Political Science 310 "Political Inquiry & Analysis"
Summer II 2002 Semester *8 July - 15 August 2002*

UNIVERSITY OF HAWAI'I AT MÂNOA

Instructor: Vincent Kelly Pollard, Ph.D. *(Proposed course: Taught 4 times during 1999-2001)*

Class meeting times:	**Office hours:** Monday 3:00-4:00 & by arrangement
M/T/W/R/F 12:00 noon-1:15 p.m.	**Phone:** TBA **Fax:** 808 956-6877
Classroom: TBA	**Electronic office**: pollard@hawaii.edu
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Introduction. Like any political science course anywhere, Political Science 310 is organized and driven by a point of view. As one political scientist writes, "The study of politics is itself a political act containing little that is neutral." Or natural! If you agree with that claim, then the next step is to figure out how much confidence one should have in any political research. By placing theoretically guided empirical tradition in its developmental and historical context, this course also takes a step toward the future Political Science 390 and 400. They will replace Political Science 310.

Systematic studies of cause and effect are one of many kinds of political science research. These can be beneficial or harmful. An example of a harmful study is the racist Tuskeegee Institute "public health experiment." In that case, a cohort of male African-American "subjects" infected with syphilis unnecessarily suffered medical complications and even died while being kept ignorant of their condition as long as thirty years. In the early 1940s, the most advanced medication available was sometimes denied to people suffering with Hansen's disease on Molaka'i Island. In another example, the "atomic veterans" are U.S. infantry survivors ordered to walk through radioactively contaminated bombing sites where nuclear weapons had been exploded a few hours earlier.

Political Science 310 begins with an overview of big changes in the social science that began early in the twentieth century. Then we will take an in-depth and critical look at how the managers of the Bell Systems Western Electric Company experimented on women workers at the Hawthorne Works factory--and how those workers sometimes subverted the experiments! We will see how prestigious Harvard University researchers misleadingly told the public story of those famous experiments. The Harvard summaries of those experiments influenced political science--and American industrial workplaces.

As you will come to appreciate, any research activity involves power relations. Finally, you will develop a research design directed towards an investigation of an issue, problem or development that you feel needs to be better understood or corrected. If you wish, you may show how to link political power to the cause of justice in policy-relevant research projects to meet our obligations to present and future generations of humans and other creatures.

Course objectives. By the end of the semester and depending on your commitment, you will be able to do the following, with a greater degree of proficiency than on the first day of class:

a) *indicate* linkages between political theory and methods used in empirical political science inquiry and analysis;

b) while acknowledging that facts can be misleadingly divorced from values, *distinguish* between descriptions of political reality and prescriptions for political action;

c) *appreciate* the use and misuse of evidence in making political inferences;

d) *demonstrate* awareness of relevant stand-alone and networked information sources useful for empowering interested citizens as potential activists in their society;

e) appreciate the value of clearly communicating one's methods of inquiry and analysis as a way of telling your audience how much confidence they should place in your inferences and those of others; and

f) analyze previously done social science research; and

g) propose, articulate and develop your own research design on socially relevant topic.

Required text. Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, paperback edition, Studies in Economic History and Policy: The United States in the Twentieth Century series (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993).[1]

"Early Response Questions" accompany the assigned chapters in *Manufacturing Knowledge* and other assigned readings. Whether or not they are assigned as e-mail discussion list *Polbiz-L* questions or as "other homeworks," be prepared to answer them orally or on exams. "Recommended readings," associated "Issues" and other study questions from past exams listed suggest additional ways of criticizing the studies we are reading--and of improving your research design. We will learn enough descriptive and inferential statistics to appreciate how criticisms of the Hawthorne Experiments complement one another, as well as for use in your research designs.

Grading Criteria and Grade Reports. The University requires that grades be reported, and you need to know how your grade is computed. A 500-point system reflects the weight assigned to learning activities in this course. Use the "Your points" column to trace your progress:

Creditable learning activities	**Maximum points**	**Your points**
Attendance (20-point deduction for each absence[2]) …….	**100**	
Timely answers to "early response questions" on *Politics-L@hawaii.edu*...	**30**	
Other homeworks *(submitted to pollard@hawaii.edu)* ……..	**60**	
Exam #1: 1st Friday -- review exercise *(in-class & take-home exam)*	**20**	

[1] Stephen Van Evera, *Guide to Methods for Students of Political Science* (Ithaca: Cornell University Press, 1997) is highly recommended for case-study research. Other assigned readings will be distributed as free handouts. Some of these readings and most of the "Recommended Readings" are on reserve in Sinclair Library.

[2] There is no such thing as an automatically excused absence. Student athletes, students in ROTC or the Reserves, and students with disabilities are expected to let me know in advance of absences that you should have been able to anticipate. "Provisionally excused" absences are not simply excused. You may be asked to do a make-up assignment to help keep you up with your classmates' progress.

Exam #*2*: 2nd Friday -- review exercise *(cumulative in-class exam)*	**40**	
Exam #3: 4th Friday -- review exercise *(cumulative take-home exam)* ……	**60**	
Exam #4: 5th Friday -- review exercise *(cumulative in-class exam)* ……	**80**	
Research design: propose, draft, consult, present & write final draft ……..	**60**	
Your self-assessment (last Wednesday of the semester) .....……	**20**	
Instructor's assessment of your personal effort, growth & contributions ….	**+ 30**	
Maximum possible points .....……	**500**	

Letter grades in this system correspond to 50-point bands, as follows: 451-500 points = an "**A**"; 401-450 points = a "**B**"; 351-400 points = a **"C**"; 301-350 points = a "**D**"; and <301 = an "**F**." On the first day of class, please raise any concerns about the weighing of the elements above.[3] The share of A's, B's, C's and so on vary according to the quality of student work. To impose a predetermined grading "curve" would abuse the statistical concept of a "normal distribution."[4] Exam questions will be based on assigned readings and videos, as well as on the presentations and class discussions. Readings, videos (homework assignments), lectures, and in-class and online discussions will help us to achieve the course competencies and achieve our objectives.

Crediting your sources. Be aware of the UH policy on "Academic Honesty" (in the *Graduate & General Information Bulletin*, "Appendix"). Ask if you are not sure.

Internet (e-mail) for homework & discussion. As announced each week in class, you will answer a designated "early response question on *Politics-L@hawaii.edu*, an Internet e-mail discussion "list." You will need an e-mail ID no later than Thursday of the first week; a UHUNIX e-mail ID is recommended.[5] Homework assignments are to be sent to *pollard@hawaii.edu*.

Week 1
8, 9, 10, 11 & 12 July 2002

Administrative summary of the course. How to study. How your instructor got interested in political science. Self-introductions by students. Ground rules for participation in small-group and large-group discussion (feel free to express differences respectfully while remembering that

[3] Skipping class on the first or second day of class is like "missing the first fifteen minutes of a movie." Missing both classes is like skipping the first half-hour of a film. You are responsible for being aware of any understandings reached at the beginning of the course. You may be given extra assignments to do. This will help keep you from falling behind.

[4] Imposing a predetermined grading "curve" abuses the statistical concept of a "normal distribution." After all, each group of students—and each student--is different.

[5] If you have not learned how to open up, read, reply to and send e-mail, you owe it to yourself to let me know on the first day of class. We will schedule a one-on-one or small-group hands-on computer lab session to "walk you through" the steps.

shared time is valuable time). Overview of how political science developed. Description, prescription and the myth of value-free social science. Is every bias necessarily a limitation? How can you make a bias work for you?

Assigned reading: Thomas S. Kuhn, "The Function of Measurement in Modern Physical Science," *Isis* 52 (1961):161-193; reprinted in Thomas S. Kuhn (editor), *The Essential Tension: Selected Studies in Scientific Tradition and Change* (Chicago: The University of Chicago Press, 1977), pp. **31-63**.

Early response questions:

1) When you hear or see "science," what are the first three or four words that come to mind?
2) What does Thomas Kuhn mean by "scientific revolution"?
3) As Kuhn sees the history, was there more than one scientific revolution?
4) What's the difference between what Kuhn calls "normal science" and a scientific breakthrough?
5) According to Kuhn, how important was precise measurement to scientific revolutions?
6) Kuhn's drawing on page 33 is intended as a caricature—a stereotype. Does it remind you of anything you have seen, hear or read before?
7) What's the most surprising aspect of Kuhn's chapter?

Assigned reading: "Editors' Preface," pp. **vi-vii**, "Introduction," pp. **1-6**; "Acknowledgments," pp. **272-273**; "Glossary of manuscript collections," pp. **ix-x**; Ch. 1: "The Management of Work," pp. **7-36**; and "Conclusion, pp. **264-271**, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993).

Early response questions:

1) If there is a double meaning in the title of Gillespie's book, what is it?
2) From what you have seen so far, what kinds of evidence do you expect Gillespie to use in support of his claims of fact and his inferences from those facts?
3) Who paid for the research underlying this book? Who helped him? Does it matter if we know?

Week 1 (8, 9, 10, 11 & 12 July 2002 -- continued)

Early response questions on first Gillespie readings, continued:

4) What are "employee representation plans" and "employee stock options." Were these "plans" and "options" purely and simply union-avoidance schemes dreamed up by management? Or was there some other consideration?
5) And if not, to what extent did they respond to needs felt by the workers?[6]

Homework 1

[6] If your author simply doesn't provide sufficient information or analysis to answer an early response question, then why not? Is this shortcoming simply the result of space limitations? Or of limitations in the author's perspective?

Video 2257[7]
Against All Odds: Inside Statistics.
Annenberg/Center for Public Broadcasting Collection.
COMAP and Chedd/Angier; Santa Barbara: Intellimation [distributor], 1989.
Part 2: "Picturing distributions."

Homework questions:
1) For showing patterns in data, when might a stemplot be appropriate? A histogram?
2) In general, what are these graphs showing?
3) In general, what do graphs let us compare?
4) If the shape of one distribution of a variable is symmetric and another one of the same variable is skewed, why might that difference be interesting?
5) What's an outlier? What effect might it have on the distribution of a variable?

Assigned reading: "The T Room," Ch. 2, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **37-68**.

Early response questions:
1) What was the so-called "T Room"? Who was in charge? What was its purpose?
2) Why did management experimenters ignore or downplay some evidence that was uncovered?
3) How did the workers begin to use the experiments to their own advantage?
4) After reviewing the discussion beginning at page 38, take a second look at Table 2 (page 45). This table summarizes the results of eleven tests (experiments) conducted at Hawthorne Works during a seven-month period in 1926-1927. For the Hawthorne researchers, what was the independent variable, that is, the factor that they could directly manipulate (change)? In what kinds of units was it measured?
5) What exactly is the production index? In general, what is the advantage of using an index number? Precisely what kind of simplicity and clarity is achieved? State the researchers' assumption about the relationship between lighting changes and the production index. How would the year-to-year comparison look if Gillespie had converted the earliest year in Table 2 to a base index of 1.00 instead of taking an excerpt from someone else's table?
6) In Table 2 (page 38), what columns (for both the test group and the control group) might you delete without causing any lost of clarity in Gillespie's explanation? Why won't the deletion(s) make any difference?

Week 1 (8, 9, 10, 11 & 12 July 2002 -- continued)

Early response questions (Gillespie, Chapter 2, continued):
7) In Table 2, the main part of the note summarizes four additional changes (that is, besides illumination) made during the eleven test (experimental) periods. To what degree (if any) does

[7] All videotapes are on 2-hour/2-week reserve in Wong Audiovisual Center, Sinclair Library, 3rd floor. A final appendix to this syllabus will list the seven videos together, their library call numbers and the inclusive dates during which they will be on reserve.

each of these changes affect your confidence in the inferences drawn by the researchers (as summarized in Gillespie's account)?

8) The electrical industry pressured the National Research Council to facilitate the start of the illumination tests. In so doing, industry spokespersons made three broad claims about likely effects of greater illumination in factories. With evidence now at hand, how supportable are the industry's claims?

Friday, 12 July 2002: Exam #1 (review exercise).

Related topic	Recommended Readings[8]	
Social Research: System & Process	Jarol B. Manheim and Richard C. Rich (with Donna L Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 1: "The Research Process."	Shulamit Reinarz (with Lynn Davidman), *Feminist Methods in Social Research* (New York and Oxford: Oxford University Press, Ch. 10: "Feminist Action Research."

Issues: According to Manheim and Rich what are six stages of the research process? How does "feminist action research" similar to and different from Manheim and Rich's view of research?

Week 2
15, 16, 17, 18 & 19 July 2002

Students concerned about their progress in the course should make an appointment with your instructor this week.

Isolating previous conditions & other notions of causality.
Homework 2
Video 2257:
Against All Odds: Inside Statistics.
Annenberg/Center for Public Broadcasting Collection.
COMAP and Chedd/Angier; Santa Barbara: Intellimation [distributor], 1989.
Part 3: "Describing Relationships."

Homework questions:

1) In everyday language, we use the "mean" (the sum of all the values divided by the number of values) as a synonym for "average." However, the median and mode of a distribution of data are also a kind of average. What different kinds of information does each of these three kinds of averages tell us?
2) Sometimes the mean can't tell us enough about a distribution of data? Why not? Can you give a real or imaginary example?
3) What is one advantage of a boxplot? What can it show?
4) As a reflection of central tendency of a distribution of data, what does a standard deviation show? What's deviating from what?

[8] Most recommended readings are on reserve in Sinclair Library. Others may be borrowed from your instructor.

Week 2 (15, 16, 17, 18 & 19 July 2002 -- continued)

Assigned reading: "Interpreting the Relay Test," Ch. 3, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **69-95**.

Early response questions:
1) As you understand it, what is power?
2) How did the Hawthorne experimenters underestimate the women?
3) Why do you think the Hawthorne experimenters made this error?
4) What was the role of fear, habit and belief in the experiments?

Homework 3:
Video 2257a
Against All Odds: Inside Statistics.
Annenberg/Center for Public Broadcasting Collection.
COMAP and Chedd/Angier; Santa Barbara: Intellimation [distributor], 1989.
Part 11: "The Question of Causation."

Homework questions:
1) What's a variable? Why is variation essential in studying some kinds of causal relationships?
2) If two variables are associated with one another and you are given no additional information, what are several different ways in which you might explain this connection (linkage, correlation)?
3) What general caution or advice do you infer from the discussion of Simpson's Paradox?

Friday, 19 July 2002: Exam #2 (cumulative review exercise).

Related topic	Recommended Readings	
What's the official story on how social science research projects get started?	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis Research: Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 2: "Theory Building: Concepts and Hypotheses in Political Science."	Alan C. Izaak, *Scope and Methods of Political Science: An Introduction to the Methodology of Political Inquiry*, The Dorsey Series in Political Science (Pacific Grove: Brooks/Cole Publishing Company, 1985), Ch. 1: The Scope of Political Science: Political Philosophy and Political Science" & Ch. 5: "Scientific Concept Formation in Political Science." Janet Buttolph Johnson and Richard A. Joslyn, *Political Science Research Methods.* 2nd ed. (Washington, D.C.: CQ Press, 1991), Ch. 3: "The Building Blocks of Social Scientific Research: Hypotheses, Concepts, and Variables."

Issues: What is the practical value of operationalizing important words? Is hypothesizing the only worthwhile way of organizing a research project? (If not, try to give at least one example of a different orientation.)

From information given in Gillespie's account, how well did the Hawthorne researchers operationalize their independent variables?

Week 2 (15, 16, 17, 18 & 19 July 2002 -- continued)

Related topic	Recommended Readings	
Conventions ("customs")	Stephen Van Evera, *Guide to Methods for Students of Political Science* (Ithaca: Cornell University Press, 1997), Ch. 1: Hypotheses, Laws, and Theories: A User's Guide."	
Common sense ways of avoiding big errors	Carl Sagan, *Demon-haunted World*, paperback edition (First published, 1995; Ballantyne, 1996), Ch. 12: "The Fine Art of Baloney Detection."	Joanne Martin, "A Garbage Can Model of the Research Process," Ch. 1 In Joseph E. McGrath, Joanne Martin, and Richard A Kulka, *Judgment Calls in Research*, Studying Organizations: Innovations in Methodology 2, published in cooperation with Division 14 of the American Psychological Association (Beverly Hills, London & New Delhi: Sage Publications, 1982).

Issues: Van Evera criticizes those political scientists who claim that quantitative research methods are necessarily superior to qualitative methods. What exactly is Van Evera's point? Is the "garbage can model" a more honest description of how social research is conducted?

Power relations in research networks

Assigned reading: "Elton Mayo and the Research Network," Ch. 4, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **96-126**.

Early response questions:
1) Who was Elton Mayo? What was his job?
2) How did he get interested in industrial sociology and psychology?
3) What was Mayo's social position vis-à-vis the women workers at Hawthorne Works?
4) With what kind of people did Mayo collaborate in his research network?
5) Why did they feel qualified to interpret the Hawthorne Experiments?
6) Based on what you can infer from Gillespie's account, what might Mayo say if someone claimed that the women were more qualified to interpret that research? What do you think?

Homework 4
Video 2257a:
Annenberg/Center for Public Broadcasting Collection.
COMAP and Chedd/Angier; Santa Barbara: Intellimation [distributor], 1989.
Part 12: "Experimental Design"

Homework questions:

1) Observational studies and experiments pay attention to change. What's the difference between these two kinds of research activities?
2) What are some possible advantages--and disadvantages--of relying on anecdotal evidence?
3) What's a treatment? Who treats? What gets treated? What's the advantage?
4) What's a double-blind experiment? When might it be useful?
5) What ethical issue (of possible harm to human subjects) arose in the Physicians' Health Study on heart disease? How did the researchers respond to this issue? Are you satisfied by the way they handled the problem?

In-class exercise on operationalization Research networks/power networks

Introduction. Identifying research networks is a step towards understanding more broadly how power relationships in social science are activated and exercised. However understood, power is not a thing but a relationship. If power is the ability to make something happen that otherwise would not otherwise have occurred, a historical example of social science research can reveal the exercise of power (for better or for worse). Van Evera speaks of inferring relationships between independent variables and dependent variables. That's one way of analyzing cause-and-effect. However, in the Hawthorne observations and experiments, where and how was power exercised? Who controlled whom? What was the "chain-of-command"? Was it ever subverted? Your evidence?

Division of activities. Students will form groups of 3-4 students each. 1) On the basis of what we have read and discussed thus far, quickly review the sources of power in the Hawthorne experiments. Your next tasks are the following: 2) to sketch a diagram showing the main sources of authority (answering questions like "who?" or "what)?"; and 3) the lines of power (e.g., "A caused B to happen"). Then be ready to explain your group's diagram on an overhead transparency (or the chalkboard). As much as possible, be specific about the focused time frames.

Group #1 will focus on the earlier research network, that is, the Hawthorne experiments before April 1928, that is, before Mayo and his colleagues became involved. And **Group #2** will focus on the expanded network that developed after that Australian researcher and his associates began participating in the project. Meanwhile, **Group #3** will prepare to consider both the earlier and later research networks sketched and explained by Groups #1 and #2. Instead of drawing a diagram, Group #3 will comment on or ask questions about the networks sketched by Groups #1 and 2.

Reference and review: Chapter 4 ("Elton Mayo and the Research Network") has information particularly useful to Group #2 while the earlier chapters are likely to be more helpful to Group #1. Group #3 needs it all!

Before Groups #1 and #2 draw their final diagrams combining all the sources of authority and power, each group should subdivide its work, concentrating on corporate power, academic power and social or personal power. (To show that a particular source of power appears to be absent, use parentheses). Two hints: 1) Not all power is exercised hierarchically or "top-down"; and 2) power is often exercised informally.

As precisely as you can, indicate the source of each of the different kinds of power exercised in the Hawthorne experiments. Also, as best you can, label the starting and concluding points of the time frames. Finally, if you suspect there are other kinds of power at work that Mayo or Gillespie just aren't talking about, you might indicate them in your diagram with question marks. Under the diagram, indicate what time period it covers. (Use the back of this handout to draw a rough draft.)

Each group should indicate if its members are generally agree on the interpretation of power relationships or if there are clear differences among you. If there are clear differences, your presentation should specify alternative ways of showing lines of authority and power.

Presentation and discussion. Group #1 and Group #2 will each have up to 5 minutes to show us your respective diagrams on the projector (or, if you prefer, the chalkboard) and to explain them. And Group #3 will react to both.

For the future. This exercise does not conclude the story of research networks. After considering Chapter 9 ("Human Relations in the Social Sciences") later in the semester, you will be able to modify these research/power network diagrams.

Political Science 310 *Research networks/power networks* Guidance for Group #3

Group #2's diagram and explanation should focus on the expanded network that developed after that Australian researcher Elton Mayo and his associates began participating in the project. Below are questions that may help you make suggestions for improvement. However, you probably can think of some other questions, as well.

1. Did adding Mayo and his crew to the mix of researchers add any tensions at Hawthorne Works? At Harvard? How did the new researchers complicate and change the lines of authority?

2. In the pre-Mayo period of the experiments, a handful of women factory workers were the research subjects? With Mayo's involvement in the project, were there any changes? Were all the researchers still male?

3. Does information in Chapter 4 let you infer that the women research subjects have become a more coherent social group by the time Mayo enters the research project? If there is evidence supporting this claim, does **Group #2'**s diagram reflect the group as competing source of authority and power?

4. After Mayo attached himself to the Hawthorne experiments, where was the source of funding for the research? Did the same organization or organizations continue paying for the research? Was funding provided by an altogether different group of folks? Or were sources of funding partly the same and partly different from before May dropped in? Does **Group #2'**s diagram reflect this?

5. Does the diagram accurately distinguish between direct and immediate causes and indirect, remote influences?

6. Overall, is **Group #2'**s diagram in accord with their oral presentation of it? If part or all of the oral explanation is better than **Group #2**'s sketch, how would you suggest modifying it?

7. Any other issues or comments?

Week 2 (15, 16, 17, 18 & 19 July 2002 -- continued)

Handout on interviewing.

Assigned reading: "The Psychopathology of Industrial Life," Ch. 5, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **127-151**.

Early response questions:

1) What did Elton Mayo assume about the influence of the workers' home life?
2) For Mayo and as far as you can tell on the evidence in Gillespie's account, was that influence a) predisposing or b) directly causal? What is the connotation of *psychopathology*?
3) What did the workers think about the interviews? Did they turn the interviews to uses unanticipated by the researchers?
4) What was the effect of the interviewing on individual workers? On supervisor training? On industrial change?

Related topic	Recommended Readings	
Operationalization & measurement	Jarol B. Manheim and Richard C. Rich (with Donna L Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 4: "From Abstract to Concrete: Operationalization and Measurement"	Wayne C. Booth, Gregory G. Colomb and Joseph M. Williams, *The Craft of Research* (Chicago and London: The University of Chicago Press, 1995), Ch. 4: "From Questions to Problems." John W. Creswell, *Research Design: Qualitative and Quantitative Approaches* (Thousand Oaks, California, London and New Delhi: Sage Publications, Inc., 1994), Ch. 4: "The Purpose Statement."

Research design	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 5: "Working from a Plan: Considerations in Research Design" Stephen Van Evera, "What Are Case Studies? How Should They Be Performed?" Ch. 2 In *Guide to Methods for Students of Political Science Research Methods in Political Science* (Ithaca: Cornell University Press, 1997), pages 49-88.	Janet Buttolph Johnson and Richard A. Joslyn, *Political Science Research Methods*, 2nd ed. (Washington, D.C.: CQ Press, 1991), Ch. 5: "Research Design." "Critical Thinking: Required Learning for the 21st Century," Videoconference Participant Packet, 7 November 1996. Alan C. Izaak, *Scope and Methods of Political Science: An Introduction to the Methodology of Political Inquiry*, The Dorsey Series in Political Science, (Pacific Grove: Brooks/Cole Publishing Company, 1985), Ch. 8: "Theories and Models: Explanation and Discovery."

Issues: What is a case? A case study? Using your own examples, what can case studies sometimes explain better than studies using aggregate data? Is there more than one way to delineate or distinguish the cases from one another in the Hawthorne experiments? When might it matter if the focused time frame of a case is extended? If it is shortened?

Week 3
22, 23, 24, 25 & 26 July 2002

Assigned reading: "The Anthropology of Work," Ch. 6, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **152-174**.

Early response questions:

1) The chapter on "Psychopathology of Work" tells us that the Hawthorne researchers disagreed on whether "the Ideal supervisor" should be trained to be "a kind of lay psychiatrist, a person capable of analyzing the subjective side of supervisory relationships." They couldn't even agree on what "'ideal supervision"' meant (p. 148). During 1931-1932, where did some Hawthorne researchers get the idea that social anthropology would help them to improve their research on electrical assembly workers?
2) What was the purpose of the bank wiring test?
3) What was the immediate result of shifting control of the experiments from Western Electric managers to Harvard academics like Elton Mayo?

Assigned reading: "Manufacturing the Hawthorne Experiments," Ch. 7, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in

Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **175-209**.

Early response questions:
1) What were the most important themes or issues running through the books and articles describing the Hawthorne Experiments?
2) Why were the books and articles described as "scientific"?

Assigned reading: "Human Relations in Industry," Ch. 8, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **210-239.**

Early response questions:
1) What does Gillespie mean when he states that "human relations.....had become a professional ideology for personnel managers"?
2) What is an ideology? Give another example.
3) For some people, *ideology* has negative connotations. Why?

Week 3 (22, 23, 24, 25 & 26 July 2002 -- continued)

Related topic	Recommended Readings	
Sampling procedures	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 6: "Who, What, Where, When: The Problem of Sampling." Janet Buttolph Johnson and Richard A. Joslyn, *Political Science Research Methods*, 2nd ed. (Washington, D.C.: CQ Press, 1991), Ch. 9: "Sampling." John Allen Poulos, *Innumeracy: Mathematical Illiteracy and Its Consequences* (New York: Hill and Wang, 1988), Ch. 5: "Statistics, Trade-offs, and Society".	Wayne C. Booth, Gregory G. Colomb and Joseph M. Williams, *The Craft of Research* (Chicago and London: The University of Chicago Press, 1995), Ch. 6: "Using Sources." John Allen Poulos, *Innumeracy: Mathematical Illiteracy and Its Consequences* (New York: Hill and Wang, 1988), Ch. 4: "Whence Innumeracy?" Alan C. Izaak, *Scope and Methods of Political Science: An Introduction to the Methodology of Political Inquiry*. The Dorsey Series in Political Science. Pacific Grove: Brooks/Cole Publishing Company, 1985), Ch. 7: "Explanation and Prediction in Political Science."

Assigned reading: "Human Relations in the Social Sciences," Ch. 9, In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993), pp. **240-263**.

Early response question:

1) Why did social scientists feel compelled to claim that their research was "objective" and "value-free"?

Assigned Reading: "Conclusion: Manufacturing Knowledge," In Richard Gillespie, *Manufacturing Knowledge: A History of the Hawthorne Experiments*, Studies in Economic History and Policy: The United States in the Twentieth Century (edited by Louis Galambos and Robert Gallman) (Cambridge and New York: Cambridge University Press, 1993). *This reading was assigned earlier, but now you are asked to read it more closely.*

Early response questions:

1) What were the sources of support for the Hawthorne Experiments?
2) How and why did this support grow and spread in universities and in industry?

3) What kinds of social relationships made possible the Hawthorne Experiments, their interpretation and their application?
4) To what kinds of evidence would you look for to determine whether or not the Hawthorne Experiments had a large influence on management practices in American factories?
5) Are these kinds of experiments a threat to the well-being of workers? If so, what would you recommend that labor unions or other organizations do to improve the situation?
6) Is the way political science is taught and written part of the problem? Please explain in detail why this is or is not the case.
7) Was anything useful or valuable produced in the Hawthorne Experiments?

Week 3 (22, 23, 24, 25 & 26 July 2002 -- continued)

Related topic	Recommended	Readings
Direct & indirect observation	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 11: "Direct Observation."	Janet Buttolph Johnson and Richard A. Joslyn, *Political Science Research Methods*, 2nd ed. (Washington, D.C.: CQ Press, 1991), Ch. 9: "Observation."
Content analysis	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 10: "Content Analysis."	
Presenting your research	Stephen Van Evera, *Guide to Methods for Students of Political Science* (Ithaca: Cornell University Press, 1997), Appendix: "How to Write a Paper."	Wayne C. Booth, Gregory G. Colomb and Joseph M. Williams, *The Craft of Research* (Chicago and London: The University of Chicago Press, 1995), Ch. 8: "Claims and Evidence."

Homework/Video 5:
Video 2257
Against All Odds: Inside Statistics.
Annenberg/Center for Public Broadcasting Collection.
COMAP and Chedd/Angier; Santa Barbara: Intellimation [distributor], 1989.
Part 8: "Describing relationships."
Homework question:
1) What can a scatterplot tell us?

Homework/Video 6
Video 2257a
Against All Odds: Inside Statistics.
Annenberg/Center for Public Broadcasting Collection.
COMAP and Chedd/Angier; Santa Barbara: Intellimation [distributor], 1989.
Part 15: "What is probability?"
Homework questions:
1) What's the difference between deterministic and random phenomena?
2) What's the difference between longterm relative frequency and personal assessment of chance?

Questions for review and study

1. During 1924-1933, unusually influential industrial psychology experiments were conducted at Hawthorne Works, a large factory of the Bell System's Western Electric Company. These experiments began at the end of a "transitional period" in the history or development of political science. In what ways was that research activity different from the political science of the "institutional" period preceding the "transitional period"?

2. Even though some of us may consider Elton Mayo as "conservative," he thought of himself as a social critic. How did this self-conception influence Mayo's choice of research questions and the way he attempted to answer them? Why was he so fascinated by "reveries"?

3. Identifying research networks provides a broader understanding of how social science is really done. By the end of 1927, what key individuals and institutions were in Elton Mayo's research network? Within his research network, did Mayo simply set his own agenda? Or were there competing influences in his research network that led him to compromise? What people and what institutions were in Richard Gillespie's research network? What advantages did this network provide him? Disadvantages? If you wish to supplement your explanation with one or two sketches or diagrams of your own, please do so.

4. What is a study variable? Unclarity about the study variable might result in what kinds of problem?

5. Social science causality is usually not physical "cuestick-to-cueball" cause-and-effect or "trigger finger-to-trigger" cause-and-effect. Instead, what is a more meaningful alternative understanding of social causality? What was Mayo's understanding of causality? How is that understanding reflected in his activity as a consultant to the Hawthorne experiments? Why was Mayo concerned with correlations at Western Electric's Hawthorne Works factory?

6. Consider the axiom in quotation marks below. Then select the best answer from among the following four choices: "Correlation does not necessarily imply causality." Expressed differently, this statement what does that mean?

7. If you observe a correlation between two events but have no other information, causality is only one of the possible explanations for the observed association. Name three other possible interpretations of the relationship.

8. What problem or problems is a double-blind experiment intended to obviate?

9. Among Richard Gillespie's central claims and complaints is his assertion that "textbook accounts of the [Hawthorne Works] illumination tests exaggerate the initial ignorance of the experimenters and misrepresent *the process of discovery* [emphasis supplied]." What precisely does Gillespie claim is mistaken about those interpretations? What evidence does he cite in support of his claim? In your view, how convincing is Gillespie's claim? Why or why not?

10. Compare and contrast Elton Mayo's methodology with the array of methods in feminist research methodology as we considered it. In your understanding, what are the implications of these similarities and differences?

11. Influenced by sociologist Max Weber (1864-1920) and the apparent value-neutrality of the dramatically successful physical, biological and medical sciences, twentieth-century positivists sharply distinguished between "facts" and "values." And for decades afterwards, social and behavioral scientists argued over whether or not a researcher's purposes should influence her choices. "These purposes," in the words of Joseph McGrath, Joann Martin, and Richard A. Kulka, "may arise from the requirements of your grant, from the implications of your theory,

from your method competencies and preferences, from your publication needs, and even from your values, attitudes, and preferences as a human being." In contrast to the early positivists, McGrath, Martin and Kulka agree with others "that such influence is *inevitable*....[and] is neither to be condoned nor condemned, but *simply to be reckoned with*." Making an argument similar to Pollard's and nine years before Gillespie's book, their research manual stated, "it is extremely important....that you *make explicit your purposes, and try to delineate their impact on your study*." How well did Elton Mayo meet their standard? How well did Richard Gillespie meet it?

12. Reviewers have praised Gillespie's *Manufacturing Knowledge* for having supplied informative and previously missing historical "context" for the Hawthorne experiments. How well has Gillespie done so? To answer this question, evaluate the extent to which Gillespie's book provides sufficient historical details making it easier to understand the Hawthorne experiments in the context of the following: a) the development of the physical, biological and medical sciences in the late nineteenth and early twentieth century; b) the emergence of influential social science research networks; *and* c) the sense of solidarity, belonging and community that labor unions provided to working class people during early union organizing drives.

13. Together and sometimes in competition with Western Electric managers supervisors and engineers, Elton Mayo and his Harvard colleagues were involved in two dozen industrial psychology experiments at Hawthorne Works during 1927-1932. a) To what extent should the multiplicity of methods used by Mayo increase your confidence in the Hawthorne experiments' findings? b) To what extent do the multiplicity of methods used by Mayo support or weaken Gillespie's assertion that social knowledge is manufactured and not discovered?

14. Is Gillespie's critique of Mayo excessively kind? In one respect, reviewer William Finlay claims that it is. Based on the evidence, how persuasive is Finlay?

15. For Elton Mayo and colleagues, what was the purpose of "theory"? And what purpose does "theory" serve for Richard Gillespie?

16. In what ways, might lessons from Gillespie's history of the Hawthorne experiments assist in designing or improving your research project? Or if it has no relevance, please explain why not.

Additional study questions

1. "In 1920, shortly before the [Hawthorne] experiments commenced, social and behavioral scientists were just starting to move out of the university and laboratory and into society; claims for the social utility of the social sciences had been common since the last decades of the nineteenth century, but only after the First World War did experts try in any coherent fashion to develop techniques of social control based on academic research, modeling themselves explicitly on the success of scientific medicine over the previous three decades."

Please explain how closely did the Hawthorne experiments conform to the quoted summary? In your answer, briefly indicate in what ways that research activity differed from earlier, more traditional political science of the "institutional" period preceding the "transitional period."

2. Below are five arguable, controversial claims. Evaluate them simply as possible starting points for a research project. Pay attention to the underlined words and assume that these statements are being made today with no further clarification:

"Ralph Nader's candidacy for President in 2000 was taking votes away from Al Gore."
"Voting for Pat Buchanan in 2000 was the same as voting for Al Gore."
"President Corazon Aquino was an indecisive leader."
"Electronic voting innovations deter voter turnout."
"O'ahu voters are apathetic."

In the tradition of theory-guided empirical political science research, what conceptual problem is common to each of the five statements above? *(circle the best choice below)*

a. All the statements imply that political leaders should take more initiative in encouraging citizens to vote.

b. All the statements reflect an elitist view of politics.
c. None of these statements predict what politically active people will do.
d. Key terms in each of the statements above can be interpreted in very different ways, making them impossible to evaluate.

3. Read and interpret the following paragraph:

"Consider, for example, the remarkably robust relationship between education and voter turnout. For decades, political scientists have argued that, ceteris paribus [= "other things being equal"], acquiring education raises the probability of voting. This causal proposition is confirmed by a wide variety of surveys, most of which are cross-sectional in design. In other words, at a given point in time, well-educated people are more likely to vote than those with less education. As with any nonexperimental result, this empirical regularity could be spurious. It could be that unobserved factors that cause one to vote are also correlated with educational attainment. Education could, for example, simply be a marker of one's socioeconomic status, and critics of this proposition have noted that rising levels of education have not yielded higher levels of voter participation. In an effort to guard against spuriousness, scholars who make a serious effort to gauge the effects of education sometimes build elaborate and exhaustive models of voter participation. But absent some kind of randomized intervention, it would be impossible to know whether this approach succeeds."

Below, circle the best answer to complete the following statement: According to the author of the paragraph above, researchers trying to explain frequency of voting should consider the possibility that, instead of education, a _____ _____ explains levels of voter participation:

a. Dependent variable
b. Super variable
c. Lurking variable
d. None of the above.

4. Political scientists and ordinary citizens use evidence to support inferences and claims. The appropriateness of evidence partly depends on its purpose. Did Richard Gillespie use the "History Sheets" in the same way that Elton Mayo did? Please explain whether, in your judgment, did Gillespie use evidence appropriately? What is your criterion for "appropriateness"?

5. A well-conceived "double-blind" experiment is supposed to reduce the likelihood of what kind of confusion? Discuss the pro's and con's of doing a "double-blind" experiment at any point in the Hawthorne Works research.

6. If you were managing an experiment or controlled observation with human subjects and if you needed to rule out heredity (genetic differences) as a possible cause, which of the following would be the most desirable research subjects? *(Circle the best choice.)*

a. Mother-and-daughter pairs
b. Father-and-son pairs
c. Any parent-and-child (mother-son or father-daughter) pairs
d. Fraternal twins
e. Identical twins
f. In-law/outlaw pairs

7. Women are at the center of most of the Hawthorne Works experiments. a) How did paternalism affect the relationship of researchers to the workers before and after Elton Mayo's entry into the Hawthorne experiments? b) How adequately were female Western Electric workers at Hawthorne Works informed of the purpose and risks of the experiments? c) How well informed were these women compared to the doctors in the aspirin/heart attack experiment of the mid-1980s? d) Was their consent more freely given than that of the so-called "atomic veterans" in the U.S. military? e) If the women were aware of the experiments and manipulated aspects of the experimental situation to their advantage, how should that affect our interpretation of the results?

8. In the empirical social science tradition that we have been studying, which of the following statements about causality is accurate? *(circle the correct answer)*:

a. Indicates that Event B would not have occurred without Event A's having happened first.
b. Is not a description but a judgment.
c. May be inferred directly or indirectly.

d. Is more than simple correlation.
d. All of the above.

9. Social science research has consequences. Name two ways in which inferences from industrial relations research weakened the power of supervisors by the late 1920s.

10. Applicants to the Department of Political Science M.A./Ph.D. program must demonstrate a "match" or "fit" between the Department's resources and their preparation and intellectual interests. "Matching" of this kind also played a singular role in the Hawthorne experiments. Elton Mayo did not grow up in an industrial city of the U.S. Instead of factory or managerial experience, he had a doctorate and a diverse teaching experience. Yet he would help lead, guide and interpret a series of industrial experiments in a large Chicago-area electrical factory. How did this happen? To answer this question, write a letter of application on Mayo's behalf to the Rockefeller Foundation. Explain how well Elton Mayo's social class, political philosophy, interests and experience "matched" or "fit" the broad objectives of the Rockefeller Foundation and why they would benefit from funding a position for Mayo at Harvard.

11. A study variable can be which of the following? *(select the best choice)*

a. An independent variable
b. A dependent variable
c. a and b only
d. An intervening variable
e. A condition variable
f. d and e only
g. a, b, d or e

12. Below is a linear representation of Mayo's "model of labor turnover":

With this in mind, what is a political science model? Why do political scientists find models useful? What did Elton Mayo expect to discover by eliciting information about workers' "reveries"? How did Mayo's model reflect, i.e., show the influence of, his political values and concerns?

13. If you observe a correlation between two events but have no other information, causality is only one of several possible explanations for the observed association. Name three other possible interpretations of the relationship.

14. Consider the following axiom: "Correlation does not necessarily imply causality." Interpret it, selecting the statement below that best restates the axiom just quoted.

a. An association between event A and event B never means that A caused B (or that B caused A).
b. An association between A and B always means that A caused B (or vice versa).
c. An association between A and B may mean that A caused B (or, perhaps, vice versa), but we usually will need to know more about the situation before we can make this claim confidently.
d. The statement in quotation marks above has no meaning in empirical social science.

15. According to Stephen Van Evera, "theory" is a causal law together with an explanation of that law; that is, theory is composed of causal laws or hypotheses, explanations and antecedent conditions. In that understanding, useful social science theory has which of the following characteristics? *(circle the best answer)*

a. Large explanatory power.
b. Parsimoniousness.
c. Satisfies our curiosity.
d. Is clearly framed.
e. Its elements are framed clearly enough that, in principle, it may be "falsified."
f. Explains important phenomena.

g. Has prescriptive richness.
h. All of the above.

16. Power and authority relations may be discovered in research projects. For the period beginning with Elton Mayo's involvement, summarize power relations in the Hawthorne experiments from the shop floor to the national level. On another page, sketch a diagram to accompany your explanation. In your explanation, also indicate the advantages and disadvantages of this network for Mayo. For clarity's sake, please use the following symbols:

(a) solid vertical arrows indicating unchallenged authority relations;
(b) broken-line vertical arrows showing indirect or situational influence;
(c) two-way vertical arrows to indicate challenged authority;
(d) parallel dotted lines to indicate cooperative relationships among or between equals;
(e) any other clearly labeled symbols of your choosing.

17. Commenting on the 1923 Continental Mills spinning operation, Richard Gillespie summarizes: "Mayo's hypothetical explanation reflected his tenuous position in the mill, wanting to antagonize neither the workers nor the managers, and reflected his commitment to the view that both labor and capital were to blame for industrial conflict."

With this in mind, explain how Mayo's political perspective on democracy and freedom shaped and guided his involvement in the Hawthorne research.

18. Most social science causality is usually not as simple as physical "cuestick-to-cueball" cause-and-effect or "trigger finger-to-trigger" cause-and-effect. What is a more common but meaningful alternative understanding of social causality?

20. In the 1940s, 1950s and 1960s, researchers wishing to clarify the association between cigarette smoking and lung cancer did retrospective and prospective human studies and laboratory studies (of mice and hamsters) because.....*(select the best answer from among the choices below)*

a. They didn't suspect that smoking might cause lung cancer.
b. The were seeking absolute certainty.
c. Animal rights activists did not care if hamsters contracted lung cancer or not.
d. Initial studies had, indeed, suggested that smoking increased a smoker's chances of getting lung cancer but researchers wanted a greater degree of confidence in the association between smoking and cancer.

21. Carefully review and consider the following two closely interrelated epistemological claims by Richard Gillespie:

> "Meaning is not discovered; it is imposed." And "science is fundamentally a social activity in which knowledge claims can never be said to be determined solely by empirical data."

Referring to evidence (documentation) used by Gillespie in the text, footnotes and acknowledgements and to what you have otherwise learned about the post-World War I empirical tradition in the social sciences, evaluate Gillespie's claims by addressing and discussing the following issues:

a) Translate Gillespie's claims into your own words, briefly illustrating your translation with your own example or examples, as well as one or two of Gillespie's examples;

b) Judge to what extent Gillespie's claims challenge a competing account of the history and development of twentieth-century social science to which you have been exposed thus far;

c) Assess to what extent Gillespie's claims supplement more conventional empirical accounts of how to do good social science, including how well he addresses the matter of how much certainty one should place in social science inferences; *and*

d) As if you were Gillespie's editor, recommend three necessary changes for the next edition of his book. Which readers would likely benefit from implementation of your suggestions?

Week 3 (22, 23, 24, 25 & 26 July 2002 -- continued)

Related topic	Recommended Readings	
Purpose & techniques of different types of literature searches	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 3: "Setting the Foundation: Techniques of Bibliographic Search." Janet Buttolph Johnson and Richard A. Joslyn, *Political Science Research Methods*, 2nd ed. (Washington, D.C.: CQ Press, 1991), Ch. 6: Conducting a Literature Review." Wayne C. Booth, Gregory G. Colomb and Joseph M. Williams, *The Craft of Research* (Chicago and London: The University of Chicago Press, 1995), Ch. 5: "From Questions to Sources."	John W. Creswell, *Research Design: Qualitative and Quantitative Approaches* (Thousand Oaks, California, London and New Delhi: Sage Publications, Inc., 1994), Ch. 2: "Use of the Literature." Lee Cuba, *A Short Guide to Writing About Social Science*, 3rd edition, The Short Guide Series, edited by Sylvan Barnet and Marcia Stubbs (New York: Longman, 1997), Ch. 2: "Using the Library and the Internet." Jacques Barzun and Henry F. Graff, *The Modern Researcher*, 5th edition (Fort Worth: Harcourt Brace Jovanovich College Publishers, 1992), Ch. 4: "Finding the Facts." "Political Science Research Data Sources" http://www.its.ilstu.edu/gmklass/pos497/stats.htm
	Wayne C. Booth, Gregory G. Colomb and Joseph M. Williams, *The Craft of Research* (Chicago and London: The University of Chicago Press, 1995), "Prologue: Starting a Research Project," Ch. 1: "Thinking in Print: The uses of Research, Public and Private" and Ch. 3: "From Topics to Questions."	W. Phillips Shively, "Appendix: Principles of Political Analysis," In *Power and Choice: An Introduction to Political Science*, 6th edition (New York: Rand McNally, 1999), pages 373-378.

Week 4

29, 30 & 31 July 2002 *and* 1 & 2 August 2002

Assigned reading: A set of short book reviews of *Gillespie's Manufacturing Knowledge* published in the following sixteen journals and periodicals:

*Business History Review * Choice * The Historian *Reviews in American History * Science * The Journal of Economic History, Sociology * Labor History * Isis * The Historical Journal * British Journal of Industrial Relations * American Historical Review, Journal of American History * Library Journal * The American Journal of Sociology * Technology and Culture*.

Early response questions:

1) How do you recommend that we begin classifying these differing perspectives on Gillespie's book?
2) What criteria should we use?
3) Whose interpretation is most similar to yours?

4) Most different?
5) Which reviewer (if any) changed your mind? How? Or if not, why not?
6) How well does the reviewer use evidence to support her/his claims?

Week 4 (29, 30 & 31 July 2002 *and* 1 & 2 August 2002 -- continued)

Homework 7
Video 7548:
Learning Corporation of America, "Two Factories: Japanese and American" (22 minutes).

Homework question:
1) If your salary and that of four assistants plus expenses (including unlimited airfare!) were funded for six months and you had the cooperation of management and workers in one factory in Japan and another in the United States, how would you operationalize (define) "culture" in order to meaningful comparisons between the ways in which American and Japanese workers work?

Friday, 2 August 2002: Exam #3 (cumulative review exercise).

Finalize the focus of individual/group research designs.

Related topic	Recommended Readings	
Survey research & interviewing	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 7: "Survey Research" 8989	Jacques Barzun and Henry F. Graff, *The Modern Researcher*, 5th edition (Fort Worth: Harcourt Brace Jovanovich College Publishers, 1992), Ch. 7: "Truth, Causes, and Conditions." Janet Buttolph Johnson and Richard A. Joslyn, *Political Science Research Methods*, 2nd ed. (Washington, D.C.: CQ Press, 1991), Ch. 8: "Making Empirical Observations: Survey Research and Elite interviewing."

Assigned reading: Handout**:** Standardized survey research and open-ended interviewing are usually contrasted with one another. By considering survey research and specialized/expert interviewing together, we can consider how they are similar, as well as how they differ from one another.

This week's lectures are partly based on the readings below. Read as much as you can from the titles below that look most interesting to you. These are on reserve or on the Web.

Related topic	Recommended Readings	
Aggregate data: sources & applications	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt, *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 12: "Sources and Applications of Aggregate Data."	Jacques Barzun and Henry F. Graff, *The Modern Researcher*, 5th edition (Fort Worth: Harcourt Brace Jovanovich College Publishers, 1992), Ch. 8: "Pattern, Bias and Revisionism."

Comparative research	Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. (White Plains: Longman Publishers, 1995), Ch. 13: "Crossing Borders: The Practice of Comparative Research."	*Newsletter of the Comparative Politics Section of the American Political Science Association*, 1997 & 1998 (all issues); these may be located on the Internet after getting the URL from the "Comparative Politics" sector of Pollard's website.

Week 5
5, 6, 7, 8 & 9 August 2002

From an assignment that will be explained in separate handouts,[9] you will share a brief oral report during the final two weeks of this semester and a written report no later than Friday of the sixth week. Since details and tactics for each one will vary, I will also meet with your or your groups separately as often as necessary. However, you are expected to take considerable initiative in this matter.

Recommended website:
http://www.press.uchicago.edu/Misc/Chicago/041247.html
"How to Think about Your Research While You are Doing It." That is the subtitle of Howard Saul Becker (with Pamela Richards), *Writing for Social Scientists: How to Start and Finish Your Thesis, Book, or Article* (Chicago and London: The University of Chicago Press, 1986). The URL above takes you to this excerpt from Becker's book.

Question for Politics-L@hawaii.edu: Most social science causation does not fit the "cuestick-to-billiard-ball" or "A-directly-causes-B" model. Instead, the researcher tries to identify and trace the necessary and sufficient conditions before an event takes place. But there are other views. What is the view of the producer of the video "Against All Odds"? Gillespie's view? The Hawthorne researchers? If they don't say so directly, can you figure out the answer from evidence in their writing?

Friday, 9 August 2002: Exam #4 (cumulative review exercise).

Week 6
12, 13 14 & 15 August 2002

Individualized and small-group consultations on development of research designs.

Assignment: Skim through the following two articles (handouts). Then find examples in Gillespie's summary of Hawthorne experiments and observations that illustrate or challenge assertions made by either of the authors: Murray S. Davis, "That's Interesting! Towards a Phenomenology of Sociology and a Sociology of Phenomenology," *Philosophy of Social Science*, 1 (1971):309-344; and Charles Kurzman, "The Rhetoric of Science: Strategies for Logical Leaping," *Berkeley Journal of Sociology 33 (1988): 131-158.*

Further consultations and additional directions for each group project.

[9] See "Research Design," appendix to this syllabus.

Monday, 12 August 2002: Consultations on group projects continue. Outlines, rough drafts or detailed progress reports due today.

Student presentations continue

Final reflections on the course.

Student self-assessments are due no later than Tuesday, 13 August 2002

Course evaluation

Final drafts of research designs are due no later than Thursday, 15 August 2002, at 1:15 p.m. Papers submitted during the first 24 hours afterwards incur a 20-point deduction.

COMMENTS & SUGGESTIONS ON WRITING YOUR PAPERS & EXAMS

From reading and commenting on papers written by political science students and participants in my "Writing for Social Scientists" workshop, I have briefly summarized typical problems that arise in these efforts. And I can suggest some solutions. Writing is thinking. And thinking can be hard work. Therefore, if you experience difficulty and frustration, that does not mean anything is wrong with your head. It's normal. Just persistent. My comments on your writing should help you get better results from your efforts. Many of my comments, questions and suggestions apply only to your individual paper. Below, I share some general observations that should be helpful to all of you. Use these suggestions as guidelines and reminders in peer-editing, as well as in revising your final drafts.

1. Please carefully read and directly answer the question that you are asked to answer. Answer all parts of every question. If you do not understand the question, please talk to me about it before class, during class, or after class. Or if you prefer, make an appointment to discuss the matter in my office. Or e-mail me at **pollard@hawaii.edu**. After you have finished your answer, look at the question again. After you have written a coherent statement, make sure that it answers the question.

2. Write an introductory sentence or paragraph that summarizes the central point you are making in your answer. If this is not the first sentence or the first paragraph, it should be very close to the beginning of your paper.

3. Select examples that support your argument. Avoid vagueness. Since two different people may sometimes interpret the same example in completely different ways, show precisely how your chosen example strengthens the point you are making. In a short paper, one or two well-chosen and well-explained examples can add a lot of power to your writing. Further, if you are developing an interpretation or line of argumentation that I hadn't anticipated, your examples will be helpful to me. Also, if your examples are clear but, perhaps, your point of view is less clearly expressed than it otherwise might be, then it is easier for me to write questions, comments or suggestions for you.

4. Say exactly what you mean. Your reader shouldn't have to "guess" your real meaning.

5. Be as concise as possible. Avoid "overwriting." Ask yourself: "Do I really need that sentence?" "Do I need those words?" Many of you may have noticed that I sometimes suggest a shorter way of expressing some thoughts. Sometimes when I make these kinds of suggestions, I also write: "Same idea/fewer words/more power." And sometimes I will write an "equals" (=) sign followed by one or more words and a question mark. The comment will be **{**bracketed**}** with a word or expression from your essay. This comment means I am unsure of your point. If you decide that my suggested alternative does not express exactly what you mean to say, then my comments are simply encouraging you to improve your own writing.

6. In face-to-face conversational language, our whole body, our facial muscles and our tone of voice "punctuate" and emphasize our spoken words. However, if we write down our spoken language, those written words are sometimes less effective than the same words if spoken aloud. Phrases slowing the reader down as she searches for your main point are words and phrases that do not belong in your writing. For example, in face-to-face conversation, we commonly use throw-away words like "actually" and "basically" for emphasis and transitions. In writing, try to find more precise transitional words and phrases.

7. Social science, as we are learning, is social! We often depend on the work of other people. But avoid plagiarism! Plagiarism is a form of dishonesty that fails to acknowledge how we have used the writing of other people. So, use quotation marks whenever you are reproducing someone else's words in your paper. Give page references or URL's when you are quoting someone's words or summarizing ideas s/he has expressed in books, articles or Internet essays.

8. Using extensive quotations should be the exception. Learn to summarize. Quote sparingly for added effect. And it demonstrates your understanding of what you have read.

9. Becoming "your own best critic" should be your goal. Ask yourself the questions that I ask when I comment on your paper. Acquire the skill of making better criticisms of your own writing than the criticisms made by other people.

10. Make sure subjects and verbs in your sentences "agree" with one another: that is, a singular subject takes a singular verb; a plural subject gets a plural verb. Also, pronouns refer back to the closest noun that agrees with them. Although this rule is violated in spoken language, clear writing requires accurate pronoun-noun "agreement."

11. Ask yourself if your verbs would be more effective in the "active" voice. Usually, the "active" voice is more "lively" than the "passive" voice.

12. Turn long adjectival clauses into independent clauses or separate sentences.

13. Very long introductory adverbial phrases and clauses make it hard to tell what the main idea is. Consider three alternatives: a) Shorten these phrases or clauses; b) place them after the main clause; or c) turn them into separate sentences.

14. Continual suggestions (from me) on the need for more precise word usage probably indicate that you will benefit from using a better dictionary--one with several meanings for each word.

15. Careful use of transitional adverbs or adverbial phrases will enhance the coherence of your paper, that is, the way in which one part flows into another.

16. In proofreading your final drafts, please use the "spellcheck" software on your computer. Or use the "eyeball method." Large numbers of spelling errors distract from your main point. Also, some spelling errors change your meaning.

17. Show the "final" version of your paper to a friend who has not seen an earlier draft. Ask your friend to summarize your main point in one or two sentences. If your friend has difficulty giving you a clear summary, then you probably need to spend some more time revising the paper.

18. Never give up! Just keep telling yourself that, no matter how frustrating the writing sometimes gets, you will absolutely refuse to give up. And get whatever help you need. Why? Sometimes the difference between a mediocre paper and a superb piece of writing is the result of revising your draft one or two more times.

PLEASE NOTE: In place of extensive "corrections," I may simply refer to the numbered paragraphs above when I comment on your papers. In that case, please first refer back to this handout. Then if you still have difficulty understanding how the designated numbered paragraph refers to your writing, then please bring the paper to me and we'll discuss it further.

Political Science 310 Reserved Readings:
Sinclair Library Reserve Reading Room.

For your interest and information, I have requested that several excellent books be made available on reserve for you on the first floor of Sinclair Library. I urge you to take a serious look at them early in this course. Previous students have found them useful. If you forget the exact title or call number, just ask for the list of books on reserve for Political Science 310. (NOTE: These books are or will be on reserve throughout the semester; in the list below, the "location" of each book refers to its regular place in the UH Library System.)

I. Primary sources

Fritz Jules Roethlisberger and William J. Dickson (with Harold A Wright). M*anagement and the Worker: An Account of a Research Program Conducted by the Western Electric Company, Hawthorne Works, Chicago.* Cambridge, Massachusetts: Harvard University Press.
CALL #: T58.R62

Fritz Jules Roethlisberger. Management and Morale. Cambridge, Massachusetts: Harvard University Press, 1941.
CALL #: HF5549.R6

Harvard University, Graduate School of Business Administration, Division of Research. *Training for Human Relations: An Interim Report of A Program for Advanced Training and Research in Human Relations, 1951-1954.* (Boston, 1954).
CALL#: BF636.H326

William John Dickson and Fritz Jules Roethlisberger. *Counseling in an Organization: A Sequel to the Hawthorne Researches.* Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1966.
CALL #: HF5549.D49

Fritz Jules Roethlisberger. *Man-in-Organization; Essays of F. J. Roethlisberger*. Cambridge: Belknap Press of Harvard University Press, 1968.
CALL #: HD31.R62

Fritz Jules Roethlisberger. *The Elusive Phenomena: An Autobiographical Account of My Work in the Field of Organizational Behavior at the Harvard Business School.* Edited by George F. F. Lombard. Boston: Division of Research, Graduate School of Business Administration, Harvard University/ Cambridge, Massachusetts: distributed by Harvard University Press, 1977.
CALL #: HD58.7.R64 1977
Reserve loan period: Library use only (2 hours)

II. Critical reviews of Richard Gillespie's *Manufacturing Knowledge*

A Reserve Reading Room folder will contain book reviews published in the following sixteen journals and periodicals: Business History Review * Choice * The Historian * Reviews in American History * Science * The Journal of Economic History, Sociology * Labor History * Isis * The Historical Journal * British Journal of Industrial Relations * American Historical Review, Journal of American History * Library Journal * The American Journal of Sociology * Technology and Culture
Reserve loan period: Library use only (2 hours)
You will also receive a set of these reviews.

III. Recommended and Supplementary Readings

Henry Ramsey Fowler and Jane E. Aaron, *The Little, Brown Handbook*, 5th edition (New York, NY: Harper Collins, 1992).
COMMENT: Well organized with numerous illustrative examples.
LOCATION: Hamilton (2nd floor)
CALL #: **PE1112 .F64 1992**
Reserve loan period: Library use only (2 hours)

Jacques Barzun and Henry F. Graff, *The Modern Researcher*, 5th edition (Fort Worth: Harcourt Brace Jovanovich College Publishers, 1992).
COMMENT: See Chapters 9 ("Organizing: Paragraph, Chapter, and Part), 10 ("Plain Words: The War on Jargon and Clichés"), 5 ("Verification") and 12 ("The Arts of Quoting and Translating");
LOCATION: Hamilton Library (2nd floor)
CALL #: **D13.B334 1992b**
Reserve loan period: 2 nights

Wayne C. Booth, Gregory G. Colomb and Joseph M. Williams, *The Craft of Research* (Chicago and London: The University of Chicago Press, 1995).
COMMENT: See "Quick Tips" following Chapters 2, 3, 6, 8, 9, 10, 11, 12, 13, 14 & 15.
LOCATION: Hamilton Library (2nd floor)
Call #: **Q180.55 M4B66 1995**
Reserve restrictions: 2 nights

Howard Saul Becker (with Pamela Richards), *Writing for Social Scientists: How to Start and Finish Your Thesis, Book, or Article* (Chicago and London: The University of Chicago Press, 1986).
COMMENT: Read Becker's chapter on "Rewriting" and any other chapters that meet your needs.
LOCATIONS: Hamilton Library (2nd floor)
& Public Health Library
CALL #: **H91.B4 1986/**
Reserve loan period: 2 nights

Stephen Van Evera, *Guide to Methods for Students of Political Science* (Cornell University Press, 1997).
COMMENT: See "Appendix: How to Write a Paper," pages 124-128; also, Chapters 1 & 2
LOCATION: Hamilton Library (2nd Floor)
CALL #: JA71.V3 1997
Reserve loan period: 2 hours

Jarol B. Manheim and Richard C. Rich (with Donna L. Bahry and Philip A. Schrodt), *Empirical Political Analysis: Research Methods in Political Science*, 4th ed. White Plains: Longman Publishers, 1995).
CALL#" JA86.M35 1995
Reserve loan period: 1 night

IV. Other Useful Books in Hamilton Library Reference.

Albert Sydney Hornby, *Oxford Advanced Learner's Dictionary of Current English*, editor, Jonathan Crowther, 5th edition (Oxford: Oxford University Press, 1995)
COMMENT: Gives multiple meanings for most words--essential for developing proficiency in written & spoken English.
CALL #: **PE1625 .H67 1995**

Henry Ramsey Fowler and Jane E. Aaron, *The Little, Brown Handbook,* 5th edition (New York, NY: Harper Collins, 1992).
COMMENT: Well organized with numerous illustrative examples.
CIS-WRITING AIDS/GRAMMAR
CALL #: **PE1112.F64 1992**

Val Dumond, *The Elements of Nonsexist Usage: A Guide to Inclusive Spoken and Written English,* 1st edition (New York: Prentice Hall Press, 1990)
LOCATION: Hamilton Reference
CALL #: **PE1460 .D78 1990**

V. Recommended websites

http://www2.hawaii.edu/~pollard/#search
Try links in the "Search engines" section of Pollard's website.

http://www.iias.leidenuniv.nl/iiasn9/internet/cyber.html
Vincent Kelly Pollard, "Entering Cyberspace: Joining the Electronic Seminar," *International International Institute of Asian Studies Newsletter,* no. 9 (Summer 1996), pages 40-41.

Your name: _____ **Comments on your writing assignment**

Thank you for your paper! Please first read my comments on this form. Then read what I have written on the attached paper that you wrote--or rewrote. Revising and revisioning your paper requires **more** than making corrections noted on your first draft.

Your topic and your focus:

_____

_____

Written presentation style. Aside from specific guidance for this assignment, you were asked to review my "Comments & Suggestions on Writing Your Papers & Exams." This two-page handout provides advice that students in previous courses have found helpful.

Please pay attention to the circled items in the boxes below. And read the related marginal and interlinear comments on your attached paper. These will remind you of the need to edit your paper more carefully:

This paper needs a **title--or a better title**. A title should reminds you & your reader of your point of view.	Give **credit** for printed, electronic & human (interview) sources that were helpful in writing your paper -- **avoid plagiarism**.	For **more precise word usage**, consult a good dictionary.	Subject-verb "**agreement**" requires a singular subject with a singular verb & a plural subject with a plural verb.
State **what your paper will accomplish** -- in the 1st paragraph.	(Author's last name + date published + colon + page number) are included in **parenthetical in-text references**.	**Rework** unconvincing links between paragraphs and/or between major sections of paper.	**Maintaining "agreement"** between a pronoun & its antecedent noun avoids confusion
Review the assigned question & answer it directly. Are you using concepts discussed in class & in readings?	**If you don't know the author's personal name,** is she a "corporate author"? "Staff" of a newspaper? Anonymous?	Conjunctions, transitional adverbs & adverbial phrases enhance **coherence**.	Verb tenses matter: Past tense, present perfect tense and past perfect tense are each for a different purpose.
Develop & **elaborate** your claims -- passionately asserting them shows your sincerity but is insufficient. Some things are not obvious. **Why should anyone believe you?** Select examples that support your claims.	**Mention "Facts of publication"** for print, audiovisual, electronic & oral sources cited in your **reference list.** Place an author-alphabetized reference list **at the end of your paper.**."	Be direct and **to the point**. Strive for **conciseness**: Eliminate extraneous words, phrases & clauses. **Shorten** long introductory phrases & clauses if they obscure your main point.	Verbs in the "active" voice are usually **more effective** than those in the "passive" voice. Divide very long paragraphs **into shorter ones**.
Quote or summarize appropriate **sources** as assigned to strengthen your claims & assertions. **Summarizing in your own words** is better than long quotations & shows that you understand what you have read.	A "persuasive" or "advocacy" paper quotes or fairly summarizes authorities with whom you differ over facts & prescriptions **before criticizing them.** The paper rambles, losing focus.	**So what?** Use the concluding paragraph **to summarize** what your paper has achieved.	Eliminate **spelling errors**. They distract from your main message. Avoid using **misleading punctuation**, but don't skip essential punctuation.
		Other:	

If this is a rewrite, you were expected to *re-vision* your paper. Please also note any comments circled below:

Didn't attach my earlier comments	*Didn't attach peer comments*	*Didn't address my earlier comments*
Didn't address peer comments	*Rethink & refine content*	*Merely copied corrections from commentary*

If this paper is not a rewrite and if you choose to revise and resubmit your paper, you must also attach three things to your revised draft: **1)** this cover sheet, **2)** any peer-edited comments and **3)** your earlier draft. If you need to discuss the comments circled above, please contact me in person, by voice mail or on the Internet. If you revise your paper, there is no guarantee that your grade will be raised; however, it will not be lowered.

Useful translations: The most important of Pollard's marginal & interlinear symbols:

___ *or* √ *or* **!** = "important point"	~~~~~ = "questionable point"	¶ = "start new paragraph here"	**?** = "What's the point?"

Due date for optional rewrites. This assignment is worth [ ] of your final course grade. If your paper was not turned in late and if you wish to make the effort to revise and improve your paper, you may resubmit it no later than one week from the day when you received your first paper back. Your deadline: _____ 2002.

Achieving course competencies: Students who continuously work to improve their written communication skills will better cope with challenges from the political world in which we live.

Political Science 310 (1) *Research Design* Final, written version

COMMENTS BY _____ ON PAPER BY _____

One or two students may write the research design. **To get started, please succinctly state the general topic or issue; and specify the researchable question you wish to investigate**. The final draft of your written research design will elaborate your earlier individual or group oral presentation.[10] Focus on the following issues and questions:

Introductory material. The cover page will include the following information: 1) title or theme of your research design; 2) for group projects, a certification that "Although we divided the work up among ourselves, each of us has read and commented on all parts of this paper, including reading the final draft"; 3) for individual projects, a statement that "Aside taking advantage of suggestions received from classmates and my instructor, this paper is my work alone; 4) for group projects, a list of your names--beginning with the contact person; and 5) in the case of group projects, signatures of each student to the right of her/his name.[11]

A. What exactly is the purpose of the research project you are designing? What difference would it make if this study is not done? If you are trying to isolate a cause-and-effect sequence, what is your study variable? If you were to request funding for your project, why should a private foundation or government agency pay for the research you are proposing?

B. From your literature review, select at least one or two approaches, perspectives or types of explanations of your study variable that strike you or your group as particularly helpful--or unhelpful. Or if a published explanation remains underdeveloped, please explain what you see as promising and where (or how) it needs further development. How sure are you (and what makes you sure) that your questions haven't been asked and answered? Or if they have been asked and answered, why aren't you satisfied with the way the questions were asked or answered? Do you notice any trend or pattern in the literature, for example, dominant interpretations or identifiable pro's and con's? How do you characterize these trends?

C. What information helps to answer your research questions? And what kind(s) of information will be most useful in answering the researchable questions you have set out to explore? Will it be sufficient to reanalyze existing data? What are the biggest information gathering problems likely to be? How might these problems be overcome? With qualitative case studies? Questionnaires or surveys of specific populations? Open-ended interviews with experts? Provide sample illustrations, perhaps in appendix. Since information "doesn't speak for itself," why should the reader be persuaded by your interpretation?

D. What has been the most challenging aspect of this project overall? What has been its most satisfying dimension?

E. What will be the best way to publicize your research? Who--or what kinds of people and organizations--will most likely emerge as advocates for the changes implied by your project?

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[10] Evaluation of the written presentation accounts for 80 of the 100 points allocated to the research design.

[11] Except for indented quotations of three or more lines, footnotes and appendices, please doublespace your paper throughout. Leave a one-inch margin, and use a readable 12-point font. Staple the paper in the upper lefthand corner. No binders or covers, please.

Reference list. This alphabetically lists printed, electronic and human sources cited in your paper.

Appendices. One appendix will list indexes and search engines consulted. If you wish, additional appendices might elaborate subordinate points[12] that otherwise would slow the flow of your argument.

Written presentation style. The final draft should reflect a good command of language, avoiding errors of usage, grammar, spelling and punctuation. You will also benefit from reviewing my "Comments & Suggestions on Writing Your Papers & Exams." For that, refer to your Political Science 310 course syllabus.

With an eye to improving your final draft, please consider the items in the boxes below. Ask yourself if any of these concerns apply to your paper:

State **what your paper will accomplish** -- in the 1st paragraph. **Might have answered the assigned issues** more directly. Might have used concepts discussed in class & in readings. Develop & **elaborate** your claims -- passionately asserting them is insufficient.	Give **credit** for printed, electronic & human (interview) sources that were helpful in writing your answers -- **avoid plagiarism**. (Author's last name + date published + colon + page number) are included in **parenthetical in-text references**. **If you don't know the author's name,** is she a "corporate author"? "Staff" of a newspaper? Anonymous?	For **more precise word usage**, consult a good dictionary. **Rework** unconvincing links between paragraphs or major sections of your answer(s). Conjunctions, transitional adverbs & adverbial phrases enhance **coherence**.	Subject-verb "**agreement**" requires a singular subject with a singular verb & a plural subject with a plural verb. **Maintaining "agreement"** between a pronoun & its antecedent noun avoids confusion
Why should anyone believe you? Select examples that support your claims. Quote or summarize appropriate **sources** as assigned to strengthen your claims & assertions.	**"Facts of publication"** for print, audiovisual, electronic & oral sources cited are included in the **reference list.** Place the author-alphabetized reference list **at the end of your paper**.	Be direct and **to the point**. Strive for **conciseness**: Eliminate extraneous words, phrases & clauses. **Shorten** long introductory phrases & clauses if they obscure your main point.	Divide very long paragraphs **into shorter ones** Verbs in the "active" voice are usually **more effective** than those in the "passive" voice.
Summarizing in your own words is better than long quotations & shows that you understand what you have read.	A persuasive answer quotes or fairly summarizes authorities challenging your facts & prescriptions **before answering their objections.** The paper rambles, losing focus.	**So what?** Use the concluding paragraph **to summarize** what your answer has achieved.	Eliminate **spelling errors**. They distract from your main message. Avoid using **misleading punctuation**, but don't skip essential punctuation.

For a more elaborate version of the grid above, see also my "Writing and Analysis Editing Grid" on the Web at <http://www.teachingforsuccess.com/Issue2/Nov_02Pollardi.html>.

Overall length. There is no quota. The number of pages is left up to your good sense and discretion. The quality of your presentation, description and analysis is what counts!

Deadline. Final drafts are due no later than the end of the period when the final exam is scheduled.

[12] Respond selectively to comments from your instructor and your classmates. Since your instructor has copies of your worksheets and of our e-mail communications, you may explain in a footnote or an appendix why you considered specific advice and then chose not to follow it. If a suggestion may have stimulated you to think of yet a better way to refine your research design, you might footnote that realization, as well. By the same token, if members of a group project have different interpretations of data or analysis, you should also summarize the contrasting interpretations. That will make for better research and a more interesting paper.

Late papers automatically lose 20 points per day.

Record keeping. If you want a copy of your paper returned, you or your partner must submit two (2) copies. One will be returned to the Political Science 310 tray in SSB 640.