Political Analysis: Introduction and Research Design

Week 1

14 January, 2019

Prof. Andrew Eggers

Our aims

- Improve your ability to **assess evidence on empirical questions**.
- Give you the tools to **do your own data analysis**.

Assessing evidence on empirical questions

For example:

- Does first-past-the-post discourage political engagement compared to other electoral systems?
- Do majority-Islamic countries have worse human rights records, controlling for wealth and other factors?
- Does satellite technology help avoid interstate wars?
- Does decentralization of the political system change its political culture? (Prelims specimen exam paper)
- What causes party systems to change over time? (Prelims specimen exam paper)
- What explains the rise of populism in advanced democracies? (Prelims specimen exam paper)

Of Time and the Development of Partisan Polarization

Laura Stoker University of California, Berkeley
M. Kent Jennings University of California, Santa Barbara

In this article we address the topic of increasing partisan polarization in the American mass public, focusing on the twin influences of individual-level development and cohort replacement and the interaction between the two. We posit a model of individual development that consists of declining openness to change beyond young adulthood, an increase in party-issue constraint as age advances, and cohort-specific responsiveness to changes in the partisan environment. Results from a long-term panel study provide initial evidence of these dynamics. We then use simulations to generate expectations about how these developmental processes play out across cohorts, issues, and time. These expectations are evaluated through a cohort analysis of National Election Studies data from 1972 to 2004. Overall, our results provide a new perspective on the dynamics of individual political development and their implications for the timing, extent, and future trajectory of partisan polarization in the U.S. electorate.

In his classic 1969 essay, "Of Time and Partisan Stability," Converse proposed an elegant model that helped account for the emergence of partisan stability over time and in varying national contexts. Although challenged in terms of certain specifics, the model has proved to be remarkably fruitful. A particularly valuable aspect of the work consists of the demonstrated linkage between individual-level learning processes and the unfolding character of the political party system. The concepts of time and context are integral to the model. The passage of time is used to index an individual's cumulative experience with the party system and the accompanying growth in partisan attachment. Context is employed to demonstrate how the duration of the party system in a given polity can affect the growth of partisan stability.

This article is written in the spirit, though not all the particulars, of Converse's essay. Our topic is partisan polarization rather than stability, and we confine our examination to the United States. However, as with Converse we attempt to show the linkage between microlevel processes and macrolevel outcomes of relevance to the party system. We use a similar model of adult political learning but extend it to include the development of constraint between partisanship and issue positions. Instead of variation by level of democratic procedures, we employ variation by type and degree of partisan cleavage over time. As with the development of partisan stability, we also see increasing polarization as a long-term process, but do not posit some sort of "mature" end state such as that for partisan attachments.

Colorful media accounts notwithstanding, scholars largely agree that the American public has not become more polarized in the sense of being more divided ideologically, or in the sense that citizens hold more divergent views on major policy issues (Dimaggio, Evans, and Bryson 1996; Fiorina 2006). Rather, it is partisan polarization in the electorate that has been on the rise: Democrats and Republicans in the electorate have become increasingly divided ideologically and the issue opinion differences between them have been widening (e.g., Abramowitz and Saunders 1998, partisan environments. These simulations clarify the relationship between learning processes and context. They also set forth expectations that are met when tested against National Election Studies cross-section data stretching from 1972 to 2004.

Laura Stoker is associate professor of political science, University of California, Berkeley, 210 Barrows Hall, Berkeley, CA 94720-1950 (stoker@socrates.berkeley.edu). M. Kent Jennings is professor emeritus, University of Michigan and professor of political science, University of California, Santa Barbara, 3834 Ellison Hall, Santa Barbara, CA 93106-9420 (jennings@polsci.ucsb.edu).

Financial support for the most recent data collection utilized here came from the National Science Foundation, Grant SBR-9601295. We thank Stephen Weatherford and Eric Smith for their comments. We are also grateful for the technical assistance of Kuang-hui Chen and the financial support provided by the Academic Senate of the University of California, Santa Barbara and the Institute for Governmental Studies at the University of California, Berkeley.

American Journal of Political Science, Vol. 52, No. 3, July 2008, Pp. 619–635

 ISSN 0092-5853

The Stability of Political Affiliations and Attitudes

Although commonly accepted, the proposition about declining openness across the adult life span has rarely been subjected to the scrutiny of long-term panel data. We use panel data from the political socialization project to generate support for this proposition and to expand upon it. We have observations for the youth sample across all four waves for several measures and across three waves for others, thus permitting us to look at the patterns of persistence up to age 50. In addition, we have three- and two-wave data for the parent sample. Table 1 presents the continuity coefficients (r) for 11 commonly used attitudinal measures.[4] The correlations indicate attitudinal continuity across adjacent years of observation. In order to convey a sense of life-stage progression, the age range has been affixed to each panel's calendar time, with the parental range being expressed in terms of *mean* age.

Modest attitudinal continuity, at best, is evident as the youth aged from 18 to 26, whereas continuity was much more pronounced over the next decade, a trend found for a number of other orientations as well (Jennings and Markus 1984). Across the third time frame—as the youth aged from 35 to 50—these gains tend to remain very much in place, a particularly arresting fact given the much longer time span represented by that third period. Significantly, the 11 measures range widely in terms of attitude objects, question format, and the political vicissitudes that have been relevant to them since 1965. The overall similarity is not to deny the likelihood of interaction effects involving life stage, political history, and the stability of *particular* attitudes (Sears and Funk 1999).

Drawing on the parent panels from the same project reinforces the image of declining openness. The gains posted by the parents across the first two panel periods on the five measures first used in 1965 are, predictably, not nearly as sharp as those registered by the youth cohort during the same two time frames. These incremental gains in stability beyond young adulthood point toward a plateauing effect in the middle to late middle years. Combining the youth and parent panels results in a makeshift life span ordering. Splicing of this sort is risky, but the exercise is instructive and the results are similar to those based on long-term surveys of special populations (Alwin, Cohen, and Newcomb 1991; Sears and Funk 1999). Viewed this way, in eight of the 11 measures the overall pattern is one of early gains and then gradual increases or little or no change over the remaining years.

The three exceptions merit brief attention. First, parental PID stability substantially exceeds that found in the younger generation. A generational accounting for this exceptionalism proposes party ties as simply being generally more volatile in the cohorts coming of age after 1964 (e.g., Miller and Shanks 1996, chap. 6), whereas a life cycle explanation allows for even greater strengthening of partisanship well after midlife due to the unique features of partisanship as a concrete, frequently reinforced orientation with high affective mass. At this point we cannot choose between these alternative explanations, but the results do show the uniqueness of PID. Much lower parental stability with respect to the newer issues represented by evaluation of the women's movement and the legalization of marijuana constitute the other two exceptions. These were emergent issues as the class of 1965 came of political age and developed their political identities. By contrast, the issues hit the parental generation when they were already well into middle age and found themselves trying to graft these issues onto previous identities.

The Linkage of Issue Positions and Party Identification

As indicated above, we expect that the increasing stability of partisanship and political attitudes will be matched by a strengthening linkage between the two. People in a reasonably stable party system should increasingly come to understand the issue positions differentiating the parties and respond by bringing their policy views and partisan affiliation into greater alignment. In so doing, they would either come to adopt the policy views advocated by the party with which they identify or adjust their partisan affiliation to be consistent with their issue commitments, or do some of both.[5] This would be true regardless of the

[4]See the appendix for details about the measures. The continuity coefficients are not adjusted for measurement error. Such adjustments are not likely to alter the patterns of development over time but are likely to influence the pattern of stability across issues (Alwin and Krosnick 1991). Comparisons of correlation coefficients may also be problematic due to the statistic's sensitivity to the variables' marginal distributions. However, the same pattern shown with correlation coefficients emerges when using other continuity measures.

[5]The question of which of these processes is generating higher constraint is an important one but is not central to the arguments in this article. We return to this issue in the conclusion, however.

Table 1 Stability of Opinions over Time, by Generation

	Youth Generation			Parent Generation	
Panel Years (Age)	**65–73 (18–26)**	**73–82 (26–35)**	**82–97 (35–50)**	**65–73 (46–54)**	**73–82 (54–63)**
Party Identification	.49	.65	.65	.81	.83
Ideological Identification	—	.45	.58	—	.63
Evaluation of Labor Unions	.23	.49	.53	.54	.60
Government Job Assistance	—	.35	.40	—	.38
Evaluation of Blacks	.33	.50	.47	.36	.41
School Integration	.17	.29	.36	.32	.32
Government Aid to Minorities	—	.41	.44	—	.39
Evaluation of Women's Movement	—	.48	.50	—	.39
Women's Role	—	.45	.45	—	.45
Prayer in the School	.37	.59	.60	.48	.58
Legalization of Marijuana	—	.63	.60	—	.48

Note: Entries are continuity correlations. The data come from the Political Socialization Project. Members of the parent generation with an education level of less than a high school degree were excluded. Age ranges for parent cohorts refer to mean ages. The Ns for each variable are held constant across time within cohorts. For each variable, in turn, the Ns are as follows: Youth Generation 883, 728, 787, 783, 775, 684, 868, 779, 900, 598, 884; Parent Generation 535, 425, 514, 481, 503, 430, 510, 498, 512, 436, 459.

specific learning mechanism involved—if, for example, political experience brings about a clearer sense of the parties' issue stances, which then drives the enhanced tie between attitudes and partisanship, or if political experience enhances the frequency with which political attitudes become primed, which then generates the tighter bond (e.g., Sears and Funk 1999).

We also expect adjustments in constraint to be more pronounced during the "impressionable years" of young adulthood, which is when the greatest gains in understanding of party differences are likely to occur.[6] This expectation follows from Converse's argument that "rates of learning would decline with the resistances and psychological interferences of more advanced age" (1969, 144). It also accords with Achen's (2002) Bayesian updating model of how party differences in a stable party system are learned, which shows that the value of new information declines with age. Finally, the expectation of nonlinear gains in party-issue constraint is tied to the expectation of nonlinearity in openness to change. As partisan and issue attitudes become more crystallized, they should be less subject to the adjustment that builds constraint.

One test of this hypothesis consists of using the socialization panel data to observe the associations between political attitudes and party identification across time. We restrict the analysis to the youth sample in order to take advantage of a fuller range of the life cycle and political developments between the early 1980s and late 1990s. Table 2 presents the findings, gauged in terms of Pearson correlation coefficients.[7] For the most part, the expected strengthening does occur with the passage of time. Relationships for all but one indicator (evaluation of blacks) are demonstrably higher in 1997, usually by a very hefty margin, than are those in 1965 and 1973. Especially striking is the dramatic rise with respect to ideological identification; partisans increasingly place themselves where they "should be" on the 7-point liberal-conservative continuum. Overall, these results underscore the learning associated with sheer adult-level interaction with the political system. People experience more politics, and thus make more sense of politics, as they age. That the pattern across the years is not always monotonic suggests the contribution of short-term period effects, most pointedly so in the

[6]In 1965, only 26% of high school seniors in the socialization study thought that there were "any important differences in what Democrats and Republicans stand for." By 1973, that figure had nearly doubled to 49% and continued to grow over the next two periods, though to a diminishing extent—to 61% in 1982 and 65% in 1997. This pattern, which also prevailed among those not going on to college, is all the more compelling in that elite-level studies identify the last period (1982–1997) as one in which sharp ideological divisions between the parties emerged (e.g., McCarty, Poole, and Rosenthal 2006).

[7]Very similar results are found using regression coefficients, whether treating party identification or issue attitude as the dependent variable.

Table 2 Constraint between Political Attitudes and Party Identification over Time, Youth Generation

Year (Age)	**1965 (18)**	**1973 (26)**	**1982 (35)**	**1997 (50)**
Ideological Identification	—	.39	.52	.64
Evaluation of Labor Unions	.22	.20	.35	.37
Government Job Assistance	–	.25	.35	.41
Government Aid to Blacks	–	.22	.28	.35
Evaluation of Blacks	.16	.13	.13	.13
School Integration	.14	.16	.28	.23
Evaluation of Women's Movement	–	.17	.27	.40
Women's Role	–	.14	.10	.21
Prayer in the School	.03	.12	.14	.26
Legalization of Marijuana	–	.18	.11	.23

Note: Entries are Pearson correlations between party identification and the variable named in the row. The data come from the Political Socialization Project. The Ns for each variable are held constant across time. For each variable, in turn, the Ns are 709, 743, 750, 832, 734, 654, 745, 852, 564, and 811.

case of the school integration issue, which has waxed and waned as a salient partisan issue.

However, another possible explanation for the rising constraint levels is that the class of 1965 was merely responding to push-pull forces that were affecting *all* cohorts passing through the same historical time—a long-term period effect. There is, in fact, a hint of that in the more limited parent panel. In this scenario, constraint gains have been fueled by party differences that have become more pronounced or less uncertain since the 1960s. Researchers have found increased public awareness of party differences on issues in recent decades, as elaborated on below. These kinds of changes in partisan cues have also undoubtedly contributed to the increased linkages shown in Table 2.

Thus we are left with two explanations for the observed growth in the partisan/issue linkage: (1) political learning processes associated with aging, and (2) period effects associated with more distinctive party divisions. Only by analyzing longitudinal data on multiple cohorts over an extended period of time can we begin to distinguish between these two effects and, more critically, we will argue, the interaction between them, whereby entering cohorts are more affected by changing party cleavages than are older ones. In order to clarify the processes at work, we first present simulations of party-issue constraint under three different scenarios of partisan cleavages. In doing so we reintroduce the missing part of our original model in Figure 1, namely, contextual variations in partisan divisions interacting with individual learning processes.

Simulating Developmental and Period Effects in Party-Issue Constraint

We have suggested that growing party-issue constraint at the individual level requires a relatively stable partisan system in terms of the issue positions parties are staking out and the groups whose interests they are seeking to advance, though not necessarily stable in terms of what particular issues are on the agenda. This argument by no means rules out inter-cohort differences in terms of what particular attitudes become linked to partisanship or in how strongly the linkages form. Quite the contrary. As cohorts begin to make firmer their partisan allegiances and attitudinal dispositions, the particular linkages being forged between the two should vary with the contextual forces at work at the time. How issues, groups, and parties become connected in a voter's mind should depend upon how they are aligned in the political environment that marks the individual's coming of age.

As a first step we simulated how party-issue constraint would change across time and cohorts given varying assumptions about the nature of party differences on an issue. Specifically, we modeled constraint at time t as equal to constraint at time t − 1 plus an increment that depended on the magnitude of the party difference in place and the individual's openness to change. Individuals who came of age when the party difference was already intact were modeled as growing in constraint by the amount indicated in Figure 1 (above). For those who came of age prior to the emergence of the party difference, growth in constraint was discounted by their level of openness. Constraint levels were treated as responsive to the magnitude of the party difference, which varies over time in two of the simulations.

The first scenario assumed a constant party difference on an issue over the entire time span being modeled—1930–2000. That is, the parties differed on an issue in 1930 and continued to differ, in the same way, on the issue across the next 70 years. A prime example would be the decades-long distinction of Democrats as being prolabor and Republicans as probusiness. The entries found in Table 3 report simulated constraint levels given the proposition that constraint increases with age in the fashion described earlier. Each cohort shows the same, curvilinear maturation pattern as it ages (looking across rows), which is also found by comparing age cohorts at one moment in time (looking across columns). No "generational effect" is evident (looking across the diagonals). Overall, the extent of the party cleavage in the electorate, indexed by the average constraint coefficient (see bottom row), is constant over time.[8]

[8]In these simulations what matters is the patterning of constraint levels across cohort and across time, not their absolute levels, which are arbitrary. The overall cleavage is calculated by assuming equal cohort sizes, and takes into account cohorts not showing up in the tables in the years prior to 2000.

Table 3 Simulated Constraint between Political Attitudes and Party Identification over Time and across Cohorts

I. Constant Party Difference

	Year							
	1930	**1940**	**1950**	**1960**	**1970**	**1980**	**1990**	**2000**
Came of Age:								
in 1930	.32	.48	.57	.63	.66	.68	.69	.69
in 1940	—	.32	.48	.57	.63	.66	.68	.69
in 1950	—	—	.32	.48	.57	.63	.66	.68
in 1960	—	—	—	.32	.48	.57	.63	.66
in 1970	—	—	—	—	.32	.48	.57	.63
in 1980	—	—	—	—	—	.32	.48	.57
in 1990	—	—	—	—	—	—	.32	.48
in 2000	—	—	—	—	—	—	—	.32
Full Population	.59	.59	.59	.59	.59	.59	.59	.59

Table 4 Simulated Constraint between Political Attitudes and Party Identification Over Time and across Cohorts

II. New Party Difference Emerges in 1970

	Year							
	1930	**1940**	**1950**	**1960**	**1970**	**1980**	**1990**	**2000**
Came of Age:								
in 1930	.00	.00	.00	.00	.24	.25	.25	.26
in 1940	—	.00	.00	.00	.27	.28	.29	.29
in 1950	—	—	.00	.00	.30	.32	.34	.35
in 1960	—	—	—	.00	.33	.39	.43	.45
in 1970	—	—	—	—	.32	.48	.58	.63
in 1980	—	—	—	—	—	.32	.48	.58
in 1990	—	—	—	—	—	—	.32	.48
in 2000	—	—	—	—	—	—	—	.32
Full Population	.00	.00	.00	.00	.27	.31	.36	.42

The second, more dynamic simulation stipulated that the parties took similar positions on the issue until 1970, at which point a party difference emerged (Table 4). One can think of this as representing, for example, the emergence of a party division on racial issues, with the Democrats being more liberal and the Republicans more conservative on policies aimed at promoting racial equality. Several aspects of the simulation findings deserve emphasis.

First, the older cohorts are less responsive, less open to change than are the younger cohorts. Compare, for example, the changes across 1970 to 2000 for the 1930

6–8. Evaluation of Blacks (6), Women's Movement (7), and Labor Unions (8) were obtained using the 0–100 scale of the Feeling Thermometer. In the socialization study the term "Negroes" was used in 1965 while "Blacks" was used in 1973–97. "Women's Liberation Movement" used in 1973–82; "Women's Movement" used in 1997. NES also contains similar changes.

Questions Used Only in the Political Socialization Study

9. Legalization of Marijuana, 7-point scale anchored by "the use of marijuana should be made legal" and "the penalties for using marijuana should be set higher than they are now."
10. School Integration, 3-point scale: After an introduction that described the issue and filtered out those with no opinion, the question continued with "Do you think the government in Washington should see to it that white and black children go to the same schools or stay out of the area as it is none of its business?" "Depends" responses were coded in the middle.
11. Prayer in School, 3-point scale: After an introduction that described the issue and filtered out those with no opinion, the question continued with "Which do you think—schools should be allowed to start each day with a prayer or religion does not belong in the schools?" "Depends" responses were coded in the middle.

Questions Used Only in the NES Studies

12. Government Social Spending, 7-point scale anchored by "the government should provide fewer services, even in areas such as health and education, in order to reduce spending" and "it is important for the government to provide many more services even if it means an increase in spending."
13. Limited Government formed by averaging the responses to three forced-choice questions: (1) One, the less government the better; or Two, there are more things that government should be doing. (2) One, we need a strong government to handle today's complex economic problems; or Two, the free market can handle these problems without government being involved. (3) One, the main reason government has become bigger over the years is because it has gotten involved in things that people should do for themselves; or Two, government has become bigger because the problems we face have become bigger. Respondents with missing data on two or more component variables were omitted.
14. Abortion, 4-point scale: 1. By law, abortion should never be permitted. 2. The law should permit abortion only in case of rape, incest, or when the woman's life is in danger. 3. The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established. 4. By law, a woman should always be able to obtain an abortion as a matter of personal choice. In the 1972 and 1976 NES surveys the response option wording was slightly different.
15. Gay Rights averaged responses from (1) feeling thermometer toward "Gay men and lesbians, that is, homosexuals" and (2) responses to the question: Do you favor or oppose laws to protect homosexuals against job discrimination? "Depends" and "Don't Know" responses were coded in between the favor and oppose responses. Cases with missing data on both component variables were omitted.
16. Traditional Values averaged responses from two Likert questions: (1) "The newer lifestyles are contributing to the breakdown of our society," (2) "This country would have many fewer problems if there were more emphasis on traditional family ties." Responses ranged from agree strongly to disagree strongly. Cases with missing data on either variable were omitted.
17. Church Attendance based on a question about frequency with which respondent attended religious services. The exact question wording changed in 1990. Responses were coded: 1 = Every week or more frequently, .5 Almost every week, once or twice a month, 0 = A few times a year, never, or no religious preference.
18. NES Index Composition New Deal Issues: items 3, 7, 12–13. Race and Gender Issues: 4–7. Cultural issues: 14–17.

References

Abramowitz, Alan I., and Kyle L. Saunders. 1998. "Ideological Realignment in the U.S. Electorate." *Journal of Politics* 60 (August): 634–52.

Abramowitz, Alan, and Kyle Saunders. 2006. "Why Can't We All Just Get Along? The Reality of a Polarized America." *The Forum:* 1–22 (http://www.bepress.com/forum/vol3/iss2/art1).

Achen, Christopher H. 2002. "Parental Socialization and Rational Party Identification." *Political Behavior* 69 (June): 151–70.

Adams, Greg D. 1997. "Abortion: Evidence of an Issue Evolution." *American Journal of Political Science* 41 (July): 718–37.

Alwin, Duane F., Ronald L. Cohen, and Theodore M. Newcomb. 1991. *Political Attitudes over the Life Span.* Madison: University of Wisconsin Press.

Of Time and the Development of Partisan Polarization

Laura Stoker University of California, Berkeley
M. Kent Jennings University of California, Santa Barbara

In this article we address the topic of increasing partisan polarization in the American mass public, focusing on the twin influences of individual-level development and cohort replacement and the interaction between the two. We posit a model of individual development that consists of declining openness to change beyond young adulthood, an increase in party-issue constraint as age advances, and cohort-specific responsiveness to changes in the partisan environment. Results from a long-term panel study provide initial evidence of these dynamics. We then use simulations to generate expectations about how these developmental processes play out across cohorts, issues, and time. These expectations are evaluated through a cohort analysis of National Election Studies data from 1972 to 2004. Overall, our results provide a new perspective on the dynamics of individual political development and their implications for the timing, extent, and future trajectory of partisan polarization in the U.S. electorate.

In his classic 1969 essay, "Of Time and Partisan Stability," Converse proposed an elegant model that helped account for the emergence of partisan stability over time and in varying national contexts. Although challenged in terms of certain specifics, the model has proved to be remarkably fruitful. A particularly valuable aspect of the work consists of the demonstrated linkage between individual-level learning processes and the unfolding character of the political party system. The concepts of time and context are integral to the model. The passage of time is used to index an individual's cumulative experience with the party system and the accompanying growth in partisan attachment. Context is employed to demonstrate how the duration of the party system in a given polity can affect the growth of partisan stability.

This article is written in the spirit, though not all the particulars, of Converse's essay. Our topic is partisan polarization rather than stability, and we confine our examination to the United States. However, as with Converse we attempt to show the linkage between microlevel processes and macrolevel outcomes of relevance to the party system. We use a similar model of adult political learning but extend it to include the development of constraint between partisanship and issue positions. Instead of variation by level of democratic procedures, we employ variation by type and degree of partisan cleavage over time. As with the development of partisan stability, we also see increasing polarization as a long-term process, but do not posit some sort of "mature" end state such as that for partisan attachments.

Colorful media accounts notwithstanding, scholars largely agree that the American public has not become more polarized in the sense of being more divided ideologically, or in the sense that citizens hold more divergent views on major policy issues (Dimaggio, Evans, and Bryson 1996; Fiorina 2006). Rather, it is partisan polarization in the electorate that has been on the rise: Democrats and Republicans in the electorate have become increasingly divided ideologically and the issue opinion differences between them have been widening (e.g., Abramowitz and Saunders 1998,

Laura Stoker is associate professor of political science, University of California, Berkeley, 210 Barrows Hall, Berkeley, CA 94720-1950 (stoker@socrates.berkeley.edu). M. Kent Jennings is professor emeritus, University of Michigan and professor of political science, University of California, Santa Barbara, 3834 Ellison Hall, Santa Barbara, CA 93106-9420 (Jennings@polsci.ucsb.edu).

Financial support for the most recent data collection utilized here came from the National Science Foundation, Grant SBR-9601295. We thank Stephen Weatherford and Eric Smith for their comments. We are also grateful for the technical assistance of Kuang-hui Chen and the financial support provided by the Academic Senate of the University of California, Santa Barbara and the Institute for Governmental Studies at the University of California, Berkeley.

American Journal of Political Science, Vol. 52, No. 3, July 2008, Pp. 619–635

ISSN 0092-5853

partisan environments. These simulations clarify the relationship between learning processes and context. They also set forth expectations that are met when tested against National Election Studies cross-section data stretching from 1972 to 2004.

The Stability of Political Affiliations and Attitudes

Although commonly accepted, the proposition about declining openness across the adult life span has rarely been subjected to the scrutiny of long-term panel data. We use panel data from the political socialization project to generate support for this proposition and to expand upon it. We have observations for the youth sample across all four waves for several measures and across three waves for others, thus permitting us to look at the patterns of persistence up to age 50. In addition, we have three- and two-wave data for the parent sample. Table 1 presents the continuity coefficients (r) for 11 commonly used attitudinal measures.[4] The correlations indicate attitudinal continuity across adjacent years of observation. In order to convey a sense of life-stage progression, the age range has been affixed to each panel's calendar time, with the parental range being expressed in terms of *mean* age.

Modest attitudinal continuity, at best, is evident as the youth aged from 18 to 26, whereas continuity was much more pronounced over the next decade, a trend found for a number of other orientations as well (Jennings and Markus 1984). Across the third time frame—as the youth aged from 35 to 50—these gains tend to remain very much in place, a particularly arresting fact given the much longer time span represented by that third period. Significantly, the 11 measures range widely in terms of attitude objects, question format, and the political vicissitudes that have been relevant to them since 1965. The overall similarity is not to deny the likelihood of interaction effects involving life stage, political history, and the stability of *particular* attitudes (Sears and Funk 1999).

Drawing on the parent panels from the same project reinforces the image of declining openness. The gains posted by the parents across the first two panel periods on the five measures first used in 1965 are, predictably, not nearly as sharp as those registered by the youth cohort during the same two time frames. These incremental gains in stability beyond young adulthood point toward a plateauing effect in the middle to late middle years. Combining the youth and parent panels results in a makeshift life span ordering. Splicing of this sort is risky, but the exercise is instructive and the results are similar to those based on long-term surveys of special populations (Alwin, Cohen, and Newcomb 1991; Sears and Funk 1999). Viewed this way, in eight of the 11 measures the overall pattern is one of early gains and then gradual increases or little or no change over the remaining years.

The three exceptions merit brief attention. First, parental PID stability substantially exceeds that found in the younger generation. A generational accounting for this exceptionalism proposes party ties as simply being generally more volatile in the cohorts coming of age after 1964 (e.g., Miller and Shanks 1996, chap. 6), whereas a life cycle explanation allows for even greater strengthening of partisanship well after midlife due to the unique features of partisanship as a concrete, frequently reinforced orientation with high affective mass. At this point we cannot choose between these alternative explanations, but the results do show the uniqueness of PID. Much lower parental stability with respect to the newer issues represented by evaluation of the women's movement and the legalization of marijuana constitute the other two exceptions. These were emergent issues as the class of 1965 came of political age and developed their political identities. By contrast, the issues hit the parental generation when they were already well into middle age and found themselves trying to graft these issues onto previous identities.

The Linkage of Issue Positions and Party Identification

As indicated above, we expect that the increasing stability of partisanship and political attitudes will be matched by a strengthening linkage between the two. People in a reasonably stable party system should increasingly come to understand the issue positions differentiating the parties and respond by bringing their policy views and partisan affiliation into greater alignment. In so doing, they would either come to adopt the policy views advocated by the party with which they identify or adjust their partisan affiliation to be consistent with their issue commitments, or do some of both.[5] This would be true regardless of the

[4]See the appendix for details about the measures. The continuity coefficients are not adjusted for measurement error. Such adjustments are not likely to alter the patterns of development over time but are likely to influence the pattern of stability across issues (Alwin and Krosnick 1991). Comparisons of correlation coefficients may also be problematic due to the statistic's sensitivity to the variables' marginal distributions. However, the same pattern shown with correlation coefficients emerges when using other continuity measures.

[5]The question of which of these processes is generating higher constraint is an important one but is not central to the arguments in this article. We return to this issue in the conclusion, however.

specific learning mechanism involved—if, for example, political experience brings about a clearer sense of the parties' issue stances, which then drives the enhanced tie between attitudes and partisanship, or if political experience enhances the frequency with which political attitudes become primed, which then generates the tighter bond (e.g., Sears and Funk 1999).

We also expect adjustments in constraint to be more pronounced during the "impressionable years" of young adulthood, which is when the greatest gains in understanding of party differences are likely to occur.[6] This expectation follows from Converse's argument that "rates of learning would decline with the resistances and psychological interferences of more advanced age" (1969, 144). It also accords with Achen's (2002) Bayesian updating model of how party differences in a stable party system are learned, which shows that the value of new information declines with age. Finally, the expectation of nonlinear gains in party-issue constraint is tied to the expectation of nonlinearity in openness to change. As partisan and issue attitudes become more crystallized, they should be less subject to the adjustment that builds constraint.

One test of this hypothesis consists of using the socialization panel data to observe the associations between political attitudes and party identification across time. We restrict the analysis to the youth sample in order to take advantage of a fuller range of the life cycle and political developments between the early 1980s and late 1990s. Table 2 presents the findings, gauged in terms of Pearson correlation coefficients.[7] For the most part, the expected strengthening does occur with the passage of time. Relationships for all but one indicator (evaluation of blacks) are demonstrably higher in 1997, usually by a very hefty margin, than are those in 1965 and 1973. Especially striking is the dramatic rise with respect to ideological identifications; partisans increasingly place themselves where they "should be" on the 7-point liberal-conservative continuum. Overall, these results underscore the learning associated with sheer adult-level interaction with the political system. People experience more politics, and thus make more sense of politics, as they age. That the pattern across the years is not always monotonic suggests the contribution of short-term period effects, most pointedly so in the

[6]In 1965, only 26% of high school seniors in the socialization study thought that there were "any important differences in what Democrats and Republicans stand for." By 1973, that figure had nearly doubled to 49% and continued to grow over the next two periods, though to a diminishing extent—to 61% in 1982 and 65% in 1997. This pattern, which also prevailed among those not going on to college, is all the more compelling in that elite-level studies identify the last period (1982–1997) as one in which sharp ideological divisions between the parties emerged (e.g., McCarty, Poole, and Rosenthal 2006).

[7]Very similar results are found using regression coefficients, whether treating party identification or issue attitude as the dependent variable.

case of the school integration issue, which has waxed and waned as a salient partisan issue.

However, another possible explanation for the rising constraint levels is that the class of 1965 was merely responding to push-pull forces that were affecting *all* cohorts passing through the same historical time—a long-term period effect. There is, in fact, a hint of that in the more limited parent panel. In this scenario, constraint gains have been fueled by party differences that have become more pronounced or less uncertain since the 1960s. Researchers have found increased public awareness of party differences on issues in recent decades, as elaborated on below. These kinds of changes in partisan cues have also undoubtedly contributed to the increased linkages shown in Table 2.

Thus we are left with two explanations for the observed growth in the partisan/issue linkage: (1) political learning processes associated with aging, and (2) period effects associated with more distinctive party divisions. Only by analyzing longitudinal data on multiple cohorts over an extended period of time can we begin to distinguish between these two effects and, more critically, we will argue, the interaction between them, whereby entering cohorts are more affected by changing party cleavages than are older ones. In order to clarify the processes at work, we first present simulations of party-issue constraint under three different scenarios of partisan cleavages. In doing so we reintroduce the missing part of our original model in Figure 1, namely, contextual variations in partisan divisions interacting with individual learning processes.

Simulating Developmental and Period Effects in Party-Issue Constraint

We have suggested that growing party-issue constraint at the individual level requires a relatively stable partisan system in terms of the issue positions parties are staking out and the groups whose interests they are seeking to advance, though not necessarily stable in terms of what particular issues are on the agenda. This argument by no means rules out inter-cohort differences in terms of what particular attitudes become linked to partisanship or in how strongly the linkages form. Quite the contrary. As cohorts begin to make firmer their partisan allegiances and attitudinal dispositions, the particular linkages being forged between the two should vary with the contextual forces at work at the time. How issues, groups, and parties become connected in a voter's mind should depend upon how they are aligned in the political environment that marks the individual's coming of age.

As a first step we simulated how party-issue constraint would change across time and cohorts given varying assumptions about the nature of party differences on an issue. Specifically, we modeled constraint at time t as equal to constraint at time t − 1 plus an increment that depended on the magnitude of the party difference in place and the individual's openness to change. Individuals who came of age when the party difference was already intact were modeled as growing in constraint by the amount indicated in Figure 1 (above). For those who came of age prior to the emergence of the party difference, growth in constraint was discounted by their level of openness. Constraint levels were treated as responsive to the magnitude of the party difference, which varies over time in two of the simulations.

The first scenario assumed a constant party difference on an issue over the entire time span being modeled—1930–2000. That is, the parties differed on an issue in 1930 and continued to differ, in the same way, on the issue across the next 70 years. A prime example would be the decades-long distinction of Democrats as being prolabor and Republicans as probusiness. The entries found in Table 3 report simulated constraint levels given the proposition that constraint increases with age in the fashion described earlier. Each cohort shows the same, curvilinear maturation pattern as it ages (looking across rows), which is also found by comparing age cohorts at one moment in time (looking across columns). No "generational effect" is evident (looking across the diagonals). Overall, the extent of the party cleavage in the electorate, indexed by the average constraint coefficient (see bottom row), is constant over time.[8]

[8]In these simulations what matters is the patterning of constraint levels across cohort and across time, not their absolute levels, which are arbitrary. The overall cleavage is calculated by assuming equal cohort sizes, and takes into account cohorts not showing up in the tables in the years prior to 2000.

The second, more dynamic simulation stipulated that the parties took similar positions on the issue until 1970, at which point a party difference emerged (Table 4). One can think of this as representing, for example, the emergence of a party division on racial issues, with the Democrats being more liberal and the Republicans more conservative on policies aimed at promoting racial equality. Several aspects of the simulation findings deserve emphasis.

First, the older cohorts are less responsive, less open to change than are the younger cohorts. Compare, for example, the changes across 1970 to 2000 for the 1930

6–8. Evaluation of Blacks (6), Women's Movement (7), and Labor Unions (8) were obtained using the 0–100 scale of the Feeling Thermometer. In the socialization study the term "Negroes" was used in 1965 while "Blacks" was used in 1973–97. "Women's Liberation Movement" used in 1973–82; "Women's Movement" used in 1997. NES also contains similar changes.

Questions Used Only in the Political Socialization Study

9. Legalization of Marijuana, 7-point scale anchored by "the use of marijuana should be made legal" and "the penalties for using marijuana should be set higher than they are now."
10. School Integration, 3-point scale: After an introduction that described the issue and filtered out those with no opinion, the question continued with "Do you think the government in Washington should see to it that white and black children go to the same schools or stay out of the area as it is none of its business?" "Depends" responses were coded in the middle.
11. Prayer in School, 3-point scale: After an introduction that described the issue and filtered out those with no opinion, the question continued with "Which do you think—schools should be allowed to start each day with a prayer or religion does not belong in the schools?" "Depends" responses were coded in the middle.

Questions Used Only in the NES Studies

12. Government Social Spending, 7-point scale anchored by "the government should provide fewer services, even in areas such as health and education, in order to reduce spending" and "it is important for the government to provide many more services even if it means an increase in spending."
13. Limited Government formed by averaging the responses to three forced-choice questions: (1) One, the less government the better; or Two, there are more things that government should be doing. (2) One, we need a strong government to handle today's complex economic problems; or Two, the free market can handle these problems without government being involved. (3) One, the main reason government has become bigger over the years is because it has gotten involved in things that people should do for themselves; or Two, government has become bigger because the problems we face have become bigger. Respondents with missing data on two or more component variables were omitted.
14. Abortion, 4-point scale: 1. By law, abortion should never be permitted. 2. The law should permit abortion only in case of rape, incest, or when the woman's life is in danger. 3. The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but only after the need for the abortion has been clearly established. 4. By law, a woman should always be able to obtain an abortion as a matter of personal choice. In the 1972 and 1976 NES surveys the response option wording was slightly different.
15. Gay Rights averaged responses from (1) feeling thermometer toward "Gay men and lesbians, that is, homosexuals" and (2) responses to the question: Do you favor or oppose laws to protect homosexuals against job discrimination? "Depends" and "Don't Know" responses were coded in between the favor and oppose responses. Cases with missing data on both component variables were omitted.
16. Traditional Values averaged responses from two Likert questions: (1) "The newer lifestyles are contributing to the breakdown of our society," (2) "This country would have many fewer problems if there were more emphasis on traditional family ties." Responses ranged from agree strongly to disagree strongly. Cases with missing data on either variable were omitted.
17. Church Attendance based on a question about frequency with which respondent attended religious services. The exact question wording changed in 1990. Responses were coded: 1 = Every week or more frequently, .5 Almost every week, once or twice a month, 0 = A few times a year, never, or no religious preference.
18. NES Index Composition New Deal Issues: items 3, 7, 12–13. Race and Gender Issues: 4–7. Cultural issues: 14–17.

References

Abramowitz, Alan I., and Kyle L. Saunders. 1998. "Ideological Realignment in the U.S. Electorate." *Journal of Politics* 60 (August): 634–52.

Abramowitz, Alan, and Kyle Saunders. 2006. "Why Can't We All Just Get Along? The Reality of a Polarized America." *The Forum*: 1–22 (http://www.bepress.com/forum/vol3/iss2/art1).

Achen, Christopher H. 2002. "Parental Socialization and Rational Party Identification." *Political Behavior* 69 (June): 151–70.

Adams, Greg D. 1997. "Abortion: Evidence of an Issue Evolution." *American Journal of Political Science* 41 (July): 718–37.

Alwin, Duane F., Ronald L. Cohen, and Theodore M. Newcomb. 1991. *Political Attitudes over the Life Span*. Madison: University of Wisconsin Press.

Assessing evidence better: exams and essays

Explain the basis of empirical evidence you cite.

"Evans and Tilley say X, but Fisher says Y"

"Evans and Tilley's regression analysis of the British Election Study indicates X, but Fisher (using the same data) says Y once we properly control for age and education"

Assess the empirical evidence you cite.

"Evans and Tilley say X."

"Evans and Tilley say X, but their analysis does not account for important factors . . ."

"Evans and Tilley say X, but their analysis only indirectly addresses the question because . . ."

"Evans and Tilley say X, and their analysis is particularly credible because. . ."

Assessing evidence better: the rest of your life

Assessing the Strength of Evidence

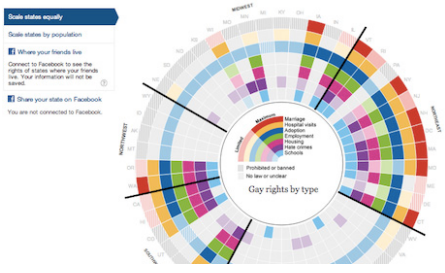
Contents

Doing your own data analysis

Then: Data hard to get and (learn to) process; only specialists did data analysis

Now: Data easy to get and (learn to) process; everyone can do data analysis

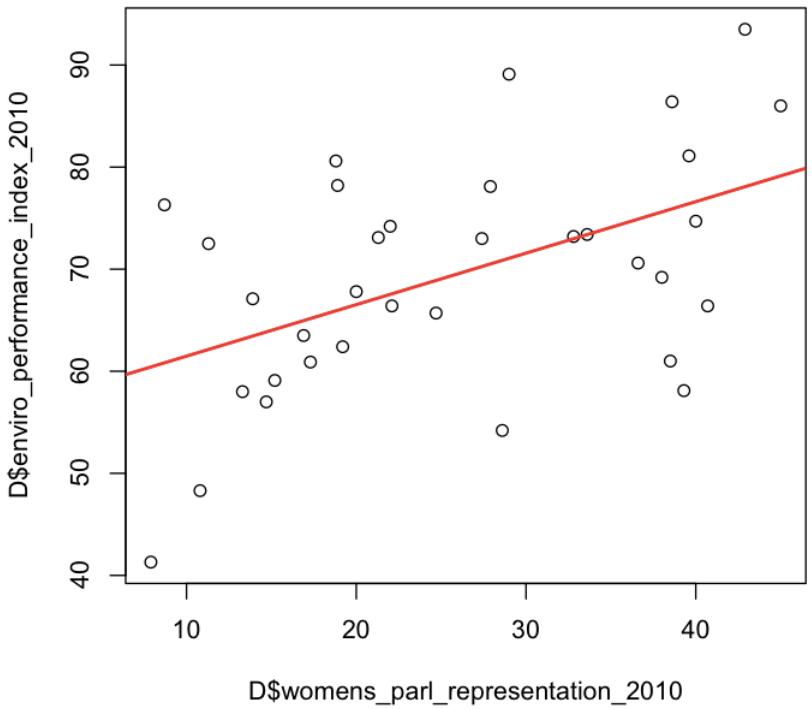
stackoverflow



DATA.GOV.UK (beta)
Opening up Government

What you'll learn

```
# download the Lijphart dataset
D = read.csv("http://andy.egge.rs/data/L.csv")
# make a scatterplot
plot(D$womens_parl_representation_2010, D$enviro_performance_index_2010)
# add a regression line
abline(lm(D$enviro_performance_index_2010 ~  D$womens_parl_representation_2010),
col = "red", lwd = 2)
```



Why should I learn to do my own data analysis?

- To better assess evidence
- To produce your own evidence: tutorial essay, research paper, dissertation, beyond
- To get a job, or do more interesting things at a job: "the intern who stopped making coffee"
- You may not know yet why!

Political Analysis: a snapshot

Lectures by week:

1. Introduction and Research Design (AE)
2. Concepts and Measurement (DK)
3. Descriptive Statistics and Visualization (DK)
4. Case Selection (RH)
5. Bivariate Relationships (AE)
6. Multivariate Relationships (AE)
7. Inference (AE)
8. Synthesis and Review (RH)

Data labs by week:

2. R basics

4. Descriptive statistics

6. Regression analysis I

8. Regression analysis II

For the time & location of lab sessions, see email from PPE office.

Lecturers:

Andrew Eggers

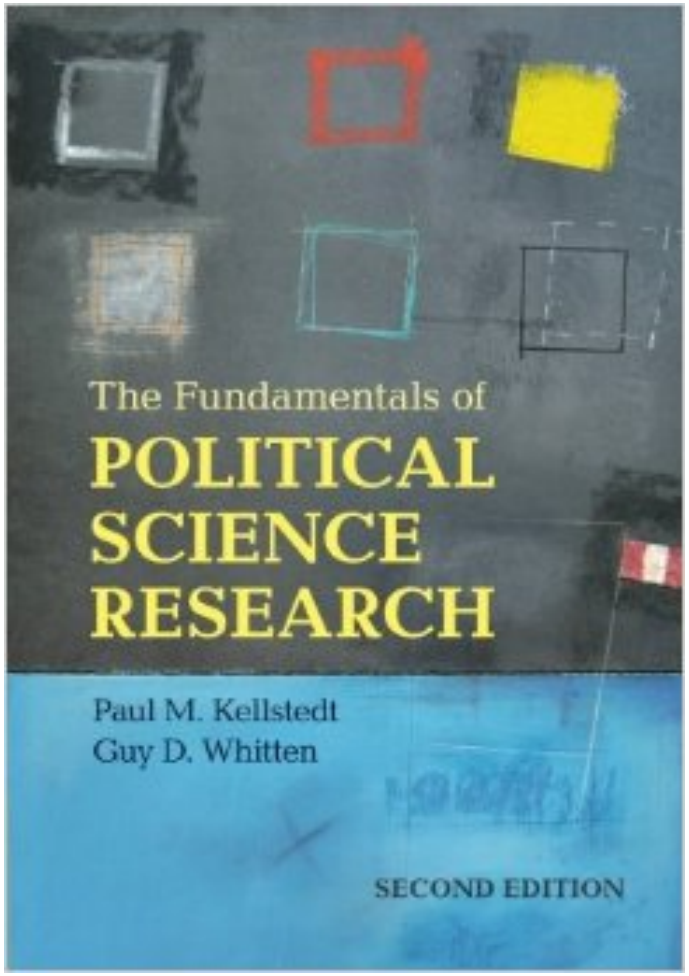
Dave Kirk

Robin Harding

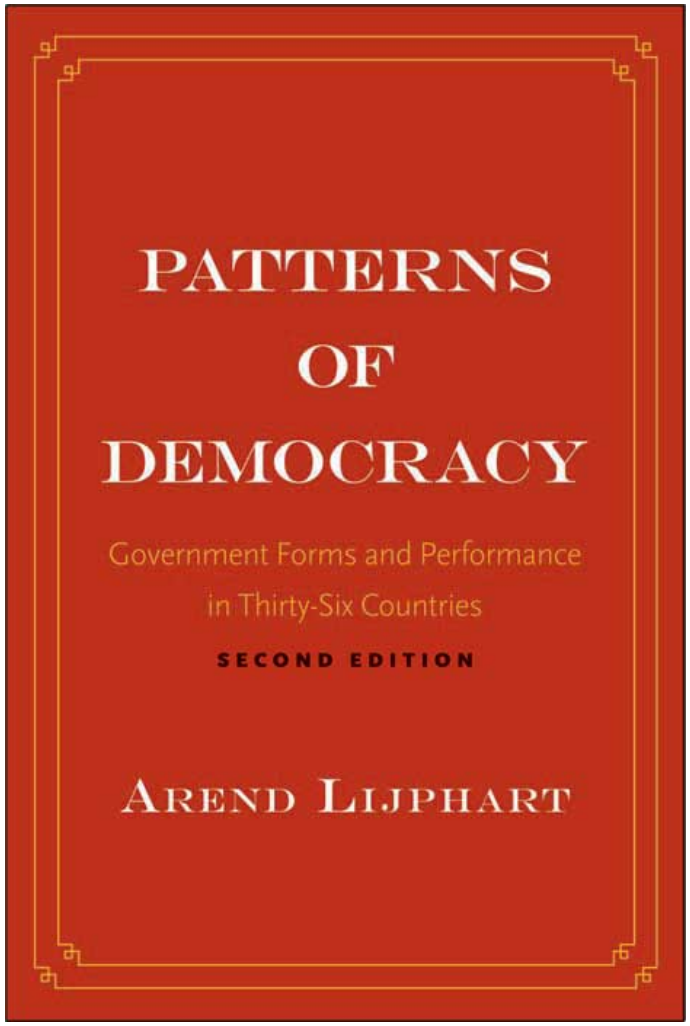
Assessment: 2000-word essay (on one of three questions related to Lijphart's claims about effects of consensus democracy) to be submitted by 12 noon Tuesday 7 May 2019

You won't understand what you're doing in the labs or the essay assignment unless you attend the lectures and/or read the textbook.

Books in the course



Main concepts, techniques

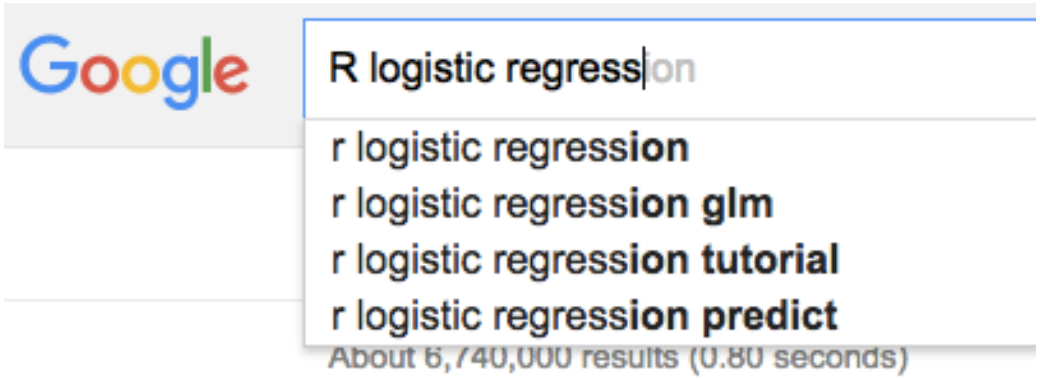


Thematic context in which to apply those ideas

Software in the course

The programming language we will use

The user interface we will use (the program you should download)



One way to get help when you're stuck

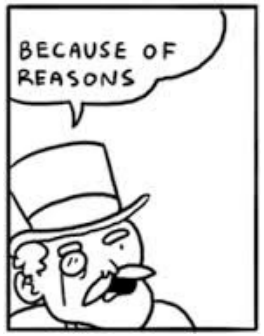
A typology of research questions

Descriptive questions:

- What proportion of UK citizens support leaving the EU?
- Do democracies have better human rights records than non-democracies?

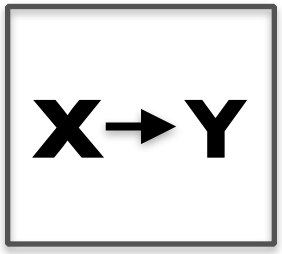
Explanatory questions (**reverse causal** questions):

- Why do democracies seldom fight wars against each other?
- Why are incumbent legislators so likely to win re-election?
- What caused the French revolution?



Forward causal questions:

- What is the effect of campaign spending on election outcomes?
- What is the effect of consensus democracy on political stability?

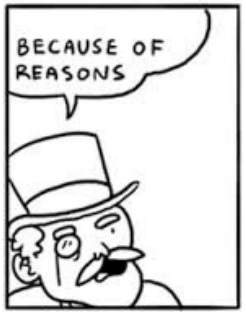


Research design for descriptive questions

Consider this question: "Is respect for human rights higher in democracies than in non-democracies?"

Requires

- defining concepts (democracy, respect for human rights), deciding on a procedure for measuring them (Week 2)
- communicating the resulting measures (Week 3) and their relationship (Week 5)



Characteristics of reverse causal questions ("why" questions)

Some start from a single **event** and seek to explain why it happened.

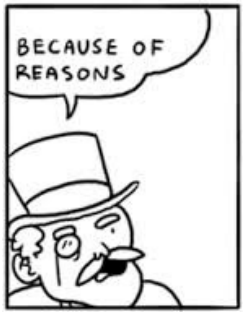
Potential causes

Bad harvests

The Enlightenment

War debts

An event: the French revolution



Characteristics of reverse causal questions ("why" questions) (2)

Others start from a **pattern** and seek to explain why it holds.

A pattern:

democracies tend not to fight one another

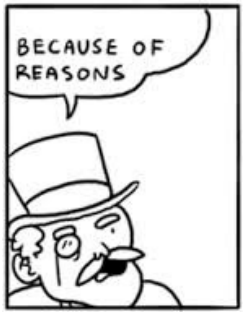
Potential explanations

Economic development

Education and values

Popular sovereignty

	country	exec_parties_1945_2010	exec_parti
1	ARG	-0.93	-1.01
2	AUL	-0.73	-0.65
3	AUT	0.43	0.64
4	BAH	-1.50	-1.33
5	BAR	-1.28	-1.20
6	BEL	1.14	1.10
7	BOT	-1.43	-1.62
8	CAN	-1.00	-1.03
9	CR	-0.37	-0.38
10	DEN	1.31	1.35
11	FIN	1.58	1.48
12	FRA	-0.86	-0.89
13	GER	0.78	0.63
14	GRE	-0.64	-0.55
15	ICE	0.53	0.55
16	IND	0.65	0.63
17	IRE	0.17	0.38

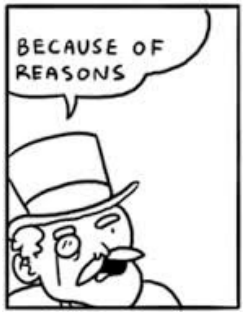


How do we assess explanations?

A good explanation

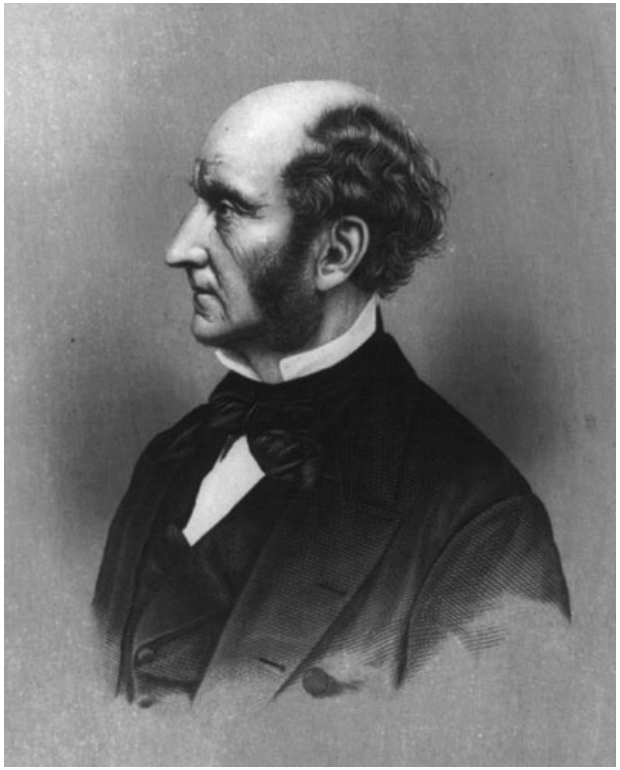
- is, or would have been, useful for prediction
- includes an account of **how** the causes produced the effects (**mechanisms,** or **theory**)
- converts a **puzzle** into a "matter of course" (Peirce, 1903) [inevitability]
- is "hard to vary" (Deutsch, 2011), i.e. doesn't work if you alter elements of it

For more on answering explanatory questions, see Andrew Gelman and Guido Imbens, "Why ask why? Forward causal inference and reverse causal questions", unpublished manuscript 2013.



Mill and reverse causal questions

Mill's methods clarify why explanation in the social sciences is difficult and often unsatisfying.

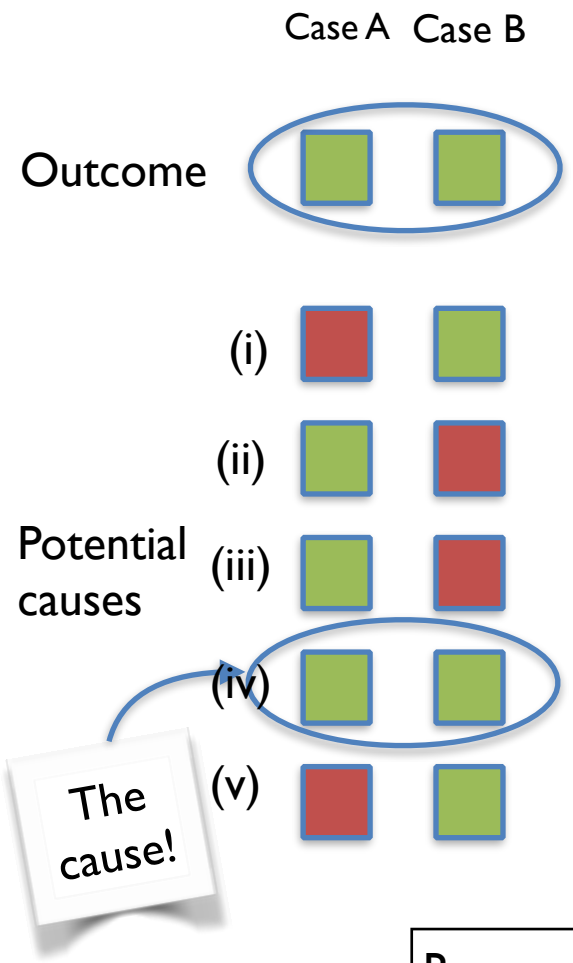


John Stuart Mill

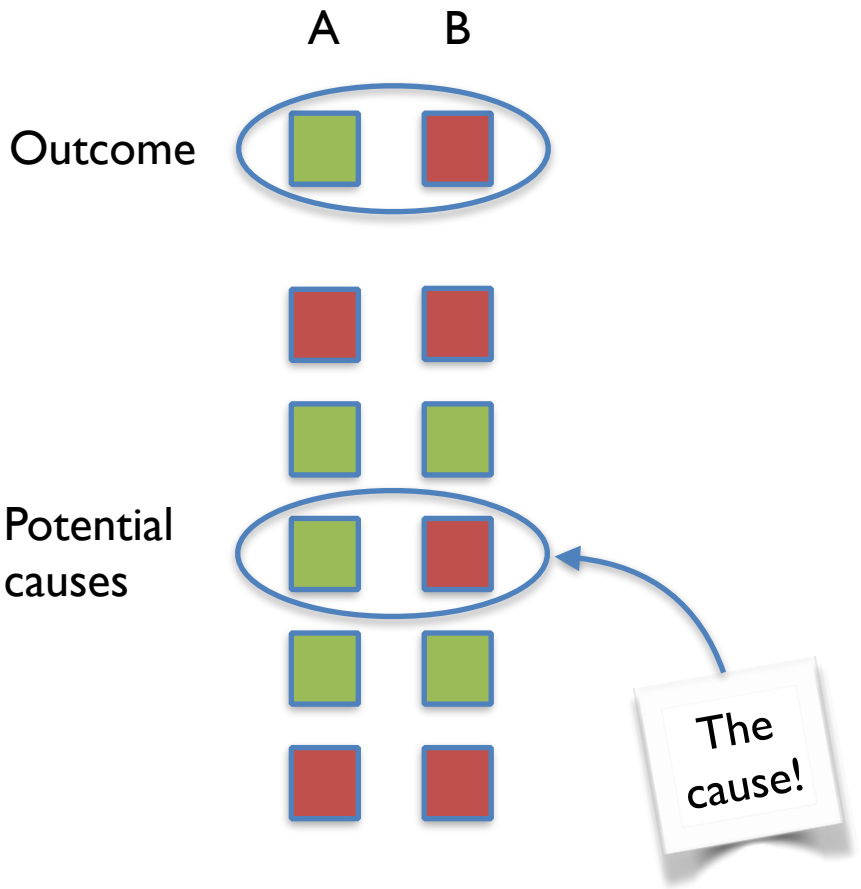
***A System of Logic* (1843)**

Suppose all of the potential causes can be enumerated and accurately measured. Then these two methods will *in certain circumstances* tell us the cause of an outcome:

Method of agreement



Method of difference

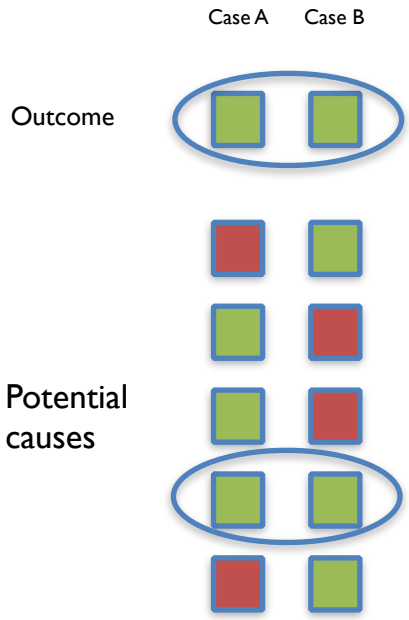


Reverse causal inference from just two cases!!!

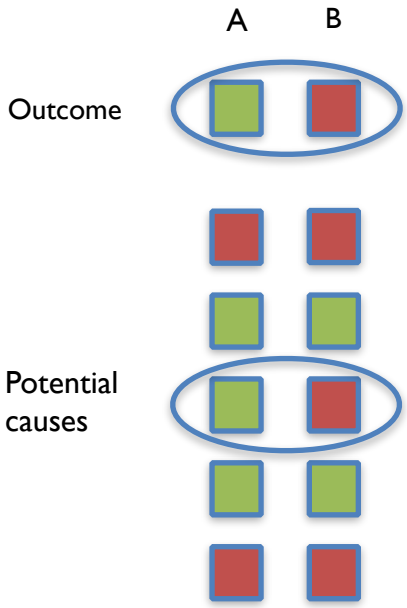
Problems with applying Mill's methods in social science research

- What if there is more than point of agreement or difference?
- How do you know if you have listed all of the potential causes?
- How do you judge agreement when factors are not binary?
- What if there is measurement error or randomness?
- What if two causes both need to be present?

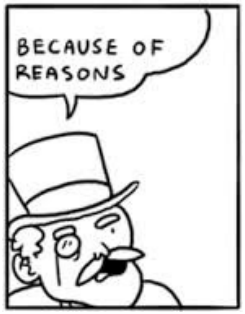
Method of agreement



Method of difference



"…in the sciences which deal with phenomena in which artificial experiments are impossible (as in the case of astronomy), or in which they have a very limited range (as in mental philosophy, social science, and even physiology), *induction from direct experience is practiced at a disadvantage in most cases equivalent to impracticability.*" (Mill, *A System of Logic*)

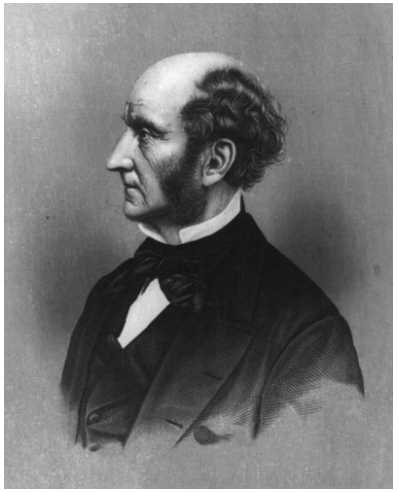


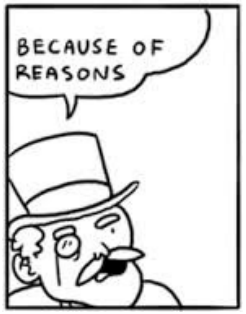
Answering reverse causal questions in a complex world

There are important phenomena we don't know or can't observe.

=> Mill's methods can't be applied. (He knew that!)

Explanations in social science will be messy & contested.





Research design for reverse causal questions

Types of explanations:

1) **Theoretical**: "I offer a theory that shows how the observed pattern is actually not puzzling at all."
2) **Empirical**: "I produce a new measure of [democracy, spending, public opinion] that shows how the observed pattern is not puzzling at all."
3) **Combination of theoretical and empirical**: e.g. "Democracies do not fight each other considerably less than would be expected when you consider their wealth."

In social science, there can be many "good" explanations for a phenomenon and no clear way to choose one.

X→Y

Forward causal questions: What is the effect of X on Y?

We think in terms of **counterfactual scenarios**.

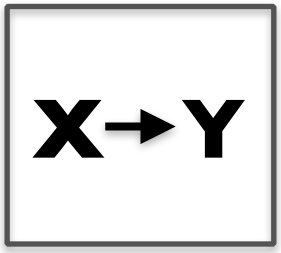
*what would have happened if I **had** taken the aspirin? (treatment)*

vs

*what would have happened if I had **not** taken the aspirin (control)*

Fundamental problem of causal inference (Holland, 1986):

We only ever observe **one of these** for any particular individual.



Fundamental problem of causal inference (1)

Consider these forward causal questions:

- Does aspirin relieve headaches?
- Does a job training program increase participants' income?
- Do door-to-door campaigns increase voter turnout?
- Does consensus democracy increase political stability?

(1) How does the **fundamental problem of causal inference** apply?

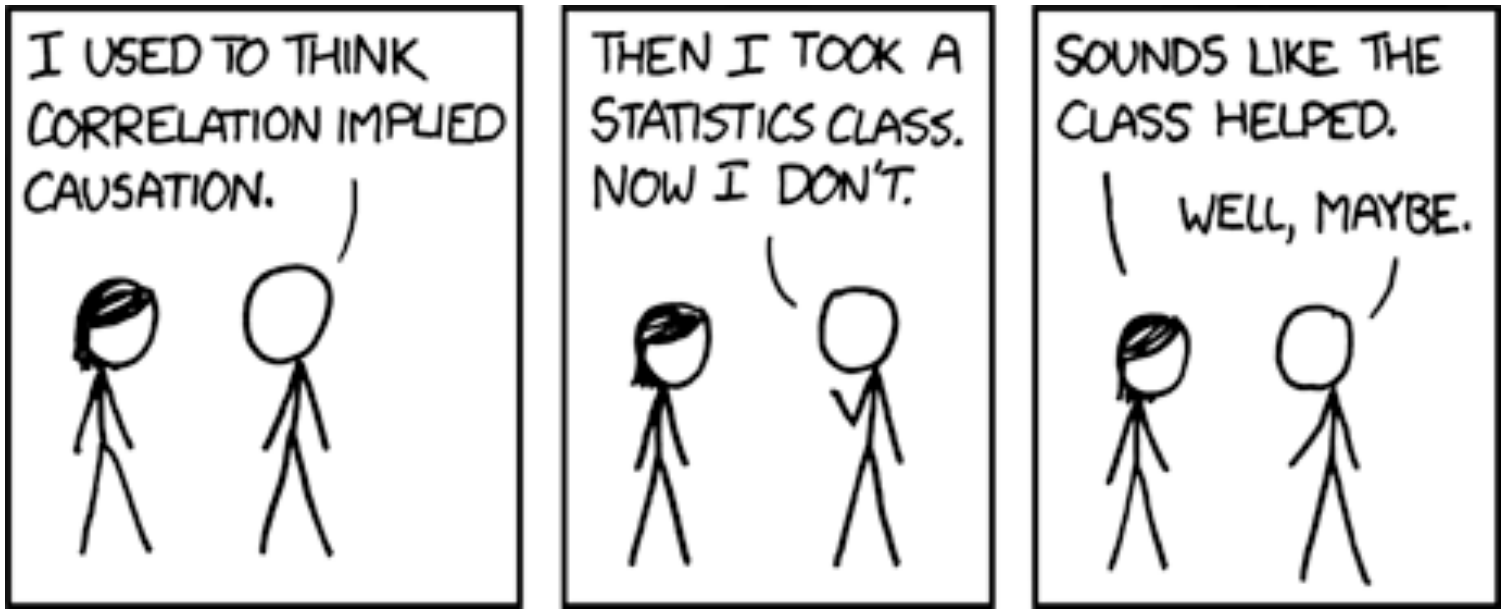
(2) Could we measure the effect

A. with a "before-and-after" comparison?

B. by measuring correlation between treatment and outcome in several cases?

X→Y

Fundamental problem of causal inference (2)

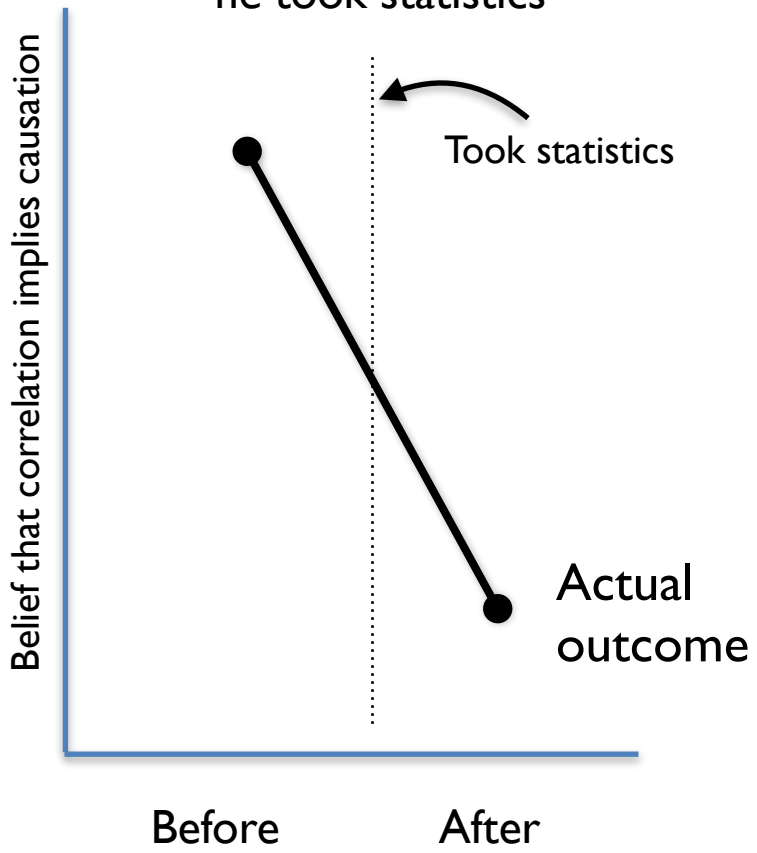


http://xkcd.com/552/

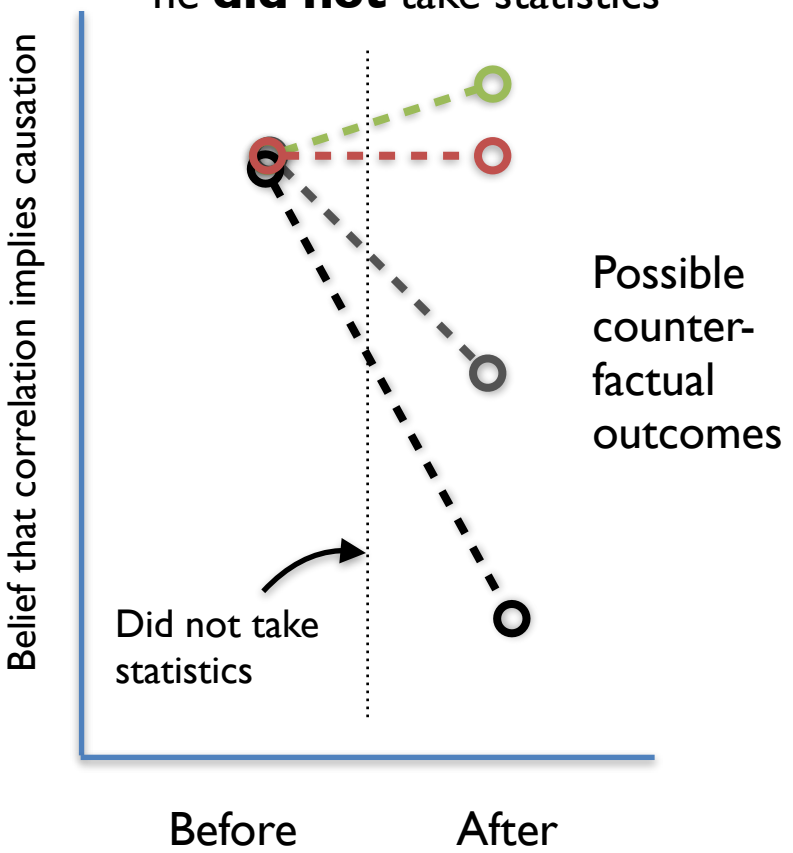
X→Y

The problem with the before-and-after design

What we observe:
outcomes before and after
he took statistics



What we **don't** observe:
outcomes after
he **did not** take statistics



X→Y

But sometimes the "before-and-after" design is convincing!

When I flipped the light switch, the light turned on.

George W Bush approval rate before 9/11 57%; after 88%.

Why is it convincing in these cases?

Approval rating of U.S. President, from Kellstedt and Whitten p. 28)

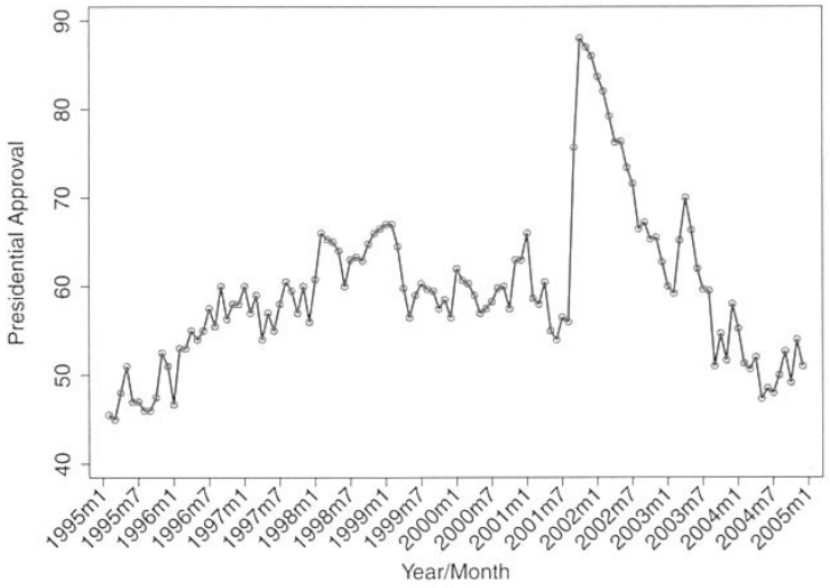


Figure 2.1. Presidential approval, 1995–2005.

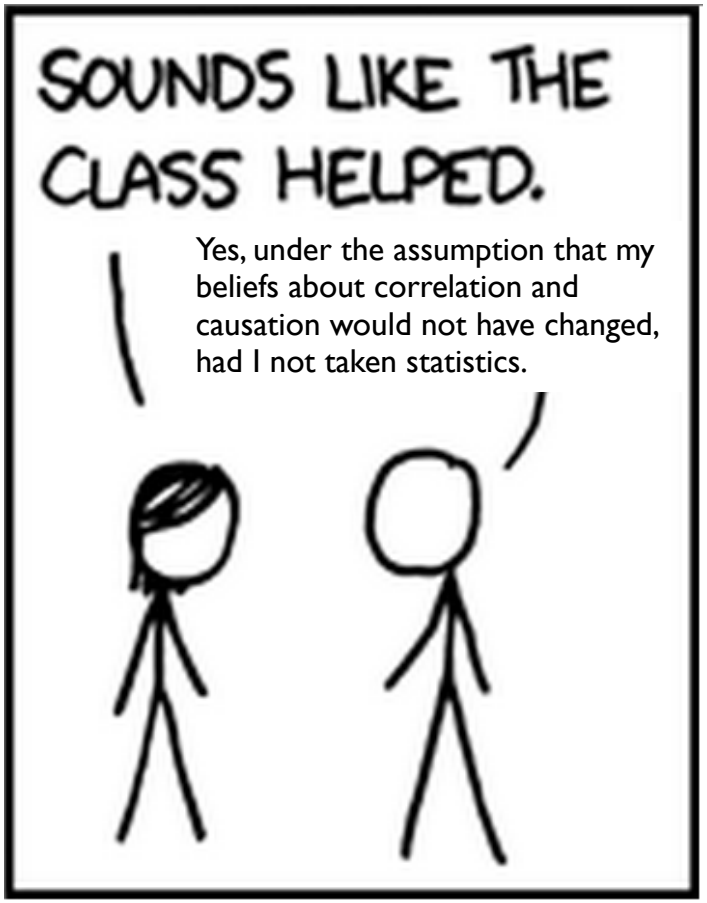
X→Y

Dealing with the fundamental problem of causal inference

We **make comparisons** among outcomes we do observe

and

we clearly **state the assumptions** under which our comparisons will give the right answer.



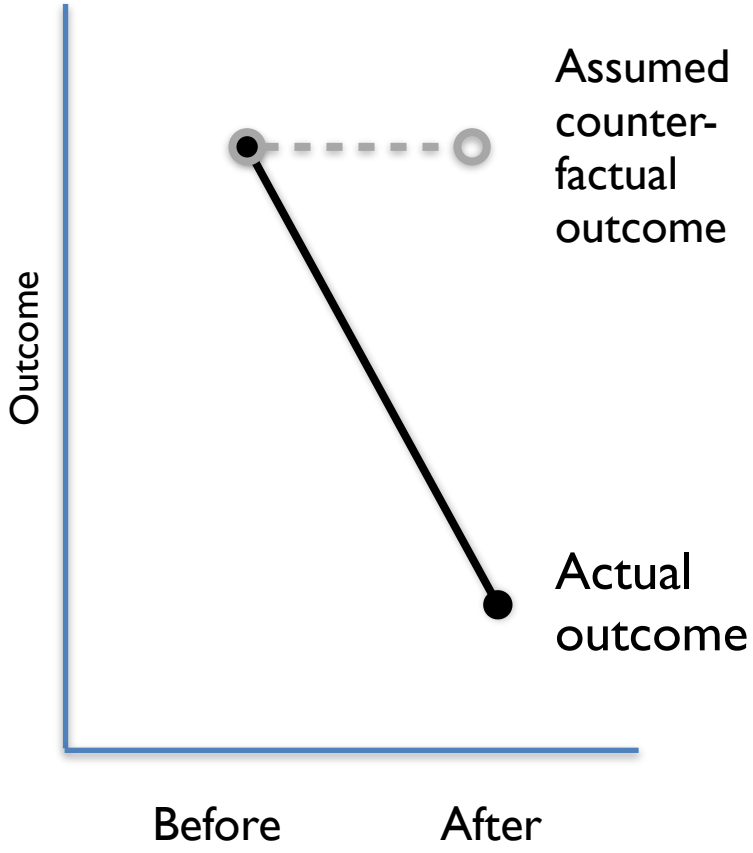
http://xkcd.com/552/

X→Y

What makes the "before-and-after" plausible

Comparison: Same unit(s), before and after an intervention.

Key assumption: No change in outcome if treatment not applied.



X→Y

The gold standard: randomized control trial (RCT)

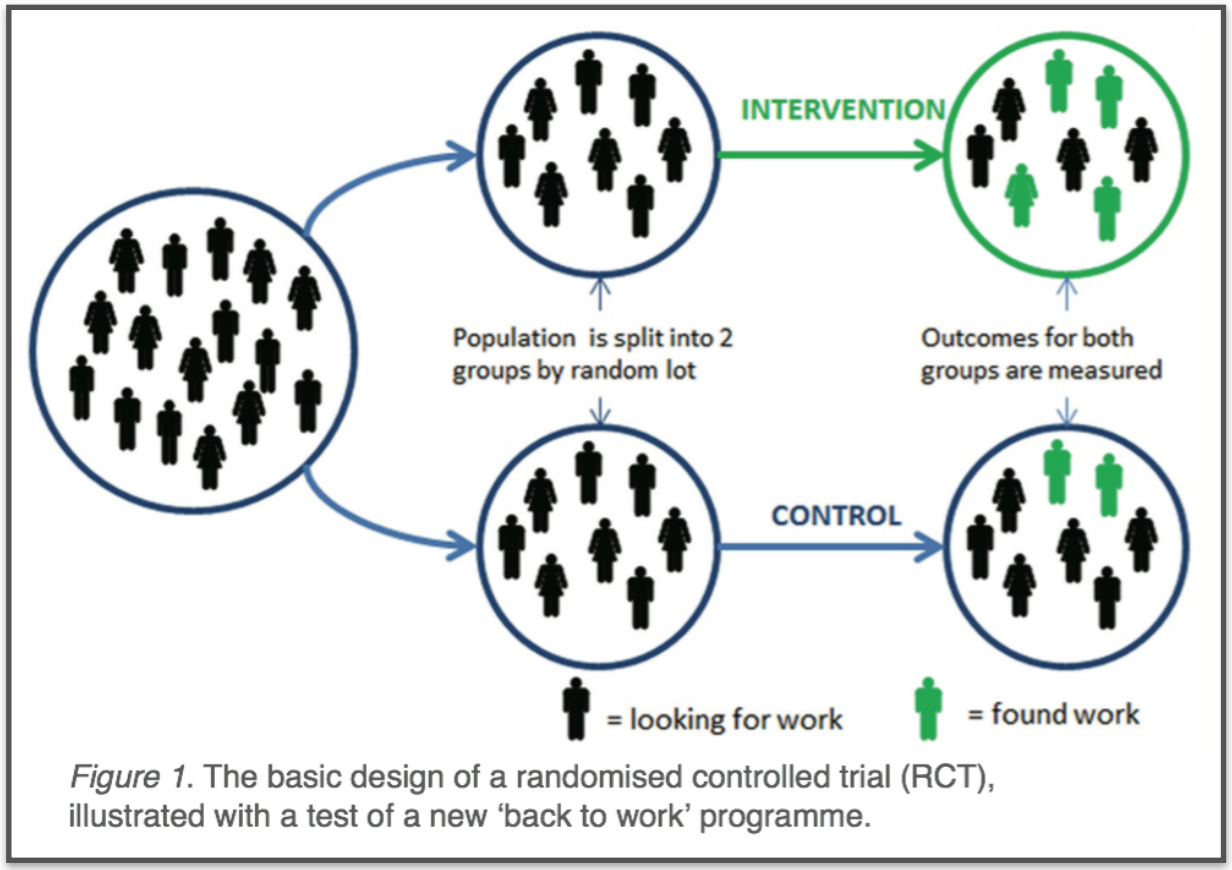
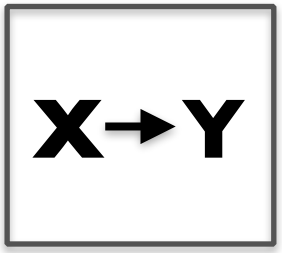


Figure 1. The basic design of a randomised controlled trial (RCT), illustrated with a test of a new 'back to work' programme.

How would you use an RCT to study

- the effect of aspirin on headaches
- the effect of a job training program on income
- the effect of door-to-door campaigns on voter turnout
- the effect of consensus democracy on political stability

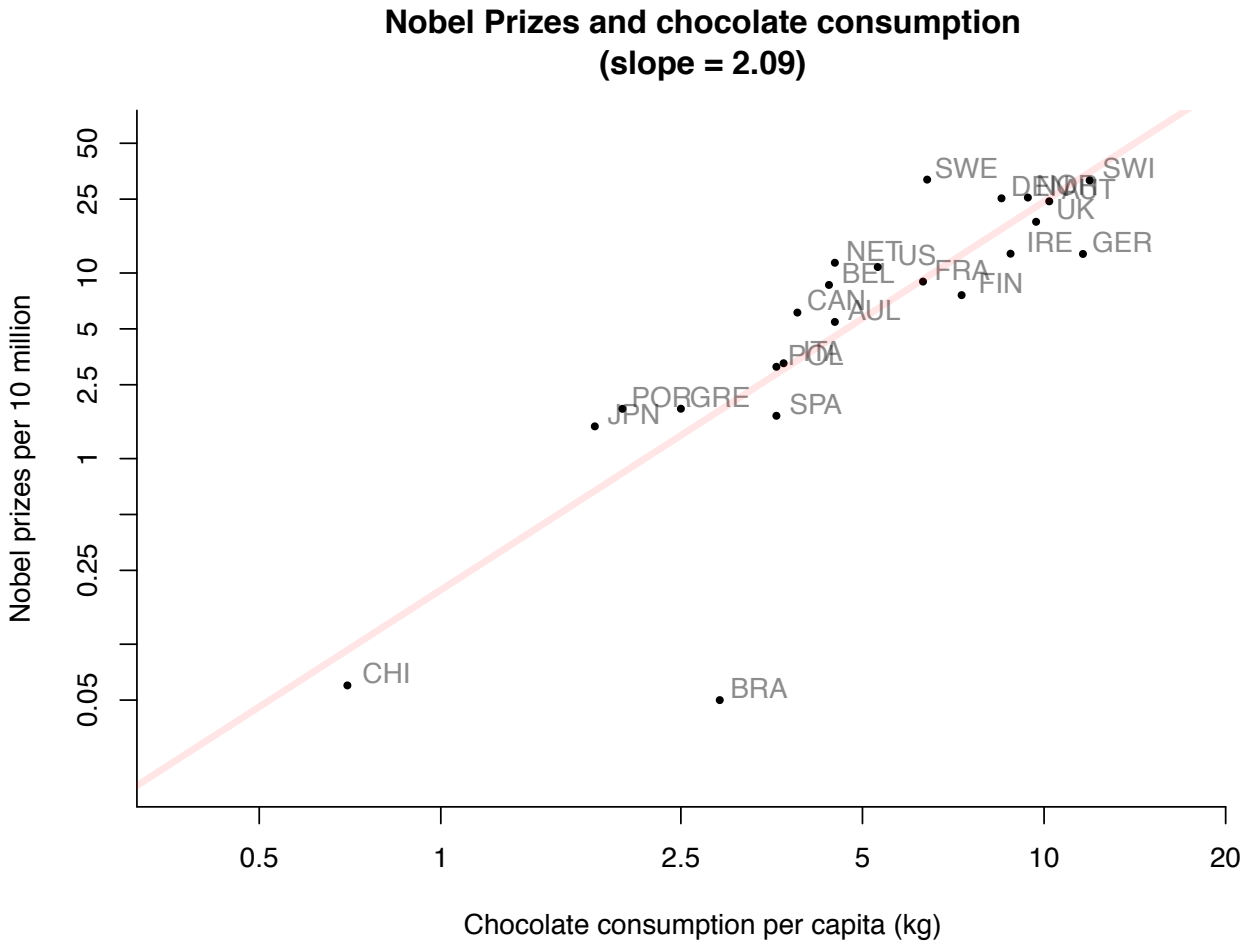
What is the key assumption under which correlation implies causation?

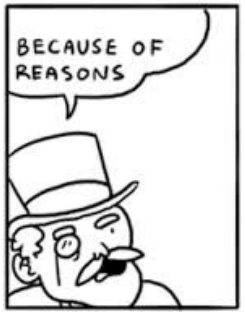


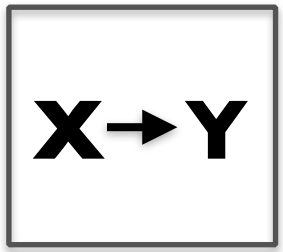
The most common design: regression analysis

Comparison:
Different units at the same point in time, possibly controlling for other variables.
(see Week 6)

Key assumption:
Confounding variables (a.k.a. *selection bias)* are properly accounted for.



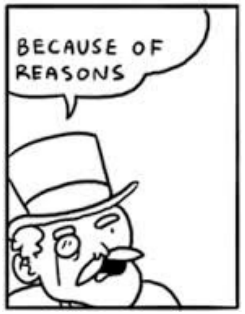


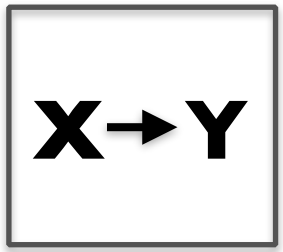


Implications (1)

Every time you read an article/book in Politics (IR, Economics), ask what kind of research question is being asked:

- Descriptive (what is X? what is relationship between X and Y?)
- Explanatory/reverse causal (what explains/caused Y?)
- Forward causal (what is the effect of X?)





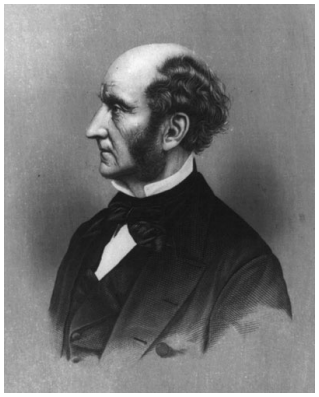
Implications (2)

For research addressing **explanatory** questions:

- keep in mind the fundamental messiness, and where it comes from
- note the kind of explanation (theoretical, empirical, both) being offered

For research addressing **forward causal** questions:

- ask what RCT one could hypothetically run
- note the kind of design actually used (RCT, before-and-after, regression analysis, etc), the assumptions under which correlation implies causation in this design, and ask whether these assumptions are met



John Stuart Mill says: social science is hard!

"Nothing can be more ludicrous than the sort of parodies on experimental reasoning which one is accustomed to meet with, not in popular discussion only, but in grave treatises, when the affairs of nations are the theme. . . . 'How can such or such causes have contributed to the prosperity of one country, when another has prospered without them?' Whoever makes use of an argument of this kind, not intending to deceive, should be sent back to learn the elements of some one of the more easy physical sciences."