

## Appendix

### A About the data

The appendix provides additional data on the use of the first image that underlies our analysis in the body of the paper. All data used in the paper, unless noted, is from the Teaching Research and International Policy Project (TRIP) Journal Article Database and includes journal articles from years 1980-2018, inclusive. The journals included in the TRIP database are: *American Journal of Political Science* (AJPS), *American Political Science Review* (APSR), *British Journal of Political Science* (BJPS), *European Journal of International Relations* (EJIR), *International Organization* (IO), *International Security* (IS), *International Studies Quarterly* (ISQ), *Journal of Conflict Resolution* (JCR), *Journal of Politics* (JOP), *Journal of Peace Research* (JPR), *Security Studies* (SS), and *World Politics* (WP). TRIP codes **all** articles published in *IO*, *IS*, *ISQ*, *WP*, *JCR*, *EJIR*, *SS*, and *JPR* and all broadly IR related articles in *JOP*, *APSR*, *AJPS*, and *BJPS*.

In our analysis, we further refine the TRIP dataset to include strictly-IR articles, omitting articles whose issue area is philosophy of science, political theory, methodology, or Comparative or American politics. We also omit articles that are coded as lacking any levels of analysis, since they do not examine a question they might plausibly have answered by drawing on the first image.

Below we include language directly from the TRIP codebook (<https://trip.wm.edu/data/replication-and-other-data>) on the TRIP coding process, and Level of Analysis:

**Coding Methodology:** (Maliniak et al. 2018, 3).

Given time and resource considerations, we developed the following process for determining each of the variable values for each article: Each coder reads the article’s abstract, skims the article (paying particular attention to headings within the text and to any tables, graphs, or illustrations), and reads the introduction and conclusion. If the author explicitly declares his/her epistemology, paradigm, methods, issue area, etc., then we take this as a cue, but the articles are categorized strictly according to the rules in this codebook, not the self-expressed identity of the author. Quite often, the author’s commitments are implicit and coders have to read more closely to infer the value of the variables. If there are some variables that cannot be coded using this process, the coder reads the article more closely. On average, each article takes 12-15 minutes to code.

To ensure inter-coder reliability, we conducted two initial test rounds of coding, in which all researchers coded the same sample of 100 articles. We compared our results and discussed discrepancies, which allowed us to clarify our rules and procedures. Once we collectively improved our coding, we divided the journals among the researchers so that each article was assigned to two independent coders. If both coders independently came to the same conclusion about the value of all the variables within an article, then we accepted the observation as part of the final data set. If any two coders disagreed on the value of any observation in an article, however, then a senior coder would independently code that observation and had the authority to change the value of any other variable.

**Level of Analysis** (Maliniak et al. 2018, 16-17)

Level of analysis refers to the unit of study. We adopt Kenneth Waltz’s use of three levels of analysis and enter a “yes” or “no” in the appropriate column for each level. We record a “yes” when an author locates her IV at that level. Purely game theoretic articles that do not address any particular level of analysis but instead refer to any type player are coded as “No levels of analysis.” Articles may be coded “yes” for multiple levels.

Level 1: refers to the individual level of analysis and includes such independent variables as: personality, perceptions, beliefs, images, values, human nature, bias, accidents, timing, means/ends calculations, group processes (such as groupthink), and any other factors specific to the

individual decision makers and/ or the decision-making process.

Level 2: refers to the nation-state level of analysis and includes such independent variables as: regime type, regime stability, partisan politics, economic system, governmental structure, bureaucratic interests and bargaining, standard operating procedures, national culture, national resources, geography, and any other factors internal to the state. Note that these are coded as level 2 variables only when they are ascriptive, not when they are interactive or distributional. Geography, resources, regime type, and other variables may be considered level 3 when causality inheres in the distribution of these variables across the international system. For example, the statement, “The fact that the United States is a democracy explains the development of its foreign policy,” is coded as a level 2 argument, but the statement, “The increasing number of democracies in the international system during this historical period explains the declining number of interstate wars,” is coded as level 3.

Level 3: refers to the international level of analysis and includes such independent variables as: anarchy, security dilemma dynamics, the offense/defense balance, the distribution or balance of power, specific catalytic events that are external to the actor whose policy is being explained, action/ reaction processes, international market forces, international institutions and norms, transnational actors, and any other factors external to the state, including the distribution across the international system of any level 1 or 2 variables.

## B Supplemental analysis

Table A1: Level of Analysis 1980-2018

	Image	n	Percentage	N
1	1st image	989	13.70	7215
2	2nd image	4864	67.40	7215
3	3rd image	4963	68.80	7215

Table A1 illustrates the proportion of IR articles using the first image over the entire TRIP journal data set. This proportion remains largely the same over all years from 1980 to 2018.

Table A2: Use of First Image by Journal 1980-2018

	journal	n	Percentage First Image	N
1	AJPS	31	13.50	230
2	APSR	22	9.00	245
3	BJPS	23	13.20	174
4	EJIR	60	11.70	512
5	IO	85	8.80	962
6	IS	123	12.90	957
7	ISQ	126	11.20	1127
8	JCR	229	27.10	845
9	JOP	34	15.30	222
10	JPR	99	10.80	916
11	SS	102	17.90	571
12	WP	55	12.10	454

Table A2 shows use of first image across the twelve journals in our sample. The *Journal of Conflict Resolution* stands out as the journal with by far the highest proportion of first image articles.

Table A3: Use of First Image over Time

	Time Period	n	Percentage First Image	N
1	1980-1984	127	16.50	770
2	1985-1989	126	17.00	741
3	1990-1994	128	16.20	791
4	1995-1999	128	14.30	898
5	2000-2004	130	14.20	916
6	2005-2009	123	11.60	1062
7	2010-2014	98	8.40	1164
8	2015-2018	129	14.80	873

Table A3 displays the five year average for use of the first image. The number of articles that use the first image is remarkably consistent across time, as seen in figure 1 below. In the figure, note the variation in 2nd image analysis, which gradually comes to replace 3rd image theorizing by 2000; no such tendency is evident with 1st image research.

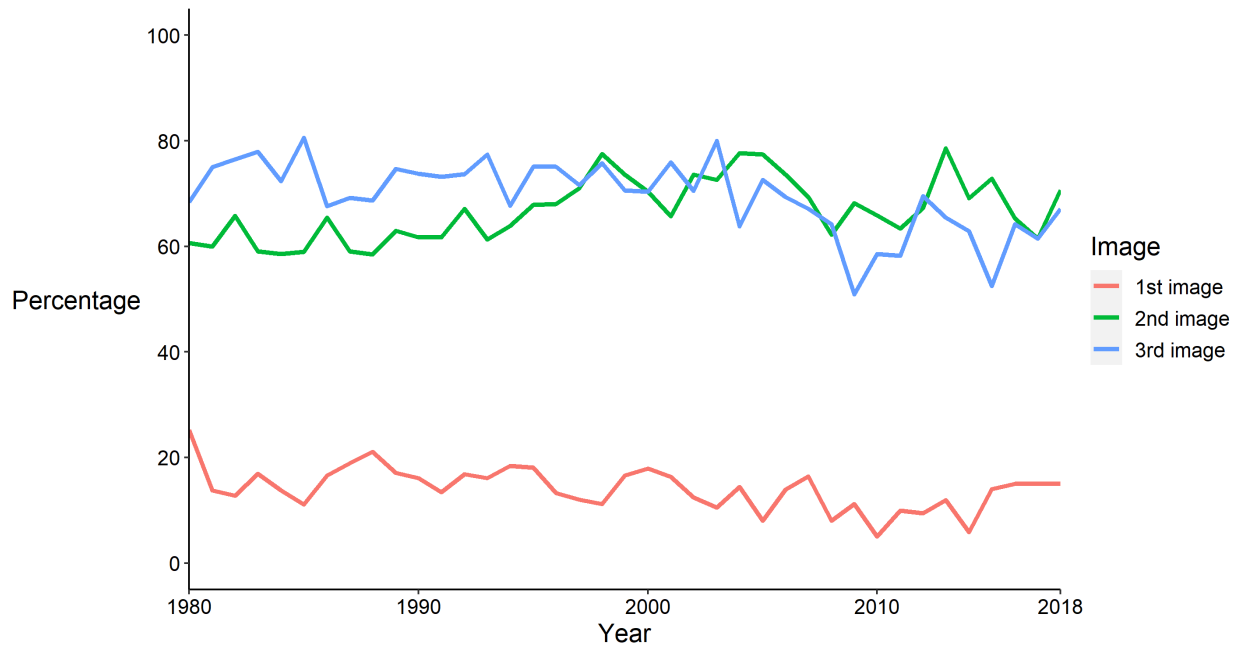


Figure 1: Proportion of IR articles by image 1980-2018

Table A4: Use of First Image by Paradigm 1980-2018

	Paradigm	n	Percentage First Image	N
1	Atheoretic/Non	91	14.30	636
2	Constructivist	117	20.40	574
3	Liberal	77	5.10	1513
4	Marxist	1	1.00	103
5	Non-paradigmatic	661	17.90	3702
6	Realist	42	6.10	687

Table A4 displays the use of the first image by IR paradigm. The data support our second hypothesis that articles employing a liberal or realist perspective are less likely than those employing other paradigms to use first image.

Table A5: Use of First Image by Methodology 1980-2018

	Method	n	Percentage First Image	N
1	Analytic NonFormal	124	15.60	795
2	Counterfactual	7	20.00	35
3	Descriptive	80	13.30	602
4	Experimental	164	68.60	239
5	Formal Modeling	110	14.10	780
6	Policy Analysis	25	8.50	294
7	Qualitative	346	12.80	2695
8	Quantitative	371	13.00	2862

Table A5 displays the proportion of first image articles broken out by methodology employed. There is little difference between the percentage of quantitative and qualitative articles using a first image approach, providing evidence for our first hypothesis.

Table A6: Use of First Image by Epistemology 1980-2018

	Epistemology	n	Percentage First Image	N
1	Non-Positivist/Post-Positivist	179	16.00	1119
2	Positivist	810	13.30	6096

Table A6 displays the proportion of first image articles broken out by epistemology. There is little difference between the percentage of Positivist and Non-Positivist/Post-Positivist articles using a first image approach, again adding support to our first hypothesis.

Table A7: Use of First Image by Issue Area 1980-2018

	Issue Area	n	Percentage First Image	N
1	Comparative Foreign Policy	112	23.90	468
2	Environment	7	7.50	93
3	General (or non-specific)	85	56.70	150
4	Health	5	26.30	19
5	History of the IR Discipline	7	23.30	30
6	Human Rights	25	9.10	275
7	International Law	9	7.30	123
8	International Organization	44	7.20	609
9	International Political Economy	43	4.10	1048
10	International Security	302	10.20	2958
11	IR theory	86	17.60	490
12	Other	114	27.40	416
13	US Foreign Policy	150	28.00	536

Table A7 displays the proportion of first image articles broken out by the article's Issue Area covered. There is wide variation in the proportion, but it is worth noting the largest issue areas, International Organization, International Political Economy, and International Security all have a relative low proportion of First Image Articles.

Table A8: Level of Analysis TRIP Book Data 2000-2014

	Image	Value	n	Percentage	N
1	1st image	Yes	168	18.50	909
2	2nd image	Yes	714	78.50	909
3	3rd image	Yes	638	70.20	909

Table A8 displays level of analysis in IR books gathered in TRIP's book database which includes a 15 year sample of roughly 900 IR books published between 2000-2014 from 5 university presses (Cambridge, Cornell, Oxford, Princeton, Routledge).