EU” (“CEI: Objectives” 2004). To achieve these goals, CEI hosts annual meetings of the member states’ heads of government and foreign affairs ministers, monthly meetings of a committee of national coordinators, and other events. It seems very likely that this organization helps facilitate isomorphism among its members, and considering its stated goals of bringing countries both *closer together* and *closer to the EU*, a failure to do so would probably be counted as a nearly complete failure of the organization.

The official goals of IGOs are seldom as explicitly isomorphic as those of the CEI, but even IGOs whose official purpose is much narrower possess the structure and operations required to facilitate such isomorphism. The mere existence of shared memberships in IGOs can establish states as referents, which can create socio-cultural linkages through which individuals in one state interpret and emulate the behavior of their self-identified peers (Simmons, Dobbin and Garrett 2006). Also, IGOs employ groups of professionals and other employees, which gain legitimacy in part because of their professional interactions with other member states. These professionals, aided by the accompanying institutional structures, can “influence governments to adopt new policies simply by making arguments for them” (Simmons et al. 2006: 800) and thus facilitate a mediated mechanism of convergence.

IGOs also host regular meetings of ministers and other high-level state officials, which further facilitate information exchange and mutual appreciation among national elites, and are likely to increase understanding and isomorphism in a wide variety of domains. They also form a vital part of soft power (Nye 1991), which depends partly on the attraction of one's own ideas, but crucially on shaping the preferences of others. As Dorussen and Ward succinctly summarize, "IGOs are places where information is exchanged and where people come to appreciate others' points of view" (2005: 8).

For example, the goals of the European Central Bank (ECB) are very specific: "The primary objective [...] shall be to maintain price stability" ("ECB: Tasks" 2006). However, the ECB is authorized to support general economic policies, and seems to interpret its objectives broadly. For instance, the bank holds annual "Cultural Days" over the course of a month to showcase the cultural wealth of one of its member states through art exhibitions, concerts and other events. The bank also publishes educational material intended to demonstrate to young Europeans the importance of price stability and the "Eurosystem" of European central banks.

As this example suggests, actual IGOs are different from the narrow treaty texts on which they are based. Organizational practices become infused with value beyond the technical requirements of the task at hand, and in addition, organizations assigned a specific purpose tend to initiate projects aimed at increasing the understanding between different constituencies, if only to reduce friction in their operation (Meyer and Rowan 1977; DiMaggio and Powell 1983). While the above examples are European, their spirit is parallel to that of IGOs operating elsewhere, such as the Latin American Integration Association's interest in "*convergence* in the South-American countries, taking into account the present *asymmetries* ..." ("ALADI: Action Program" 2006, emphasis ours), or the Niger Basin Authority's objective to "*harmonize* and

coordinate national policies ...” (“NBA: Goals” 2004, emphasis ours). The vocabulary of isomorphism is evident in IGOs in all parts of the world.

This isomorphism is not unconditional, and the end result of the process, as well as the speed by which it progresses, depends on which behaviors are perceived as legitimate. As Rogers points out, an innovation that is “incompatible with the values and norms of a social system will not be adopted as rapidly as an innovation that is compatible” (2003: 15). Lee and Strang also found that states imitate public-sector downsizing among their neighbors but not upsizing, an effect that they ascribed to the “dominance of neoliberal and managerialist discourses that legitimate and theorize shrinking the public sector” (2006: 883).

The information that IGOs communicate between their member states is not transferred verbatim — in fact it is the interpretation of information that makes IGOs effective mediators. Information that is perceived as illegitimate in the international community of IGOs will be interpreted and propagated in a negative manner or not at all, while information that is perceived as legitimate is interpreted in a way that maximizes the likelihood of it being evaluated positively by member states. Thus, to understand how democracy diffuses through the IGO network, one must consider its legitimacy in world society.

LEGITIMACY, DEMOCRACY AND IGOS

The status of democracy as the gold standard of governmental forms has evolved over time. Its modern ideological foundations stem back to a search in the seventeenth and eighteenth centuries for a legitimate foundation for state sovereignty. In the West, the struggle between divine and secular justifications for sovereignty was won by the secular side. The dominant conclusion was that sovereignty came from “the people,” although the extent of sovereignty transfer from the people to the government was contested. At one extreme was Hobbes, who

believed that the people had permanently and irrevocably handed over sovereignty to an all-powerful monarch. Others, such as Locke and Rousseau, argued successfully for limits on how sovereignty could be transferred to the rulers; Locke focused on procedural limitations on the actions of the ruler, and Rousseau focused on the inalienability of the sovereign rights from the people. The Western conception of democracy then became a dominant global ideology, a process that was driven in part by Western military and economic dominance, but also by Western influence on world culture through a privileged position in the world society of IGOs and INGOs (Beckfield 2003).

Concurrently with this debate the world experienced a general trend in democratization. In the process of democratization, reversals are not unusual at the level of individual states, since elites often withdraw their support from a new democracy before it has solidified (Tilly 2007). Nevertheless, the global trends were real and large, and the democracies that materialized in the period, including the United States and France, derived their legitimacy from a social contract with the people as holders of the sovereign right. The resulting systems of elections, coupled with internal controls on the power of the government, became the blueprints by which government was evaluated in the world society. In the last 200 years the level of democracy has increased considerably all over the world, and objective measures categorize well over one-half of the states in the world as democracies (Mansfield and Pevehouse 2006).

On a global level, the rise in the prevalence of democracy coincides with a rise in the political and economic success of countries adhering to democratic ideologies. Even so, the average level of democracy in the world declined in the “age of dictators” between the two world wars, and again during the Cold War period, before rising sharply during the three decades often referred to as the third wave of democratization (figure 1 shows this evolution in detail).

[Figure 1 about here]

Even states that do not practice democracy recognize its legitimacy. For example, communist rhetoric celebrated democracy even though communist regimes were in many cases decisively undemocratic. Marx claimed that the communist revolution and the dictatorship of the proletariat were a temporary state of affairs, after which democracy should be restored. Democracy was, according to Marx, the true form of government, and he maintained that “all forms of state ... are untrue insofar as they are not democracy” (Marx 1978: 21). Such decoupling is consistent with other examples of state practices that diverge from dominant global scripts, as in the case of environmental policies (Schofer and Hironaka 2005) and human rights (Hafner-Burton and Tsutsui 2005). More evidence of decoupling is the frequent use of the word “democratic” in the names of undemocratic states: according to the data used in this paper, states whose official names include this word are one standard deviation below the average of the system as a whole in terms of the measure of actual democratic institutions.

While the long-term rise of democracy around the world is not only a consequence of IGOs, we argue that the channels of contact offered through IGOs provided important support for this process and hastened it. IGOs provide interpretation and interaction venues for elites, while at the same time supporting a shared identity by the populace of member states, increasing the likelihood of change that is consistent with shared norms and decreasing the likelihood of inconsistent change. Normative diffusion among rulers is important even when the demands for change originate with the public, such as through a revolution or uprising, since international norms about democracy and limits on the use of force constrain the violent repression of such movements.

Based on the above, we test two hypotheses about the effect of IGO networks on democratic change. A direct implication of our arguments is that the interaction with others in a state's IGO network should result in the state becoming more similar to those others over time. As each country attends to another, comes to understand it, and becomes subject to normative influence from it, the democracy level of the counterpart comes to seem more credible and desirable. Therefore, to the extent that countries have different levels of democracy, they will converge more quickly when they interact through more IGO connections.

Hypothesis 1: The influence of another country on the democracy level of the focal country will be positively related to the product of the IGO connectedness between the two countries and the difference in democracy levels between them.

Hypothesis 1 describes the effects of a process through which all countries align themselves with their counterparts in the IGO network. However, countries should not be expected to simply imitate IGO counterparts unconditionally. The understanding and acceptance of a different behavior is based on the positive evaluation of that behavior, which is facilitated by the IGO network but conditional on the legitimacy of the behavior according to international norms (Meyer et al. 1997). The form of government perceived to be legitimate in the world society in which IGOs operate is democracy, while autocracy has not had serious defenders in that realm since Hobbes in the 17th century. The diffusion of democracy through the IGO network should therefore be more successful than the diffusion of autocracy:

Hypothesis 2: The democracy-enhancing influence of more democratic countries through the IGO network will have a larger effect than the democracy-reducing influence of less democratic countries.

METHODS AND DATA

The unit of analysis is the country-year, and we simultaneously consider state-level or “monadic” variables that may influence a country towards democracy, inter-state or “dyadic” influence of other countries through the IGO network and other relationships, as well as system-level effects. Our statistical methodology is based on a network autoregression model, which estimates the extent to which adjacent nodes in a network are more similar than might be expected by chance. A purely static version of the model makes it hard to discern whether the similarity of neighbors is due to selection or influence. To aid us in establishing the causality of our mechanism, we use a dynamic variation of the model, where we estimate the impact of each variable on the subsequent change in the level of democracy in the focal country. The ideas that motivate this model are related to various other approaches to estimating diffusion processes, and we compare these alternatives to our model in the appendix.

The form of the model we estimated is:

$$\Delta y_{i,t} = \gamma y_{i,t-1} + \beta X_{i,t-1} + \delta I_{i,t-1}^{igo} + \rho C_{i,t-1}^{igo} + \theta I_{i,t-1}^{ct} + \phi C_{i,t-1}^{ct} + F_t + u_{i,t} \quad (1)$$

where γ , β , δ , ρ , θ and ϕ are the coefficients to be estimated, i represents the focal country, t represents time, y represents the time-varying level of democracy, F represents year fixed effects, and u is the error term. X is a vector of time-varying country level variables, I^{igo} is the IGO network influence variable, and C^{igo} is network centrality¹ in the IGO network. I^{igo} is operationalized as the aggregation of influence due to all states to which the focal country is connected where the influence on state i due to each alter j is proportional to the multiplicative combination (or interaction) of the IGO tie strength and the difference in democracy levels:

¹ We measure centrality using “weighted degree centrality”, which is calculated as the sum of all direct ties that a country has in the network, weighted by the strength of each tie.

$$I_{i,t-1}^{igo} = \sum_{j=1}^N \tau_{ij,t-1} (y_{j,t-1} - y_{i,t-1}) \quad (2)$$

Here, τ_{ij} is the strength of the time-varying IGO tie between states i and j in the network and y_i and y_j are the time-varying levels of democracy in the two countries. The presence of IGO network diffusion of democracy is determined by examining whether the corresponding influence variable (labeled *IGO Network Diffusion*) significantly affects subsequent change in democracy. To account for other influences beyond the IGO network (e.g., trade networks, colonial networks), we include a set of I^{ctr} influence terms and C^{ctr} centrality measures for each other network. These are calculated just as the I^{igo} term but using tie strength from the control networks (e.g., τ_{ij} would be the level of trade in a year for the trade network).

Since our measure of democracy is discrete, we use an ordered-probit regression. To control for the impact of historical trends or systematic shocks that may exert a general influence on global democracy, such as technological advances, world wars or the fall of the Berlin Wall, we include fixed year effects in our models. We report White standard errors, which are robust to heteroscedasticity, and we cluster the standard errors by country to account for the fact that observations within each country are not independent.

Our data come from several publicly available data sets. Our variables are time-varying and observed for each year. The definition of the population in question comes from the Correlates of War Project ("COW" 2008), which provides a widely used and comprehensive list of more than 200 states in existence since 1815.

For the dependent variable, we used data on the time-varying level of democracy and autocracy in 187 states, compiled by the Polity IV project (Marshall and Jaggers 2005). The levels of democracy and autocracy are coded according to the presence of specific institutions related to the competitiveness and openness of executive recruitment, constraints on the power of

the executive, and competitiveness of political participation in general, and combined into a single score. The POLITY score has been used in other democratization studies (e.g. Gleditsch and Ward 2006; Pevehouse 2005; Wejnert 2005).

The data on IGOs includes all intergovernmental organizations in existence from the beginning of that organizational form in 1815 to the year 2000 (Pevehouse et al. 2004). This data was used to construct the network of shared IGO memberships, in which the connectedness between a pair of countries is calculated as the total number of IGOs in which both countries were members in a given year (Ingram et al. 2005).

We included several other variables as controls. Most central to our theory are the influences of mimetic learning, coercion, social construction, and economic competition, because these combine with our own emphasis on normative diffusion to enumerate the four possible institutional influences identified by Simmons et al (2006). We therefore examine both individual country characteristics and a set of other networks that might provide a basis for the diffusion of democracy. Variables with a large number of missing observations are only included in auxiliary analyses, the results of which we report in the online appendix due to space considerations.

Country Characteristics

The most obviously relevant state-level factor is the wealth of a country. Wealthy nations are likely to experience both a direct tendency to democratize and an indirect tendency which stems from increased internalization of the global norms of individualism and human rights that are closely related to democratization. We represent wealth with *GDP per Capita*, available from the Penn World Tables for years since 1950 (Heston, Summers and Aten 2006). For earlier periods, we use measures of energy consumption and iron/steel production, obtained from Singer

et al. (1972) as the best available proxies for wealth. We also include each country's *CINC Score* (Composite Index of National Capabilities). The CINC score, which was originally compiled by Singer et al. (1972) and subsequently updated, is a composite measure intended to capture the capabilities of a state to project military power.

The level of educational attainment might be expected to have a positive effect on democratization, and has expanded greatly over the period in question (Schofer and Meyer 2006). We obtained data on *University Enrollment per Capita* for each country from Banks (2008).

Other Diffusion Mechanisms: Mimesis, Coercion, Constructivism and Competition

The perceived economic success of democracies or autocracies may affect how receptive other countries are to emulating a given type of government, and it is sensible to expect that countries would rather imitate the behavior of richer countries than that of poorer ones, regardless of network structure. To examine this mimetic influence, we constructed a variable equal to the logged ratio of GDP for the two countries (we assumed no mimetic influence of poorer states on richer states). We interacted this variable with the difference in democracy levels to account specifically for the mimetic influence of richer democracies and aggregated the influence on each country as the *Influence of Richer Democracies*.

Coercion, explicit or implicit, is another potential system-wide driver of convergence (Fligstein and Stone Sweet, 2002; Henisz et al., 2005). We constructed *Influence of Powerful Democracies* to parallel *Influence of Richer Democracies*, but instead of logged GDP we used the CINC scores of the focal country and its counterparts.

To reflect the role of social construction as a driver of democratic convergence we include a number of variables that have been used in the world polity literature. The first of

these, *Global Diffusion*, reflects the possibility of a homogenous process where countries converge to a global level of democracy. The variable is for each country the sum of the differences between its democracy level and that of each other country. This is equivalent to calculating a network influence variable for the fully connected network, and the resulting variable therefore captures global diffusion where each country influences all other countries to the same extent, regardless of structural position.

We also consider the role of international organizations as representing exposure to world culture, in contrast to our network argument that examines contact with specific other countries through those organizations. We therefore include *Total IGO Membership*, a count of how many IGOS the country belongs. *Logged Total INGO Membership* captures the number of memberships from the country's citizens in INGOs (Hafner-Burton and Tsutsui 2005); we log this variable since it is skewed, although our results are not sensitive to the transformation.

Military alliances could facilitate coercive diffusion, through the threat of a powerful member withholding military support. However, they could also facilitate normative diffusion, as evidenced by Tilly's (2007) suggestion that soldiers trained by the United States during the reign of Franco may have been influenced by U.S. norms regarding acceptable use of military force, precluding a military coup as a viable option after Franco's death. We estimated *Alliance Network Diffusion*, where bilateral tie strength in the network is calculated as the number of military alliances between the members of a dyad using data from Gibler and Sarkees (2004).

Colonial history may also matter, because of ongoing attention and interaction between former colonies and colonizers. Additionally, states often maintain military bases in former colonies, sometimes long after independence. Thus, colonial ties may provide a channel for either coercive or normative influence. We used data from the Correlates of War project ("COW"

2008) to estimate *Colonial Network Diffusion*, where two states are tied if one of them was ever a colony of the other.

Commercial integration associated with bilateral trade and foreign direct investment (FDI) may affect democratic convergence through the resulting inter-state communication or through competitive pressures for economic resources. For bilateral trade in the period after 1950, we used data from Gleditsch (2002). We estimated *Trade Network Diffusion*, where bilateral connectedness in the network is calculated as the log of dyadic trade between the two countries. For FDI, we use the data from "UNCTAD: FDI" (2008) on the *Stock of Inward FDI* and *Stock of Outward FDI*.

Finally, spatial proximity is likely to have a strong effect on the attention and interaction between states. To account for spatial diffusion, outside any organizational structure, we used direct line distance between each pair of countries, as well as a classification by region and continent ("UNSD: Regions" 2006). We used these data to estimate *Distance Network Diffusion*, *Regional Network Diffusion*, and *Continental Network Diffusion*, where the tie strength is calculated respectively as the inverse of direct line distance, a dummy for pairs located in the same region, and a dummy for pairs located in the same continent.

Within each network that we examined, we controlled for network centrality. There are two important reasons for including centrality measures separately in the model. First, because the network influence variable is calculated as an interaction between the difference in democracy levels and the strength of the dyadic tie, the variables are structurally related. The absolute value of the influence variable is correlated with network centrality ($r=.86$ for the IGO network), so omitting centrality could bias the results, particularly if (as we hypothesize), positive diffusion and negative diffusion are not symmetric. Second, centrality is a variable of

substantive interest and could plausibly affect democratization by itself, particularly with regard to the IGO network. That is, central states may be more inclined to democratize because of greater exposure to the prevalent norms in the international society, to the formal structures of the IGOs in which they are members, and to world culture in general. A direct impact due to greater participation in the world society is important in its own right but should not be confused with the *diffusion* of democracy through bilateral ties.

After performing all interactions, but before performing our regressions, we standardized network and influence variables to aid in interpreting coefficients. This standardization has no effect on significance levels or direction of effects. In the regression models, the coefficients of the standardized variables can be interpreted as the impact of varying the independent variable by one standard deviation, as calculated from the observed sample.

The summary statistics, available in Table A1 in the online appendix, show that some of the influence variables are positively correlated with each other. While multicollinearity does not bias parameter estimates, it can increase standard errors and decrease the significance level of the analysis. Thus, the correlations between network variables suggest that the tests of our hypotheses are conservative. We address important correlations together with the corresponding regression results in the next session.

RESULTS

[Table 1 about here]

In table 1 we report the results of our main analysis, which is based on the whole data set, with observations from the years 1816–2000.² Models 1–3 examine the effects of baseline variables along with the IGO network, while models 4–8 incorporate additional control variables and break down the IGO network diffusion in several different ways. In all cases, the dependent variable is the change in democracy between time $t-1$ and t , while the independent variables are lagged by one year and measured at $t-1$.

Model 1 serves as our baseline. It includes variables that reflect the global diffusion of democracy, as well as country-level controls. Model 2 examines the diffusion of democracy through the IGO network. The coefficient for *IGO Network Diffusion* is positive and highly significant, in accordance with hypothesis 1. That is, states that share IGO membership with countries with different levels of democracy tend to become more similar to those co-members in terms of democracy levels. The coefficient of *Democracy (Lagged)* is negative: Countries that are already democratic are less likely to experience positive change in democracy levels, as would be expected given that the Polity measure of democracy is bounded in range. The coefficient for *Total IGO Memberships* is positive, but the coefficient for *Centrality in IGO Network* is negative. These two variables both measure the extent of participation in IGOs and are highly correlated (.92), but centrality captures the effect of large IGOs relative to small ones (joining a large IGO results in more new ties than joining a smaller IGO). Together, these coefficients suggest that states that are predominantly members of larger IGOs are less likely to

² As noted, these models are estimated using ordered-probit regressions. We have also estimated these models using standard linear regressions (which do not account for the discrete nature of the data) and the results are materially the same.

experience positive democratic change than states are in same number of smaller IGOs³. It is notable that while the coefficient for *Global Diffusion* is significant in Model 1, it becomes insignificant when the IGO network effects are included. This indicates that while democracy diffuses through links created by shared IGO membership, the evidence for homogenous global diffusion is weak when IGO diffusion is accounted for.

Model 3 estimates separately the impact of positive and negative influence in the IGO network. In this model, the positive influence on a focal country is equal to the basic influence if the counterpart is more democratic, but zero otherwise; negative influence is constructed in a parallel manner. If the influence were symmetric, we would therefore expect the coefficients to be equally large, but of opposite signs. The coefficient for *IGO Diffusion (positive)* is positive and significant at the $p < .01$ level. The coefficient for *IGO Diffusion (negative)* is indeed negative, but it is smaller than the positive coefficient and not significant. This is the outcome predicted by hypothesis 2, which states that the IGO network facilitates diffusion of behaviors perceived to be legitimate in the world society. Democracy diffuses through this normative mechanism, while autocracy does not.

Models 4 and 5 add variables that allow for diffusion through other international networks. The coefficients for *Alliance Network Diffusion* and *Colonial Network Diffusion* are significant, suggesting that IGOs are not the only institutions providing structures that facilitate democratic diffusion. We find some evidence for spatial diffusion: The coefficient for *Regional Network Diffusion* is significant, but the coefficients for the other spatial networks are not. Other coefficients are similar to those in models 2 and 3, and the estimate for *IGO Network Diffusion* is

³ In the appendix, we include a “minimal” specification, containing only *Democracy (Lagged)* and the two factors of the interaction we use to construct our main variable (*Global Diffusion* and *Centrality in the IGO Network*) as controls. In that model, the coefficient for *Centrality in the IGO Network* is positive and significant. *IGO Network Diffusion* maintains its size and significance.

practically the same. We report the estimated values for the fixed year effects in the online appendix (Figure A1). Those results show that relative to recent years, the world experienced significantly less democratization in the interwar period and in the cold war period, even after controlling for the other effects in our models.

Models 6 and 7 further explore our key results by examining diffusion through IGOs that differ in their bureaucratic structure and in their mandated function, based on descriptions of the IGOs in the Yearbook of International Organization. We used Boehmer et al.'s (2004) coding scheme to distinguish IGOs that were minimally structured from those invested with more extensive bureaucracies, and Ingram et al.'s (2005) coding scheme to distinguish IGOs whose function is economic in nature from those whose function is social or cultural. Model 6 shows that while *IGO Diffusion (extensive structure)* is significant, *IGO Diffusion (minimal structure)* is not. This is consistent with the view that efficient diffusion of democracy relies on permanent structures to maintain and interpret information. It also reinforces our core claim that organized structures are fundamental to the process of globalization. In Model 7 we find significant results for *IGO Diffusion (economic)* but the *IGO Diffusion (social/cultural)*, while positive, is not statistically significant. The high correlation between these two measures (.98) makes us hesitant to over-interpret this apparent difference, but to the extent that it exists, it is consistent with arguments that democracy has advanced hand-in-hand with global capitalism (Mandelbaum, 2007). Such a result could stem from the promotion of personal freedom concurrently with economic freedom, or from a greater emphasis on standardization of behavior and governance by economic IGOs, compared with a greater acceptance of diversity by social/cultural IGOs. Thus, the former may be more germane for normative convergence than the latter. In these two models, the coefficient for global diffusion turns significantly negative, and considering the high

correlations with other variables in the model, we cannot rule out collinearity as a cause for this result.

Model 8 examines the influence of states more powerful than the focal state. The model does not show a statistically significant *Influence of More Powerful States* in general, but the specific *Influence of More Powerful Democracies* is positive and significant, and *IGO Network Diffusion* maintains both its size and significance level. This model provides some evidence that in addition to the normative effects of IGOs, coercive processes have facilitated the spread of democracy. The effects we observed were on the global level rather than through a specific network, which we find plausible since the institutional complexity of coercive processes is lower than that of normative processes.⁴

In table 2 we turn to a more contextual analysis and examine two starkly contrasting periods in the evolution of political systems: The Cold War period and the post-Cold War period. In these analyses we use data from 1950-2000, using the fall of the Berlin wall in 1989 to denote the end of the Cold War. Limiting the analysis to the post-1950 period also enables us to include measures of GDP and bilateral trade.⁵

[Table 2 about here]

Model 9 estimates the diffusion of democracy through the IGO network in the Cold War period, while model 10 examines the post-Cold War period. The coefficient for *IGO Network Diffusion* is positive and significant in both cases, and slightly larger than in the full sample analysis reported in table 1. We find evidence for spatial diffusion on a continental level and for

⁴ Supplementary analysis examined the impact of coercive influence specifically between states that are connected in the IGO network. The coefficient was generally small but positive, and in some specifications marginally significant. However, the direct normative influence through IGOs maintained both its size and strong significance.

⁵ In our analysis of the whole period from 1950–2000 (not reported here due to space constraints), the diffusion of democracy through the IGO network is positive and significant and similar in size as in our other models. A breakdown by positive and negative influence shows significant results for both types. Other coefficients are similar to those observed for the two separate periods.

diffusion through the alliance network. Diffusion through the trade network is not stable across specifications. This is notable given popular arguments that economic interdependence promotes convergence between countries, but we would point out that this instability represents absence of evidence, rather than evidence of absence.

In models 11 and 12, we examine the positive and negative IGO diffusion effects separately for each of the two periods. The coefficients in model 11, for the Cold War period, are similar to the coefficients in the main analysis: *IGO Diffusion (positive)* is significant but *IGO Diffusion (negative)* is not. However, the coefficients in model 12 for the post-Cold War period are different. Diffusion through the IGO network is still present, but according to the estimates positive influence is unimportant in this period, while negative influence is now highly significant. The period that our post-Cold War data covers is only 11 years, from 1989 to 2000, which is short compared to the periods for which we find positive diffusion through IGOs. Our data does not allow us to discern exactly why we find these different results for this period, but they nevertheless suggest the possibility of a real change in the way democratic diffusion operates. While the level of democracy has risen since the demise of the Soviet Union, the world has also become much more unipolar and a further examination of this intriguing result is fully merited in future research.

Models 13 and 14 examine the possibility of mimetic and coercive isomorphism. This analysis extends model 8 by examining the influence of wealthier democracies, a likely target for mimesis. Evidence for this influence is present in both the Cold War and post-Cold War periods, as the coefficient for the *Influence of Richer Democracies* is positive and significant in both models 13 and 14. The evidence of coercive isomorphism, estimated through the *Influence of*

More Powerful Democracies, is apparent in the Cold War period but not the post-Cold War period.

CAUSALITY AND ROBUSTNESS CHECKS

A key reason we opted for a dynamic autoregressive model rather than the static version was that a dynamic model is much less open to alternative accounts of causality. In the dynamic model, the dependent variable is change in the level of democracy, rather than the absolute level. Thus, a homophily process where states tend to create ties with similar others will not confound the models since there is no subsequent change in democracy levels. A pattern of tie creation between jointly democratizing states will not result in a measured effect either, since in that case, a movement in the predicted direction by the less democratic state will be offset by a movement against the predicted direction by the more democratic state. The use of lagged measures in the estimation model also guards against any reverse causal paths that are temporally sequential (in that cause precedes effect in time). Nevertheless, causality is always an important issue in non-experimental studies, so it deserves specific attention.

In particular, Mansfield and Pevehouse (2006) suggested that states in the process of democratizing are especially likely to join IGOs, and that they may even join these IGOs *before* they become more democratic. If, furthermore, such states were to seek out IGO ties with democracies rather than autocracies, this could result in a similar pattern to the one we observe. To ensure that our main findings were not dependent on the process of strategic IGO joining that they describe, we excluded recently joined IGOs from the calculation of network influence, thus relying only on longstanding IGO memberships (presumably forged prior to any current democratization movement). Model 15 presents estimation results using this alternative method of network construction, reflecting only memberships that had lasted 10 or more years, and

shows that the diffusion of democracy is still highly significant⁶. Clearly our evidence of the diffusion of democracy through the IGO network is not simply due to states deciding to democratize and then joining certain IGOs to speed them on the process. In addition to ruling out a reverse causality argument, model 15 provides evidence that the effect of IGO ties continues to work for a considerable time after the tie is formed. This result also provides some reassurance that the effect is not simply due to a third variable influencing both IGO membership and democracy.

Propensity score matching is a useful tool in causal inference, since it performs a hypothetical matching between observations that experience a “treatment” and those that do not. This allows an observational study to be interpreted similarly to an experiment. While it is not a panacea to the problem of unobserved variables, it relaxes various assumptions about how variables affect the selection into treatment, so we replicated model 4 using propensity score matching. The method assumes a discrete treatment, so we categorized observations where a state experiences positive democratization influence through the IGO network that is more than one standard deviation above the mean as having received the treatment, and others as the control group. The other variables from model 4 were used to match observations from the treatment and control groups. Even after the matching, states in the treatment group experienced on average double the positive change in democracy levels as their counterparts in the control group, a difference that was significant at the $p < .015$ level.⁷ A true experiment (natural or controlled), remains the ideal in establishing causality. However, the robustness of the effect in a propensity score matching estimation, together with the fact that the effect is still operating for

⁶ We have repeated this analysis restricting the IGO network to even longer standing memberships (20 years), and the results are the substantively the same as those in model 15. We have also performed analysis where new states are completely excluded from the analysis for 10 years after they enter the system, and found substantively the same results.

⁷ In the online appendix to this paper, we report the results from the propensity score matching in greater detail.

IGOs joined 10 years earlier, makes constructing alternative causal mechanisms considerably more difficult.

To account for the possibility of serial autocorrelation influencing the results, we estimated our model using the Arellano-Bond GMM estimator, which was utilized by Lee and Strang (2006) among others. Model 16 shows that diffusion through the IGO network remains significant when the model is estimated using Arellano-Bond, and serial autocorrelation does therefore not seem to be driving our results.⁸ The Arellano-Bond estimator also accounts for time invariant effects particular to specific countries, and thus provides added confidence that our results are not driven by such unobserved effects.

In auxiliary analysis, which we report on in the online appendix, we examined a number of control variables that we excluded in the main analysis because of a high number of missing observations. Most notably, these results show that democratization is greater for countries that have more university graduates and those that are more engaged in INGOs, but is not affected by a state's stock of inward and outward FDI. In the appendix, we also report the results of using state-level fixed effects, as well as several different regional and period effects specifications. Finally, we have examined the use of different methods for error clustering, as well as bootstrap estimates of standard errors to account for the correlations of variables. Our results were materially identical under these different conditions.

DISCUSSION

Guillén (2001) argues that globalization is an organizational phenomenon. Yet, even the organization-centered sociological accounts of globalization do not fully acknowledge the role of

⁸ In the Arellano-Bond estimation, we tested for second-order autocorrelation in the data, which would raise issues with the specification, but found no evidence that this was an issue.

organizations in this process. World polity theories see organizations as the source of the ideals of globalization but have not emphasized the concrete role of organizations in creating the network through which these ideals diffuse. Scholars of coercive isomorphism highlight the role of a small yet important set of international organizations but do not examine the many other organizations that promote globalization through non-coercive means. In this paper we bridge the gap between those two literatures. We provide an account of the role of intergovernmental organizations in shaping, interpreting and diffusing democracy, emphasizing that their impact is strong but dependent on the full structure of the network.

To world polity theory, we add attention to the network structure that connects states as a moderator of normative influence. While the strength of ties to the world polity has been assumed to impact states' receptiveness to these models, we refine these assumptions by focusing not only on the strength of ties, but on their structure. Our empirical analysis indicates that the IGO network facilitates diffusion, even after accounting for traditional world polity variables that capture the extent a country engages with international organizations. Similarly, we offer a refinement of the mechanisms emphasized by coercive isomorphism. We do not doubt the coercive role of certain IGOs (including the IMF and World Bank) in pushing certain practices and structures. And our own results confirm that powerful democracies influenced weaker states to adopt their political system. However, our analyses also show how location in the network formed through the large set of IGOs impacts the diffusion of democracy. There are only a handful of IGOs that could be characterized as capable of coercing their member states, but there are hundreds that can interpret and transfer normative information about models of the state. Thus, while we agree that some IGOs are in some cases channels for coercion, we believe

that most of the impact of these organizations on global convergence occurs through normative mechanisms. That conclusion is certainly true in the case of democracy diffusion.

The IGO network effect we observe is even more notable because our analyses show evidence that the process of democratization was in other ways as predicted by extant theories. Consistent with world polity theory, we find the level of exposure to international society, as measured by the number of memberships in IGOs and INGOs, supports democratization. In auxiliary analysis, we also found university education to support the democratization process, consistent with the connection between higher education and the liberal, rationalist and developmental models dominant in world culture (Schofer and Meyer 2006). Furthermore, in addition to the structured, normative isomorphism that is our focus, we find evidence of mimetic isomorphism of rich countries by the poor, and coercive isomorphism whereby the militarily powerful influence the weak (DiMaggio and Powell 1983). The simultaneous presence of all three isomorphic influences is important as it shows that our evidence of the efficacy of the IGO network does not obtain because of model misspecification (Henisz et al. 2005). Further, the fact that the other more familiar explanations for institutional influence on a global scale are at work in the democratization case suggests that it is not idiosyncratic, and that the structural properties of the IGO network may be relevant for other phenomena. We believe the approach we take in this paper can usefully be extended to explain other instances of globalization.

We also observed some diffusion through other networks. Our analysis showed evidence of spatial diffusion, the geographic reach of which seems to have expanded over time, as the world has become smaller. We also observed strong and robust diffusion through the network of military alliances. Military alliances often involve collective use of force and military aid, which

may offer a potent path for coercive influence, but normative influence is also possible through socialization and delegitimation of the use of military force in the case of civil unrest.

The diffusion of democracy through the IGO network itself is both statistically and substantively significant. Figure 2 gives an idea of the magnitude of this effect. The figure shows the results in terms of the global average democracy, 1950-2000, derived from a simulation of the democratic evolution of each state in which the effect of positive influence through the IGO network has been artificially restricted to zero. While a reference simulation without this restriction tracks the actual historical pattern closely, the restricted simulation shows a sharper drop in the 1960s and a much later and weaker reversal. The outcome of this process over fifty years is a four-point difference in democracy scores, which represents almost the entire change associated with the third wave of democratization between 1970 and 2000. It is no overstatement to say that our analyses suggest that the IGO network has been fundamental to global democratization.

[Figure 2 about here]

Policymakers interested in the ongoing evolution of democracy around the world might take heart in the evidence of the positive influence of the IGO network on democratization. However, while the evidence here speaks to the unfolding of democratization on a global scale, policymakers should consider as well the detailed structure of the network, as the impact on a specific state depends on its membership in the same IGOs as democratic states, and may be moderated by the character of the IGOs themselves. In figure 3, we present the historical values of the IGO network influence variable we use in our models, for a set of non-democratic countries in the post-1950 period. A notable aspect of this figure is the relatively large and increasing democratizing influence experienced by China at the end of the period, as China has

increased its international engagement but continues to trail in democracy. North Korea was exposed to increasing influence in this period, although this increase was considerably smaller, and almost solely a result of greater imbalance rather than of increased engagement.

On the other hand, the figure shows that the net influence on Russia and Iran was not positive at the end of the 20th century. The causes here reflect a fundamental implication of our argument, that which other states a given state is connected to in the IGO network makes a big difference in the normative influence it faces. The case of Iran is particularly illuminating. After the Islamic revolution and the overthrowing of the Shah, Iran's democracy score rose to a level close to that of its counterparts in the IGO network, which reduced the normative influence to democratize further. Iran again experienced increasing influence in the 1980s and 1990s, partly due to increased autocracy within Iran, but mostly due to the democratization of its counterparts. With the reforms of President Mohammad Khatami in 1997, Iran again caught up with its IGO counterparts, who were themselves low in democracy, and was not experiencing any net influence in the year 2000. Similarly, although Russia was still much less democratic than the typical Western democracy after the fall of the Berlin Wall, when compared to the totality of its counterparts in the IGO network, it was actually slightly more democratic than the average, and was not experiencing net positive influence through the network. These examples point to considerable opportunities for future research, focusing both on the regional and historical idiosyncrasies which influence the diffusion of democracy.

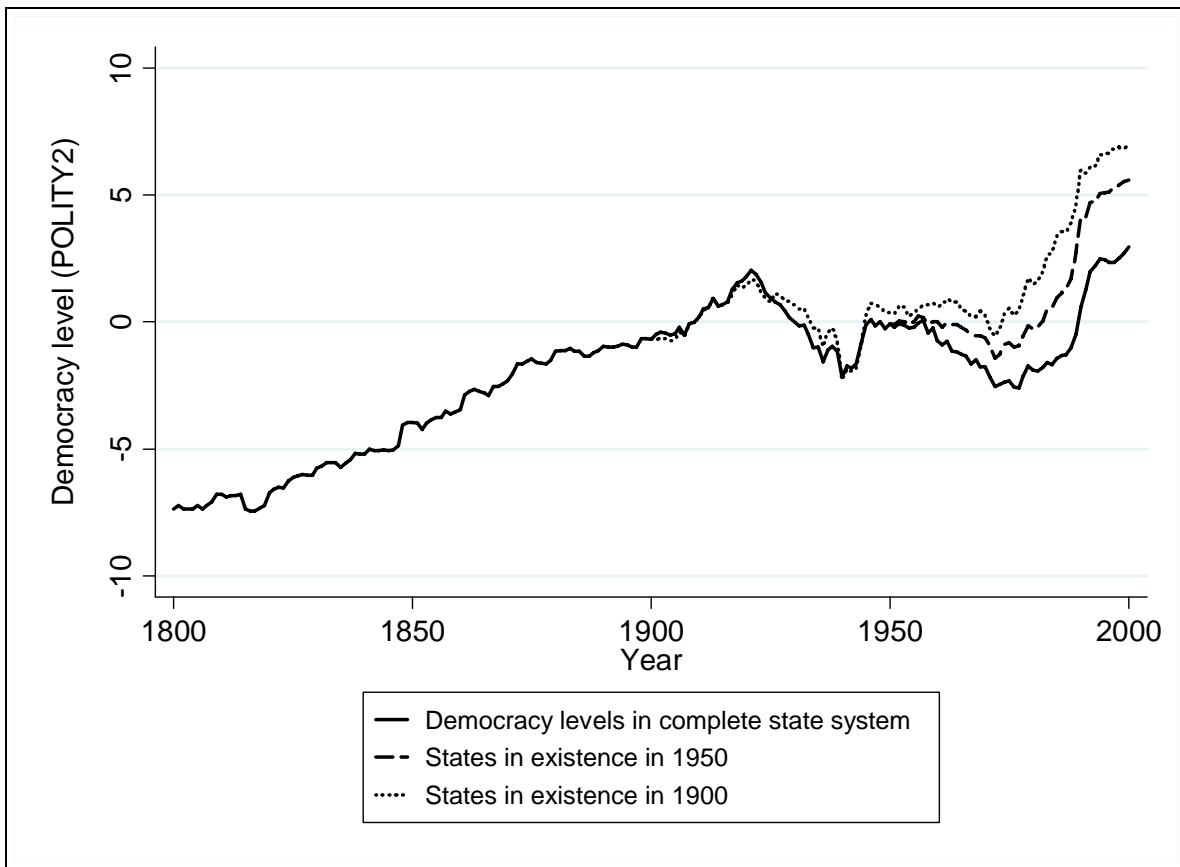
[Figure 3 about here]

Our analysis has shown that the mechanisms of democratic diffusion are highly dependent on the underlying IGO network structure. And as figure 3 illustrates, this structure is far from uniform. Combined, these two facts suggest that a more nuanced approach to the impact

of international organizations is essential, if the evolution of social and political structures in countries around the world is to be fully understood. Considering Meyer et al.'s (1997) symbolic newly discovered island society, we can say that its democratization would depend very much on which international organizations it joined. The recognition that world culture supports norms embedded in particular network structures, derived from organizational memberships and braced by bureaucracy, significantly alters the sociological account of globalization. In fact, the differences constitute what amounts to a separate and extended theory—one with more potential to explain the observed vagaries of global convergence.

FIGURE 1

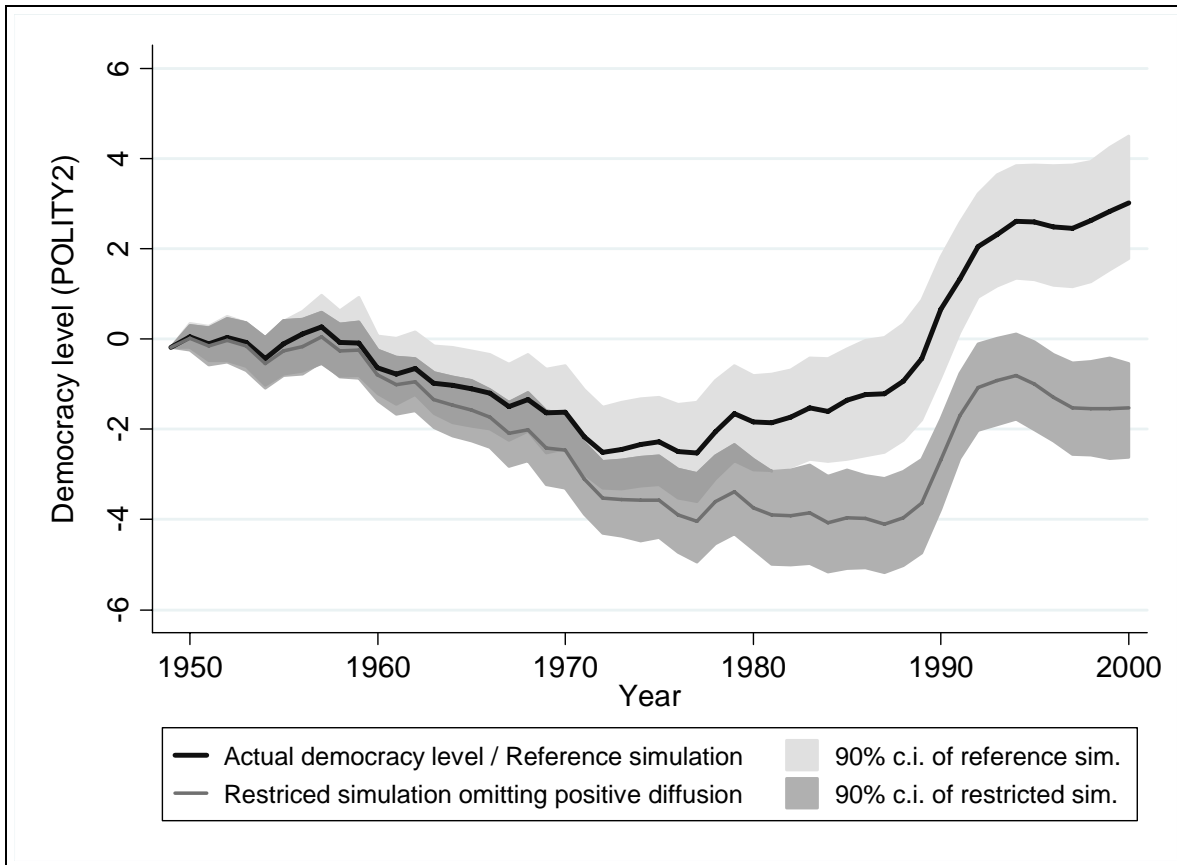
Average Historical Democracy Levels from 1815-2000



The figure shows the average level of democracy, as operationalized by the POLITY2 score. The solid line shows the level in the complete state system. The dashed and dotted lines include only states that were in existence in 1950 and 1900, respectively.

FIGURE 2

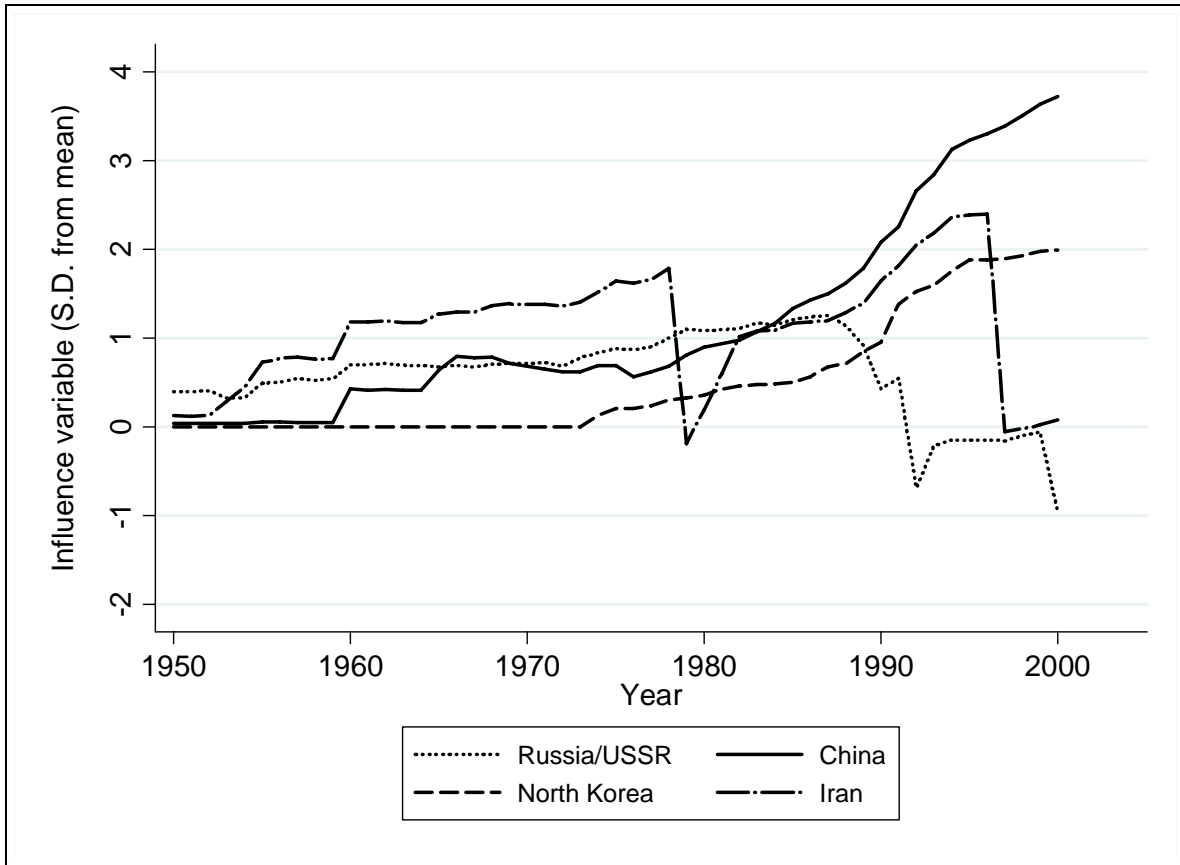
Average Levels of Democracy from a Simulation without Positive Diffusion through IGO Networks



The figure shows the global averages in democracy scores derived from a simulation which models country-level democracy between 1950 and 2000 but omits the effect of positive diffusion through the IGO network (restricts it to zero). The darker shaded area shows a 90% confidence interval of the restricted simulation, based on 100 repetitions. The lighter shaded area shows the confidence interval of a reference simulation which includes IGO diffusion and tracks the actual historical level of democracy closely. The coefficients for the simulations were generated using a linear regression estimation for the specification in model 5, other specifications yield similar results.

FIGURE 3

Normative Influence through IGOs on Selected States



The figure shows the value of the IGO network influence variable for four states. Influence depends on the democracy level of other states, and the level of IGO connectedness to those states. The unit in the graph is the number of standard deviations from the mean level of influence in the system.

TABLE 1

Ordered-Probit Network Autoregressive Models of Democratic Change

	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7	Model 8
Democracy (Lagged)	-.003 (.006)	-.025** (.008)	-.024** (.008)	-.016* (.008)	-.015 (.008)	-.018* (.008)	-.017* (.008)	-.017* (.008)
Per-capita Iron/Steel Production	.290* (.132)	.286* (.128)	.279* (.129)	.161 (.150)	.153 (.152)	.159 (.151)	.188 (.153)	.154 (.153)
Per-capita Energy Consumption	-.005 (.003)	-.004 (.003)	-.004 (.003)	-.004 (.003)	-.004 (.003)	-.004 (.003)	-.004 (.003)	-.004 (.003)
CINC Score	.347 (.399)	.302 (.411)	.301 (.413)	.676 (.459)	.678 (.460)	.690 (.462)	.669 (.462)	1.022 (.663)
Total IGO Membership	.008*** (.002)	.014*** (.004)	.014*** (.004)	.011** (.004)	.011** (.004)	.011** (.004)	.011** (.004)	.011** (.004)
Global Diffusion	.202*** (.043)	-.170 (.101)	-.155 (.108)	-.220 (.119)	-.202 (.122)	-.255* (.126)	-.243* (.114)	-.566** (.181)
Centrality in IGO Network		-.319* (.150)	-.345* (.157)	-.193 (.156)	-.222 (.164)	-.183 (.158)	-.193 (.156)	-.181 (.156)
IGO Network Diffusion		.250*** (.064)		.243*** (.068)				.252*** (.066)
IGO Diffusion (positive)			.170*** (.050)		.168** (.053)			
IGO Diffusion (negative)			-.132 (.081)		-.121 (.083)			
IGO Diffusion (minimal structure)						.035 (.063)		
IGO Diffusion (extensive structure)						.226* (.097)		
IGO Diffusion (economic)							.252** (.094)	
IGO Diffusion (social/cultural)							.002 (.091)	
Centrality in Distance Network				-.012 (.024)	-.011 (.024)	-.012 (.024)	-.011 (.025)	-.014 (.024)
Distance Network Diffusion				.016 (.044)	.016 (.043)	.018 (.043)	.017 (.043)	.011 (.045)
Centrality in Continental Network				-.057 (.044)	-.055 (.044)	-.057 (.044)	-.058 (.044)	-.055 (.044)
Continental Network Diffusion				-.022 (.051)	-.023 (.051)	-.016 (.054)	-.019 (.051)	-.013 (.053)
Centrality in Regional Network				.011 (.028)	.011 (.028)	.009 (.028)	.011 (.028)	.008 (.028)
Regional Network Diffusion				.119** (.037)	.119** (.037)	.114** (.038)	.120** (.037)	.114** (.038)
Centrality in Alliance Network				-.028 (.026)	-.027 (.026)	-.028 (.026)	-.025 (.026)	-.032 (.027)
Alliance Network Diffusion				.067** (.023)	.068** (.023)	.068** (.023)	.070** (.023)	.067** (.024)
Centrality in Colonial Network				.038 (.023)	.039 (.023)	.039 (.023)	.041 (.022)	.035 (.023)
Colonial Network Diffusion				.049* (.023)	.051* (.023)	.051* (.024)	.050* (.022)	.046* (.023)
Influence of More Powerful States								.225 (.161)
Influence of More Powerful Democracies								.325* (.165)
Observations	11086	11086	11086	10633	10633	10633	10633	10633

Dependent variable is democratic change. Independent variables lagged one year. Interaction variables are standardized.

* p<.05, ** p<.01, *** p<.001

(Robust, clustered, standard errors shown in parenthesis)

TABLE 2

**Ordered-Probit Dynamic Network Autoregressive Models of Democratic Change
Secondary Analysis and Robustness Checks**

	Model 9	Model 10	Model 11	Model 12	Model 13	Model 14	Model 15	Model 16
	Cold War	Post-CW	Cold War	Post-CW	Cold War	Post-CW	1816-2000	1816-2000
							Robust Network	Arrellano Bond
Democracy (Lagged)	-.012 (.027)	-.245* (.112)	.006 (.029)	.018 (.152)	-.019 (.028)	-.182 (.119)	-.007 (.006)	0.120*** (0.010)
CINC Score	1.958 (1.083)	-2.247 (1.929)	1.724 (1.080)	-1.323 (2.132)	-3.974 (2.864)	-80.265** (30.805)	.781 (.454)	1.086*** (0.059)
Logged Per-capita GDP	.041 (.048)	-.048 (.058)	.023 (.048)	.009 (.057)	-.035 (.079)	-.174 (.153)		
Total IGO Membership	.006 (.007)	-.005 (.008)	.007 (.007)	-.005 (.008)	.012 (.007)	-.002 (.008)	.008*** (.002)	0.003*** (0.000)
Global Diffusion	-.387 (.229)	-1.612** (.613)	-.253 (.254)	-.260 (.806)	-1.465*** (.354)	-2.112** (.770)	-.046 (.076)	-0.022 (0.018)
Centrality in IGO Network	.038 (.265)	.137 (.305)	-.263 (.386)	.559 (.332)	-.150 (.273)	.055 (.310)	-.009 (.051)	0.092*** (0.012)
IGO Network Diffusion	.245* (.113)	.518*** (.137)			.136 (.127)	.426** (.148)	.107*** (.026)	0.100*** (0.011)
IGO Diffusion (positive)			.361* (.183)	.021 (.128)				
IGO Diffusion (negative)			.035 (.178)	-.801*** (.168)				
Centrality in Distance Network	-.094*** (.024)	-.011 (.024)	-.099*** (.025)	-.012 (.023)	-.090*** (.023)	-.001 (.026)	-.015 (.024)	-0.027*** (0.004)
Distance Network Diffusion	-.048 (.056)	-.026 (.061)	-.057 (.055)	-.012 (.060)	-.042 (.053)	-.034 (.058)	.033 (.041)	0.009 (0.013)
Centrality in Continental Network	.142 (.079)	.095 (.089)	.142 (.081)	.090 (.080)	.097 (.081)	.075 (.088)	-.049 (.046)	-0.080*** (0.007)
Continental Network Diff.	.318*** (.093)	.035 (.091)	.317*** (.093)	.032 (.087)	.204* (.099)	-.034 (.099)	-.005 (.053)	0.079*** (0.011)
Centrality in Regional Network	-.043 (.046)	-.039 (.049)	-.038 (.046)	-.037 (.048)	-.045 (.045)	-.034 (.053)	.001 (.028)	0.005 (0.004)
Regional Network Diffusion	-.064 (.057)	.096 (.066)	-.060 (.057)	.077 (.067)	-.066 (.057)	.101 (.064)	.108** (.036)	0.098*** (0.007)
Centrality in Alliance Network	.002 (.037)	-.032 (.032)	.003 (.038)	-.041 (.032)	.004 (.040)	-.033 (.036)	-.034 (.026)	-0.039*** (0.006)
Alliance Network Diffusion	.098** (.032)	.141** (.048)	.094** (.031)	.150** (.047)	.118*** (.033)	.139** (.047)	.076*** (.023)	0.082*** (0.005)
Centrality in Colonial Network	.017 (.029)	.041 (.043)	.019 (.029)	.036 (.042)	.032 (.029)	.028 (.045)	.043 (.025)	0.034*** (0.004)
Colonial Network Diffusion	.004 (.029)	.083 (.060)	.005 (.030)	.072 (.059)	.005 (.027)	.047 (.063)	.052* (.025)	0.039*** (0.005)
Centrality in Trade Network	.051 (.081)	-.016 (.068)	.049 (.083)	-.025 (.071)	.036 (.088)	-.038 (.064)		
Trade Network Diffusion	.055 (.058)	-.283*** (.066)	.053 (.059)	-.279*** (.062)	.250** (.080)	-.134 (.100)		
Influence of Richer States					-.270* (.130)	-.217 (.133)		
Influence of Richer Democracies					.333*** (.084)	.207** (.070)		
Influence of More Powerful States					-.873 (.634)	-9.516* (3.741)		
Influence of More Powerful Democracies					.992** (.346)	.774 (.471)		
Centrality in IGO Network (10 year delay)								
IGO Network Diffusion (10 year delay)								
Observations	3651	1705	3651	1705	3651	1705	10633	10281

Dependent variable is democratic change. Independent variables lagged one year. Interaction variables are standardized.

* p<.05, ** p<.01, *** p<.001

(Robust, clustered, standard errors shown in parenthesis)

REFERENCES

- "ALADI: Action Program." (2006). Website of the Latin American Integration Association, Retrieved January 2006, from http://www.aladi.org/NSFALADI/SITIO.NSF/VSTITIOWEB/PROGRAMA2006_2i.
- Banks, A. S. (2008). Cross-National Time Series Data Archive, Databanks International, Jerusalem, Israel
- Beckfield, J. (2003). "Inequality in the World Polity: The Structure of International Organization." American Sociological Review **68**(3): 401-424.
- Boehmer, C., E. Gartzke and T. Nordstrom (2004). "Do Intergovernmental Organizations Promote Peace?" World Politics **57**(1): 1-38.
- Boli, John and George M. Thomas (1997). "World Culture in the World Polity: A Century of International Non-Governmental Organization." American Sociological Review **62**(2): 171-190.
- Boswell, T. and C. Chase-Dunn (2000). The Spiral of Capitalism and Socialism: Toward Global Democracy. Boulder, CO, Lynn Rienner Publishers.
- "COW" (2008). Correlates of War Project, Retrieved from <http://www.correlatesofwar.org/>.
- "CEI: Objectives." (2004, August 2006). Website of the Central European Initiative, Retrieved October 2006, from <http://www.ceinet.org/main.php?pageID=17>.
- DiMaggio, P. J. and W. W. Powell (1983). "The Iron Cage Revisited: Institutional Isomorphism and Collective Rationality in Organizational Fields." American Sociological Review **48**(2): 147-160.
- Dobbin, Frank and John R. Sutton (1998). "The Strength of a Weak State: The Rights Revolution and the Rise of Human Resources Management Divisions." American Journal of Sociology **104**(2): 441-76.
- Dorussen, Han and Hugh Ward (2005). "Inter Governmental Organizations and the Kantian Peace—A Network Perspective." Paper presented at the 3rd ECPR Conference **8**: 10.
- "ECB: Tasks." (2006). Website of the European Central Bank, Retrieved October 2006, from <http://www.ecb.eu/ecb/orga/tasks/html/index.en.html>.
- Finnemore, Martha (1993). "International Organizations as Teachers of Norms: The United Nations Educational, Scientific, and Cultural Organization and Science Policy." International Organization **47**(4): 565-597.

- Gibler, Douglas M. and Meredith Reid Sarkees (2004). "Measuring Alliances: the Correlates of War Formal Interstate Alliance Dataset, 1816-2000." Journal of Peace Research **41**(2): 211-222.
- Gleditsch, K. S. (2002). "Expanded Trade and GDP Data." Journal of Conflict Resolution **46**: 712-24.
- Gleditsch, K. S. and M. D. Ward (2006). "Diffusion and the International Context of Democratization." International Organization **60**(04): 911-933.
- Guillén, Mauro F. (2001). "Is Globalization Civilizing, Destructive or Feeble? A Critique of Five Key Debates in the Social Science Literature." Annual Review of Sociology **27**: 235-60.
- Hafner-Burton, Emilie M. and Alexander H. Montgomery (2007). The New Power Politics of International Organizations: Social Structural Inequality in the International System. Working Paper.
- Hafner-Burton, E. M. and K. Tsutsui (2005). "Human Rights in a Globalizing World: The Paradox of Empty Promises." American Journal of Sociology **110**(5): 1373-411.
- Henisz, W. J., B. A. Zelner and M. F. Guillén (2005). "The Worldwide Diffusion of Market-Oriented Infrastructure Reform, 1977-1999." American Sociological Review **70**(6): 871-897.
- Heston, Alan, Robert Summers and Bettina Aten. (2006). "Penn World Table Version 6.2." CIC at UPenn, Retrieved from <http://pwt.econ.upenn.edu/>.
- Homans, George Caspar (1950). The Human Group. New York, Harcourt, Brace & World.
- Hughes, M. M., L. Peterson, et al. (2008). "Power and Relation in the World Polity: The INGO Network Country Score, 1978-1998." Social Forces (Forthcoming).
- Ingram, Paul, Jeffrey Robinson and Marc L. Busch (2005). "The Intergovernmental Network of World Trade: IGO Connectedness, Governance, and Embeddedness." American Journal of Sociology **111**(3): 824-858.
- Lee, Chang Kil and David Strang (2006). "The International Diffusion of Public-Sector Downsizing: Network Emulation and Theory-Driven Learning." International Organization **60**: 883-910.
- Mansfield, Edward D. and Jon Pevehouse (2006). Democratization and the Varieties of International Organizations. conference on The New Science of International Organizations, U. Penn.

- Marshall, Monty G. and Keith Jagers. (2005). "Polity IV Project: Political Regime Characteristics and Transitions, 1800-2003." Retrieved from <http://www.cidcm.umd.edu/inscr/polity/>.
- Marx, Karl (1978, 1843). "Contribution to the Critique of Hegel's Philosophy of Right." The Marx-Engels Reader. Robert C. Tucker. New York, Norton: 16-25.
- Meyer, John W., John Boli, George M. Thomas and Francisco O. Ramirez (1997). "World Society and the Nation-State." American Journal of Sociology **103**(1): 144-81.
- Meyer, John W. and Brian Rowan (1977). "Institutionalized Organizations: Formal Structure as Myth and Ceremony." The American Journal of Sociology **83**(2): 340-363.
- Mukherjee, Bumba and David Andrew Singer (2007). Diffusion or the IMF: Explaining the politics of liberalization. Working Paper, University of Notre Dame.
- "NBA: Goals." (2004). Website of the Niger Basin Authority, Retrieved January 2006, from <http://www.abn.ne/webeng/goal.htm>.
- Nye, J. S. (1991). Bound to Lead: The Changing Nature of American Power. New York, Basic Books.
- Pevehouse, Jon C. (2005). Democracy from Above : Regional Organizations and Democratization. Cambridge, Cambridge University Press.
- Pevehouse, Jon, Timothy Nordstrom and Kevin Warnke. (2004). "Intergovernmental Organizations, 1815-2000: A New Correlates of War Data Set." The Correlates of War Project, Retrieved from <http://www.correlatesofwar.org/>.
- Pevehouse, Jon and Bruce Russett (2006). "Democratic International Governmental Organizations Promote Peace." International Organization **60**: 969-1000.
- Polillo, Simone and Mauro F. Guillén (2005). "Globalization Pressures and the State: The Worldwide Spread of Central Bank Independence." American Journal of Sociology **110**: 1764-1804.
- Rogers, Everett M. (2003). Diffusion of Innovations, Fifth Edition. New York, Free Press.
- Russett, Bruce M. and John R. Oneal (2001). Triangulating Peace: Democracy, Interdependence, and International Organizations, Norton.
- Simmons, Beth A., Frank Dobbin and Geoffrey Garrett (2006). "Introduction: The International Diffusion of Liberalism." International Organization **60**: 781-810.

Singer, J. David, Stuart Bremer and John Stuckey (1972). "Capability Distribution, Uncertainty, and Major Power War, 1820-1965." Peace, War, and Numbers. Bruce Russett, Sage: 19-48.

Schofer, E. and A. Hironaka (2005). "The Effects of World Society on Environmental Protection Outcomes." Social Forces **84**(1): 25-47.

Schofer, E. and J. W. Meyer (2006). "The world-wide expansion of higher education in the twentieth century." American Sociological Review **70**(6): 898-920.

Tilly, Charles (2007). Democracy, Cambridge University Press.

"UNCTAD: FDI." (2008). Website of the United Nations Conference on Trade and Development: FDI Flows and Stocks Retrieved from <http://stats.unctad.org/FDI/>.

"UNSD: Regions." (2006). Website of the United Nations Statistics Division: Standard Country and Area Codes Classifications, Retrieved from <http://unstats.un.org/>.

Wejnert, B. (2005). "Diffusion, Development, and Democracy, 1800-1999." American Sociological Review **70**(1): 53-81.