

Understanding the “Gravity” of Authoritarianism China, Russia, and Authoritarian Cooperation

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Abstract

This essay addresses the question of why some developing countries cooperate with other authoritarian regimes and others do not. In particular, it examines why a developing country may be attracted to different authoritarian “models.” Based on the existing literature, the author develops and tests a theoretical model roughly based on a simple “gravity” model, which proposes that cooperation with Russia or China is a function of the attractiveness of these countries as models for emulation, mitigated by other factors. Using a Prais Winsten estimation procedure and dyadic data from the work of Michaela Mattes and Marina Rodriguez, the research examines levels of cooperation between China and Russia, on the one hand, and developing countries, on the other, for the period 1990–2004. The results suggest that China, as a one-party regime, tends to exhibit more cooperative behavior with other authoritarian regimes than Russia, which has in place a more personalist system. This supports the idea put forward by the literature that there is something about a one-party system that makes it a more attractive partner than other authoritarian systems.

Keywords: Authoritarian cooperation, China model, gravity model, Goldstein Conflict–Cooperation Scale.

In the summer of 2016, I was asked to give a talk on democracy and good governance at a conference held at Addis Ababa University. I have been to Ethiopia several times, and the usual academics were there: expatriate Ethiopian scholars, most of whom lived and taught in the United States or Western Europe, Ethiopian academics resident in Ethiopia, other scholars from across Africa, as well as a number of government officials. After the talk, there was a rather lively discussion about various “models” that Ethiopia might consider following. Most striking to me were the reactions of both those

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who were clearly sympathetic to the Ethiopian opposition and those who were sympathetic to the government of the Ethiopian People's Revolutionary Democratic Front (EPRDF). Despite their differences, both sides were in almost total agreement that Western models of political organization should not be followed (i.e., Western democracy); rather, there was much focus on emulating the "Chinese model." Even those who advocated "Ethiopianism" (a typical alternative offered among Ethiopian academics) emphasized the longstanding ties between Ethiopia and China, and the cultural and historical similarities.

However, different reasons were offered as to why the Chinese model represented the best prospects for a country such as Ethiopia. For those who favored the government, the emphasis was clearly on the political stability and rapid economic growth that the Chinese model offered. For those in the opposition, the appeal of the model lay with the fact that it was not Western (and hence not "imperialist") and represented an alternative "third way" toward development. Both sides agreed that the way the Chinese approached the African continent and the Chinese policy of "noninterference" in internal political matters stood in contrast with the promotion of democracy and interference of the West.

This essay addresses the question of why some developing countries cooperate with other authoritarian regimes and others do not. Of particular interest is why a developing country might be attracted to different authoritarian "models"—represented by either the People's Republic of China or Russia. Based on the existing literature, I develop and test a theoretical model, roughly based upon a simple "gravity" model, which proposes that cooperation with China or Russia is a function of the attractiveness of these countries as models for emulation, mitigated by other factors. I have used the gravity model primarily as a heuristic theoretical device to make sense of what might explain the political attractiveness of certain types of regimes over others. In particular, I have used the concept of cooperation to measure the extent to which countries in the developing world are "attracted" to either the one-party authoritarian model (represented by China) or the personalist authoritarian model (represented by Russia).

I use the Chinese and Russian cases as the model "attractor" countries for two reasons. First, although there are many examples of authoritarian regimes in the world that could potentially act as "attractor" countries, China and Russia are widely recognized as the most powerful rivals to Western democracy in economic, political, and military terms. In this sense, they should have "gravity" that rivals that of the West. Second, China and Russia exemplify very different models of authoritarianism, with China representing the example of an institutionalized one-party regime, and Russia representing a more personalist system.¹

¹ To be sure, with the recent moves by President Xi Jinping, it may become less institutionalized

The central question addressed in this study is whether “regime characteristics” of the attractor state (either China or Russia) and the “satellite” states propel states together in authoritarian cooperation or other factors such as economic circumstances (e.g., the attraction of natural resources or trade connections). The essay also considers factors that mitigate against such attraction (such as geographical distance) or the attraction of other “bodies” (such as cooperation with Western countries). To examine this question, I use dyadic data developed by Michaela Mattes and Marina Rodriguez to examine levels of cooperation between China and Russia (which proxies as a measure of attraction), on the one hand, and developing countries, on the other, for the period 1990–2004.²

Theory

As a means to orient this study, I start with a simple model used by economists to conceptualize the level of attraction between countries. However, rather than adopt the gravity model as a singular theoretical construct (because unlike economics, which uses trade as a dependent variable, in this essay I focus on political cooperation), I use this model as way of thinking about how different authoritarian models may be attractive to developing countries.

The idea of a gravity model in economics was borrowed from physics. The “gravity” model was first introduced by Newton in the seventeenth century, although it has not been limited to the area of physics.³ In the social sciences, gravity models have become very popular in economics and are most often found in the international trade literature.⁴

Nobel Laureate Jan Tinbergen was one of the first scholars to use Newton’s gravity model to analyze the development of trade connections. In his pioneering study, he analyzed trade among eighteen countries to conclude that the index of trade between two countries is proportionally linked to GDP sizes and adversely to their resistance index—the distance between countries.⁵ Later scholarship revealed that the gravity model also can be derived from other international trade theories such as the Ricardian model, the Heksher-Ohlin model, and much earlier models of economies of scale.⁶ However,

in the future and more personalistic, but at least until this point the Chinese case has represented an archetype of an institutionalized one-party regime.

² Michaela Mattes and Marina Rodriguez, “Autocracies and International Cooperation,” *International Studies Quarterly* 58, no. 4 (2014): 527–538.

³ Kingsley E. Haynes and A. Stewart Fotheringham, *Gravity and Spatial Interaction Models* (London: SAGE Publications, 1984).

⁴ Sushil Kumar and Ahmed Shahid, “Gravity Model by Panel Approach: An Empirical Assumption with Implications for South East Asia,” *Foreign Trade Review* (2015): 233–249, and Jan Tinbergen, *Shaping the World Economy: Suggestions for an International Economic Policy* (New York: Twentieth Century Fund, 1962).

⁵ Tinbergen, *Shaping the World Economy*.

⁶ Kumar and Shahid, “Gravity Model by Panel Approach.”

these models generally have not been used by scholars in political science or international relations. Such models can be useful as a theoretical device to make sense of the factors that may promote cooperation between developing countries and authoritarian states and to test the proposition that authoritarian models are attractive to the developing world.

The original gravity model is estimated as

$$\log X_{ij} = c + b_1 \log GDP_i + b_2 \log GDP_j + b_3 \log \tau_{ij} + e_{ij}$$
$$\log \tau_{ij} = \log(\text{distance})$$

where X_{ij} corresponds to the exports from country i to country j ; GDP is each country's gross domestic product; τ_{ij} represents the obstacles expressed in the distance; and e_{ij} is a random error term.

The fundamental point of a gravity model is that certain “bodies” are more attractive than others, but this attraction is at times mitigated by other factors. More recently, scholars have used the concept of gravity in political science to understand the effect of super-presidential systems on political parties in post-communist politics,⁷ while others have used the model to explain the attraction of concepts in the Republican Party platform.⁸ These studies have used the idea of gravity, or attraction, to explain why some political bodies are more attractive than others. In this essay, I also use the gravity model as a heuristic theoretical tool and identify the characteristics of individual states that affect attraction (regime types, natural resource endowments, population size) and relations between states (such as trade ties, distance between countries, and the ties between the developing country and other major powers).

Theoretically, for the purposes of this study, I define “gravity” as that force which compels bodies (in this case countries) together (which results in some form of cooperation). This gravity is affected by both the characteristics of the model country (in this case, China or Russia) and the potential satellite (the developing country). The characteristics of the model country include the regime type (or model of authoritarianism it represents), and the characteristics of the potential satellite include the satellite country's resource endowments (features that attract the model country). I also consider as controls the trade ties between the model and satellite countries and factors that act as potential cooperation (such as distance and the attraction of other powers).

⁷ John Ishiyama, “Political Party Development and Party ‘Gravity’ in Semi-Authoritarian States: The Cases of Azerbaijan, Kyrgyzstan, and Tajikistan,” *Taiwan Journal of Democracy* 4, no. 1 (July 2008): 33-53.

⁸ Peter Mair, Thomas Rusch, and Kurt Hornik “The Grand Old Party—A Party of Values?” *Springer Plus* 3, no. 697 (2014), <https://doi.org/10.1186/2193-1801-3-697> (accessed November 2017).

For the purposes of this essay, the model is reconfigured as

$$\log X_{ij} = c + b_1 \text{regime}_{ij} + b_2 \text{logoil} \& \text{gas}_{j} + b_3 \text{logPopulation}_{j} + b_4 \text{Trade}_{ij} + b_5 \text{US}_{j} + b_6 \text{UK}_{j} + b_7 \text{France}_{j} + \log \text{distance}_{ij} + e_{ij}$$

where X_{ij} corresponds to the level of conflict–cooperation in a state dyad (between China or Russia, and a developing country—as measured by the Goldstein Conflict–Cooperation Scale).⁹

The “attractor” variables include Regime_{ij} , which is the regime type dyad, and $\text{logoil} \& \text{gas}_{j}$ is oil and gas production per population of the developing country. Population_{j} is the population of the developing country and Trade_{ij} is the volume of trade between the countries in the dyad ij .

There also are “obstacle” variables that include the cooperation level that the developing country j has with other powers. Thus, US_{j} is an obstacle expressed by the cooperation of the United States with the developing country j , UK_{j} is an obstacle expressed by the United Kingdom’s cooperation with developing country j , and France_{j} is France’s cooperation with the developing country j . Finally, Dist_{ij} represents the obstacle expressed in the distance between the countries in the dyad, and e_{ij} is a random error term.

In the following section, theoretical justifications are provided for the inclusion of the variables in the model presented above.

Factors Affecting Cooperation

Regime Type Dyad

Since the central focus of this essay is whether the different regime models represented by China or Russia attract countries in the developing world, the primary independent variable in this study is Regime Type Dyad. International relations scholars have long examined the conditions under which states cooperate in an anarchic international order. Many scholars have suggested that cooperation is more likely among countries with similar domestic political regimes. Much of this work, however, has focused on cooperation between democratic regimes. In particular, neoliberal institutionalists have argued that there are close links between democracy and cooperation between states.¹⁰ This is because democracies are better able to make credible commitment that

⁹ Joshua S. Goldstein, “Conflict-Cooperation Scale for WEIS Events Data,” *Journal of Conflict Resolution* 36, no. 2 (1992): 369-380.

¹⁰ Edward Mansfield, Helen Milner, and B. Rosendorff, “Why Democracies Cooperate More,” *International Organization* 56, no. 2 (2002): 477-513; Karen Remmer, “Does Democracy Promote Interstate Cooperation?” *International Studies Quarterly* 42, no. 1 (2008): 25-52; Solomon W. Polachek, “Why Democracies Cooperate More and Fight Less,” *Review of International Economics* 5, no. 3 (1997): 295-309; and Michael Mousseau, “Democracy and Militarized Interstate Collaboration,” *Journal of Peace Research* 34, no. 1 (1997): 73-87.

is the “keystone of international politics, particularly in a world that does not provide the social context that allows for mutual trust among individuals in other social settings.”¹¹

Indeed, democracies are more likely to cooperate with each other because they have similar institutional arrangements that make it easier for states to communicate their preferences and commitments to each other.¹² Further, political institutions make democracies generally more cooperative than nondemocracies. As several scholars have argued, this is because democracies are particularly good at making credible commitments to international cooperation as a result of their leaders’ accountability to domestic audiences.¹³ To renege on international agreements can lead to the removal of that leader. Thus, the domestic costs for reneging on agreements have a potentially high-risk level—leaders are incentivized to uphold international commitments and as a result, democracies are regarded as reliable and attractive partners. Indeed, institutional arrangements such as legislatures and other checks on executive power (which make it more difficult to arbitrarily undo agreements) result in democracies being more able to keep to commitments than nondemocracies.¹⁴ In short, democracies are more likely to keep to their promises, because there are internal checks on reneging on an agreement. Cooperation is more likely to occur between democracies, because they share regime characteristics. However, democracies are attractive to nondemocracies for cooperation as well because nondemocracies recognize that democracies are more likely to make credible commitments. Thus, democracy—nondemocracy cooperation also occurs.

¹¹ Lisa Martin, *Democratic Commitments: Legislatures and International Cooperation* (Princeton, NJ: Princeton University Press, 2000), 8.

¹² James Fearon and Alex Wendt, “Rationalism vs. Constructivism,” in *Handbook of International Relations*, ed. Walter Carlsnaes, Thomas Risse, and Beth A. Simmons (Thousand Oaks, CA: Sage, 2002), 55-72.

¹³ James D. Fearon, “Domestic Political Audiences and the Escalation of International Disputes,” *American Political Science Review* 88, no. 3 (1994): 577-592; Peter F. Cowhey, “Domestic Institutions and the Credibility of International Commitments: Japan and the United States,” *International Organization* 47, no. 2 (1993): 299-326; Kurt T. Gaubatz, “Democratic States and Commitment in International Relations,” *International Organization* 50, no. 1 (1996): 109-139; Brett Ashley Leeds, “Domestic Political Institutions, Credible Commitments, and International Cooperation,” *American Journal of Political Science* 43, no. 3 (1999): 979-1002; Charles Lipson, *Reliable Partners: How Democracies Have Made a Separate Peace* (Princeton, NJ: Princeton University Press, 2003); and Fiona McGillivray and Alastair Smith, *Punishing the Prince: A Theory of Interstate Relations, Political Institutions, and Leader Change* (Princeton, NJ: Princeton University Press, 2008).

¹⁴ Michael Tomz, “Domestic Audience Costs in International Relations,” *International Organization* 61, no. 4 (2007): 821-840, and Jennifer Weeks, “Autocratic Audience Costs,” *International Organization* 62, no. 1 (2008): 35-64.

¹⁵ Chansoo Cho, “Explaining Cooperation among Illiberal States: A Social Constructivist Challenge,” *Korean Journal of International Studies* 8, no. 2 (2010): 233-253, and Mark Peceny, Caroline C. Beer, and Shannon Sanchez-Terry, “Dictatorial Peace?” *American Political Science Review* 96, no. 1 (2002): 15-26.

More recently, scholars also have pointed to the possibility of interauthoritarian cooperation because of shared regime characteristics.¹⁵ One singularly important work that has argued that authoritarian regime characteristics cause attraction between states is by Mattes and Rodriguez.¹⁶ They argue that authoritarian domestic political institutions significantly affect international cooperation. Indeed, they contend that single-party dictatorships, especially those that are institutionalized, have many of the features seen in democracies that check arbitrary power. Such regimes have features that help to generate accountability, consistency of policy making, and some degree of transparency. As a result, they are more likely to engage in international cooperation as compared to personalist dictatorships, which have none of these characteristics. Thus, one-party authoritarian regimes (such as China) should also be more attractive to other states, as compared to personalist dictatorships.

Alternative Explanations for Attraction

There are a number of alternative explanations for attraction and cooperation between states. Just as developing states may find authoritarian models attractive, so, too, China and Russia find the characteristics of developing states attractive. For instance, the existence of natural and strategic resources is an important characteristic of potential satellites that make them attractive to major powers. In the foreign development aid literature, donor states often are motivated by strategic considerations. Thus, for example, “Japan concentrates its aid in the Asian region; Britain and France give much of their aid to former colonies; political and cultural relations are evident in OPEC’s aid allocations; and strategic motives dominate the bilateral aid programs of the United States.”¹⁷ In the economic sphere, the use of tied aid consistently has featured appreciably in foreign aid, particularly the desire to secure access to strategic natural resources.¹⁸

Regarding China, the search for strategic resources, according to many scholars, has played a very prominent role in its foreign policy.¹⁹ The desire for energy security is of paramount concern to the leaders of the Chinese state—thus, countries that have such resources should be particularly attractive to the Chinese. This may not be the case for Russia, however, which is a net energy producer and exporter.

¹⁶ Mattes and Rodriguez, “Autocracies and International Cooperation.”

¹⁷ Robert Cassen, *Does Aid Work?* (Oxford: Oxford University Press, 1994), 2.

¹⁸ Peter Schraeder, Steven Hook, and Bruce Taylor, “Clarifying the Foreign Aid Puzzle: A Comparison of American, Japanese, French, and Swedish Aid Flows,” *World Politics* 50, no. 2 (1998): 294-323, and Steven Hook, *Foreign Aid and the National Interest* (Boulder, CO: Lynne Rienner, 1995).

¹⁹ Bernard D. Cole, *China’s Quest for Great Power: Ships, Oil, and Foreign Policy* (Annapolis, MD: Naval Institute Press, 2016); Monique Taylor, *The Chinese State, Oil, and Energy Security* (New York: Palgrave Macmillan, 2014); and Sigfrido Burgos Caceres and Sophal Ear, *The Hungry Dragon: How China’s Resources Quest Is Reshaping the World* (New York: Routledge, 2013).

There is also extensive literature that addresses the question of whether trade between nations leads to closer relations. The economic basis upon which the argument rests is a model of exchange whereby trading countries promote peace with each other to avoid the “opportunity costs” associated with disrupted trade arising from conflict. Although certainly a longstanding idea, the formal hypothesis was first forwarded by Solomon Polachek,²⁰ formalized using a game theory by Polachek and Jun Xiang, and generalized by Philippe Martin, Thierry Mayer, and Mathias Thoenig.²¹ However, others, such as James D. Morrow, argue that trade and conflict are unrelated.²² Morrow contends that, if disputes are based on territory, trade has little effect on improving relations. Other scholars argue that trade decreases high-order conflict such as wars but has no effect on low-order conflict, such as militarized interstate disputes (MIDS).²³ Nonetheless, there is general consensus that trade reduces interstate conflict and increases cooperation between states.²⁴

There certainly are other factors that affect cooperation between states. More populous developing countries potentially represent strategically more important countries, lucrative markets, and trade partners. Alliances are important as well. As Mattes and Rodriguez note, alliances often are used as an indicator of shared interest, so it may be these shared interests rather than institutional similarity that drives international cooperation.²⁵ Distance

²⁰ Solomon Polachek, “Conflict and Trade,” *Journal of Conflict Resolution* (1980): 55-78.

²¹ Solomon Polachek and Jun Xiang, “How Opportunity Costs Decrease the Probability of War in an Incomplete Information Game,” *International Organization* 64, no. 1 (2010): 133-144; Solomon Polachek, “Multilateral Interactions in the Trade-Conflict Model,” in *Globalization and Armed Conflict*, ed. Gerald Schneider, Katherine Barbieri, and Nils Petter Gleditsch (Oxford: Rowman and Littlefield, 2003), 31-48; Philippe Martin, Thierry Mayer, and Mathias Thoenig, “Make Trade Not War?” *Review of Economics Studies* 75, no. 3 (2008): 865-900; Han Dorussen, “Balance of Power Revisited: A Multi-Country Model of Trade and Conflict,” *Journal of Peace Research* 36, no. 3 (1999): 443-462; Han Dorussen, “Heterogeneous Trade Interests and Conflict: What You Trade Matters,” *Journal of Conflict Resolution* 50, no. 1 (2006): 87-107; Han Dorussen and Hugh Ward, “Trade Networks and the Kantian Peace,” *Journal of Peace Research* 47, no. 1 (2010): 29-42; and Havard Hegre, “Trade Decreases Conflict More in Multi-Actor Systems: A Comment on Dorussen,” *Journal of Peace Research* 39, no. 1 (2002): 109-114.

²² James D. Morrow, “How Could Trade Affect Conflict?” *Journal of Peace Research* 36, no. 3 (1999): 481-489.

²³ Erik Gartzke, Quan Li, and Charles Boehmer, “Investing in the Peace: Economic Interdependence and International Conflict,” *International Organization* 55, no. 2 (2001): 391-438.

²⁴ Bruce Russett and John R. Oneal, *Triangulating Peace: Democracy, Interdependence, and International Organizations* (New York: Norton Series in World Politics, 2001), and Edward Mansfield and Brian Pollins, “The Study of Interdependence and Conflict: Recent Advances, Open Questions, and Directions for Future Research,” *Journal of Conflict Resolution* 45, no. 6 (2001): 834-859. Although it certainly could be argued that trade is endogenous with regard to cooperation (in other words, cooperation may in fact promote trade), for our purposes, since trade is a control variable as opposed to a variable of primary theoretical interest for this essay, I include it in the analysis. At the very least it is a relationship for which it is necessary to control.

²⁵ Mattes and Rodriguez, “Autocracies and International Cooperation.”

between countries affects the likelihood of cooperation, with greater distance, *ceteris paribus*, likely to inhibit cooperation between two states. Further, as with the case of gravity between planetary bodies, it is also the case that the gravitational pull of other powers can reduce the attractiveness of China and/or Russia and developing countries. In particular, if that developing country had ties with Western powers, this could mitigate the attraction of the authoritarian powers.

Design and Methodology

Variables

Dependent Variable

As a measure for our dependent variable, *international cooperation* (which proxies for the attraction between authoritarian model states and developing countries), we use the replication data from Mattes and Rodriguez that used data on cooperative events from the “10 Million International Dyadic Events” dataset, which covers all dyads between 1990 and 2004.²⁶

These data are computer-coded from Reuters Business Briefings using the Virtual Research Associates (VRA) Reader software. Events reported in Reuters news stories are assigned to one of 152 categories based on the Integrated Data for Event Analysis (IDEA) framework.²⁷ The IDEA framework is based on the well-known WEIS classification schema, but includes additional event types and differentiates among event subtypes. Like the WEIS typology, the IDEA framework intentionally avoids imposing a conflict–cooperation dimension on events yet makes it possible to map the individual event categories onto the weighted Goldstein Conflict–Cooperation Scale.²⁸

Like Mattes and Rodriguez, I am interested only in international cooperation. Their measure kept only events with positive Goldstein scores, which indicated cooperative events, and the scores were summed into yearly measures. For example, if a dyad collaborated (Goldstein=4.8), consulted (Goldstein=1.5), and one state extended military aid to the other (Goldstein=8.3), the yearly cooperation score would be $14.6/3=4.87$. The variable thus captures the average level of cooperation in the dyad-year rather than frequency. As Brett Ashley Leeds suggests, such an intensity-based measure is preferable

²⁶ Ibid.; Doug Bond, Joe Bond, Churl Oh, J. Craig Jenkins, and Charles Lewis Taylor, “Integrated Data for Events Analysis (IDEA): An Event Typology for Automated Events Data Development,” *Journal of Peace Research* 40, no. 6 (2003): 733-745; and Gary King and Will Lowe, “An Automated Information Extraction Tool for International Conflict Data with Performance as Good as Human Coders: A Rare Events Evaluation Design,” *International Organization* 57, no. 3 (2003): 617-642.

²⁷ Bond et al., “Integrated Data for Events Analysis (IDEA).”

²⁸ Charles A. McClelland, *World Event/Interaction Survey (WEIS) Project, 1966-1978* (Ann Arbor, MI: Inter-University Consortium for Political and Social Research, 1978), and Goldstein, “Conflict-Cooperation Scale for WEIS Events Data.”

to frequency-based measures because it reduces the bias that results from the over-reporting of events concerning some dyads compared to others. The measure ranges from 0 to 8.3.²⁹

Independent Variable

To measure our primary independent variable, regime type dyad, we use a variation of the measurement strategy followed by Mattes and Rodriguez. In their empirical analysis, Mattes and Rodriguez used the regime typology of Barbara Geddes et al. to investigate the international cooperation behavior of democracies as compared to single-party dictatorships, military dictatorships, and personalist dictatorships.³⁰ They argued that the domestic mechanisms that are often cited as promoting international cooperation between democracies—leader accountability, policy flexibility, and transparency—are more prevalent in single-party authoritarian regimes than among their personalist dictatorship counterparts. Thus, single-party regimes are generally more cooperative with other regimes, but also specifically more cooperative with other single-party regimes.

As mentioned above, this essay is primarily focused on the level of cooperation between the China-developing and Russia-developing country dyads. In many ways, China and Russia represent different types of “gray zone” dominant party regimes.³¹ On the one hand, China represents something like an institutionalized one-party regime, which Randall Peerenboom suggests is a model of “rule by law.” In “rule by law,” the state uses law as means to maintain order (and hence the leaders’ power).³² Unlike the “rule of law,” there is no real limitation on the state. However, governance under such conditions is not by fiat. Peerenboom suggests that, in the case of the People’s Republic, there exists something of a “thin rule of law” in the post-Mao era. Unlike a “thick theory” of the rule of law, which would incorporate some notion of human rights or limits on state authority, a “thin rule of law” emphasizes legal norms and procedures and rests upon a system of laws that are “general, public, prospective, clear, consistent, capable of being followed, stable and enforced.” Thus, Geddes et al. consistently classify China as a single-party system.

On the other hand, Russia represents a more personalist system.³³ Although for a period in the early 1990s Russia was classified as a one-party system by

²⁹ Leeds, “Domestic Political Institutions, Credible Commitments, and International Cooperation.”

³⁰ Barbara Geddes, Joseph Wright, and Erica Frantz, “Autocratic Breakdown and Regime Transitions: A New Data Set.” *Perspectives on Politics* 12, no. 2 (2014): 313-331.

³¹ Thomas Carothers, “The End of the Transition Paradigm,” *Journal of Democracy* 13, no. 1 (2002): 5-21.

³² Randall Peerenboom, *China’s Long March toward the Rule of Law* (New York: Cambridge University Press, 2002).

³³ Geddes et al., “Autocratic Breakdown and Regime Transitions,” and Michael McFaul and Kathryn Stoner-Weiss, “The Myth of the Authoritarian Model,” *Foreign Affairs* 87, no. 1 (2008): 69-84.

Geddes et al., the very nature of the system has emphasized the constitutional centrality of the president in Russian politics. Indeed, in the 1993 constitution, the president was given enormous executive, legislative, and judicial powers, so much so that scholars referred to Russia as the archetypical “super-presidential” system.³⁴ Thus, in contrast to China, Russia represents a more personalist variation of a gray-zone regime.³⁵

Based upon the above literature on interauthoritarian cooperation, we would expect to find higher levels of cooperative behavior between China and other single-party regimes, and that Chinese cooperation overall with other regimes would be higher than the dyads in which Russia is a partner.

Controls

In addition to the primary institutional similarity variables above, we also use Michael Ross’s data, *Oil and Gas Revenue/capita*, to measure the total oil and gas revenues as a percentage of the total population every country year.³⁶ This is employed to measure the resource endowments of a developing country that make it attractive to either China or Russia. Further, we also measure trade ties by using annualized data on the value of bilateral trade (both imports and exports) for China or Russia with a developing country.³⁷ To measure population, we take the log of estimated population by country by year and assess whether the dyad members were allied. I use Mattes and Rodriguez’s dummy variable measure of whether two countries were in an alliance in a given year, which they derived from the Alliance Treaty Obligations and Provisions data.³⁸ Distance is measured as the natural log of the distance in miles between two capitals (in this case, distance between Moscow and Beijing and the dyadic partner’s capital). Finally, I also include the annual Goldstein cooperation scores for the dyadic partner and the United States, Britain, and France.

Data and Analysis

I use the replication data from Mattes and Rodriguez described above. However, rather than focusing on all regime dyads (as Mattes and Rodriguez do), I examine only the Chinese and Russian dyads. Further, since I focus on only the attraction of China and Russia as models to countries in the developing

³⁴ John Ishiyama and Ryan Kennedy, “Superpresidentialism and Political Party Development in Russia, Ukraine, Armenia and Kyrgyzstan,” *Europe-Asia Studies* 53, no. 4 (2001): 1177-1191.

³⁵ Carothers, “The End of the Transition Paradigm.”

³⁶ Michael Ross, “Does Oil Hinder Democracy?” *World Politics* 53, no. 3 (2001): 325-361, and id., “What Do We Know About Natural Resources and Civil War?” *Journal of Peace Research* 41, no. 3 (2004): 337-356.

³⁷ UN Comtrade data base, <https://comtrade.un.org/data/> (accessed November 2017).

³⁸ Brett Ashley Leeds and Michaela Mattes, “Alliance Politics during the Cold War: Aberration, New World Order, or Continuation of History?” *Conflict Management and Peace Science* 24, no. 3 (2007): 183-199.

world, I use the OECD categories for middle- and low-income countries to filter our developed countries from the sample, leaving 144 countries for the period 1990–2004. The result is 2,032 dyads for China during this period, and 2,077 dyads for Russia. Table 1 lists the dyads by type of regime in the developing country for China and Russia. For both China and Russia, the most frequent annual dyads were with personalist regimes. This may reflect the more frequent contacts both have with the personalist regimes in Central Asia (although not necessarily cooperative contacts).

Table 1. Types of Dyads

Variable	China	Russia
Dyad with single-party regimes	226 (11.12%) N= 2032	136 (6.55%) N=2077
Dyad with military regimes	41 (2.02%) N= 2032	15 (0.72%) N=2077
Dyad with personalist regimes	377 (18.55%) N=2032	182 (8.76%) N=2077

For the analysis, I use the Prais-Winsten estimation procedure with robust clustered standard errors. The Prais-Winsten estimation procedure is meant to account for serial correlation of type AR (1) in a linear model, which is likely when using panel data. I do this instead of using a lagged dependent variable in an OLS regression, which often is employed as a means of capturing dynamic effects and as a method for ridding the model of autocorrelation. However, as Luke Keele and Nathan J. Kelly point out, this technique is fraught with problems. The use of a lagged dependent variable causes the coefficients for explanatory variables to be biased downward, because the first observation is dropped in a lagged model in a time series. Thus, the Prais-Winsten technique is generally preferable. Further, I use clustered robust standard errors by dyad to address any dyad specific effects.

Table 2 reports the results of the regression analysis. The results provide partial support for the expectation that China as a one-party regime would be more likely than Russia (which represents a more personalistic model of authoritarian regime) to generally exhibit cooperative behavior with other authoritarian regimes. Chinese cooperation with other single-party systems and with military regimes is generally positive (although only the China-Military regime dyad is positive and statistically significant). Both China and Russia appear not to cooperate with other personalist regimes. However, generally, Russia is much less likely than China to cooperate with other authoritarian regimes, with the coefficients for each dyad negative and statistically significant in the Russian model.

However, the suggestion that China would be more likely to cooperate with other single- party regimes is not supported by the results. In fact, China

is more likely to cooperate with military regimes than with either single-party or personalist regimes.

Further the results indicate that, as suggested by gravity models in economics, distance inhibits cooperation, whereas (not surprisingly) the existence of oil and gas resources and population attract Chinese and Russian cooperation. This is consistent with China's seeking access to resources (as suggested above) and reflects Russia's ties with the resource-rich countries of Central Asia. Trade, on the other hand, has an opposite effect than what was expected. Trade volume with the partner is not associated with increased

Table 2. Level of Cooperation—Goldstein Index
(Prais-Winsten Estimation with Robust Clustered Standard Errors)

Variables	Model 1 (China) (robust clustered standard errors)	Model 2 (Russia) (robust clustered standard errors)
China/Russia—single-party dyad	.161 (.133)	-.285** (.126)
China/Russia—military dyad	.514*** (.161)	-.792**** (.091)
China/Russia—personalist dyad	-.188** (.076)	-.197** (.094)
Log of distance	-4.983**** (.741)	-4.791**** (.527)
Alliance dummy	.326 (.232)	.389** (.091)
Goldstein cooperation U. S.	.008 (.017)	.048** (.020)
Goldstein cooperation Britain	.059** (.027)	.039 (.024)
Goldstein cooperation France	.031 (.021)	.052** (.022)
Log of oil and gas production per population	.036*** (.012)	.029** (.013)
Total volume trade in millions \$ 2004	9.911 (1.791)	-3.861*** (1.351)
Log of population in thousands	.217**** (.031)	.148**** (.032)
* = p < .05 ** = p < .01 *** = p < .001 **** = p < .0001		
R-square	.20	.20
N	1839	1867

cooperation with China, and, actually, is associated with decreased cooperation in regard to Russia. Being in alliance with Russia is associated with higher levels of cooperation (perhaps because of Russia's treaty ties with many countries in the "near abroad"), however, being in alliance has no effect on the level of cooperation between China and its dyadic partners.

Interestingly, cooperation levels vary when taking into account the "gravitational" impact of other major powers. Chinese cooperative behavior is not impeded by the gravitational pull of any of the major powers—in fact, China is more cooperative with countries with which Britain cooperates. This may reflect China's push for more cooperation with many former British colonies, particularly in Anglophone Africa. Russia also tends not to be impeded in seeking cooperation with countries that also cooperate with the West, particularly the United States and France.

Conclusion

The above results suggest that, in general, China as a one-party regime tends to exhibit more cooperative behavior with other authoritarian regimes than Russia, a more personalist system. This supports the idea put forward by the literature that there is something about a one-party system that makes it a more attractive partner than other authoritarian systems. However, this cooperation is not always with other one-party regimes. Thus, the idea of attraction based on regime similarities is not necessarily the case. Willingness to cooperate with China may not be because similar types of authoritarian regimes attract one another. Rather, it is likely because, as a system that has certain internal institutional characteristics, China exhibits some of the internal audience costs that make it a credible partner with which to cooperate, at least more so than Russia. Thus, there appears to be something to the argument that China represents an attractive regime model for the developing world. It is likely that the attractiveness of the Chinese model has a great deal to do with the political stability and rapid economic growth that the "Chinese model" offers, supporting the views expressed to me in Addis Ababa. However, it is also likely that China is attractive because of systemic characteristics. Unlike Russia, which is often associated with "kleptocracy" and the cult of personality surrounding Vladimir Putin, China represents something of an institutionalized system with at least "rule by law."

The above results are preliminary and should be taken with a very large "grain of salt." In particular, the data cover only until 2004, which means that more recent trends (such as the rise of hyper-personalism and the renewed cult of personality in Russia) are not really captured by the analysis. Nonetheless, as an empirical plausibility probe, the results are promising—the data capture at least the formative years of both authoritarian models, particularly as they have sought to assert themselves as challengers to the Western models of democracy. The results suggest that there is something different about the attractiveness

of China as an institutionalized one-party state that makes it relatively more appealing to other authoritarian regimes, when compared to the more personalist system as represented by the Russian Federation. However, this may change, particularly if Xi Jinping injects greater personalism in the Chinese system as he consolidates power. Nonetheless, as of now, China appears to be a relatively more attractive alternative to Russia as an authoritarian model.