

LOUISIANA STATE UNIVERSITY

AND AGRICULTURAL AND MECHANICAL COLLEGE

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“Critical Analysis of IS Research”
Prof. R. Hirschheim
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Course Objectives

The purpose of this course is to improve participant skills in the art of theory building, research design, communicating research, and evaluating research. Each course participant will critically analyze one or two articles in his/her chosen research area, and present these analyses in class where they will lead class discussion.

Course Organization

Each time that we meet, we will try to follow the agenda detailed below. Each meeting will also have associated with it, several readings which you should try to complete by the meeting date.

Course Schedule

| <i>Class Date</i> | <i>Subject</i> | <i>Class Leader</i> |
|-------------------|--|----------------------------|
| Week 1 | Critical Paper Reviewing - Part 1 | RH |
| Week 2 | Critical Paper Reviewing - Part II and relevant web resources | RH |
| Week 3 | The Publication Process - samples of the process | RH |
| Week 4 | IS Article Review | Course participants |
| Week 5 | IS Article Review (continued) | Course participants |

Week 1 – Critical Paper Reviewing

Agenda

- ◆ What to look for in critically reviewing a paper.
- ◆ Types of papers: empirical – quantitative, qualitative, mixed; conceptual/framework; theoretical; design science; opinion/essay; survey; tutorial, history; scientometrics; critical

Readings:

Articles on Reviewing:

- ◆ Hirschheim, Rudy, "Some Guidelines for the Critical Reviewing of Conceptual Papers", *Journal of the Association for Information Systems*, Vol.9, Issue 8, August 2008, pp. 432-441.
- ◆ Hyman, Ray (1995). "How to Critique a Published Article." *Psychological Bulletin*, 118 (2), pp. 178-182.
- ◆ Ives, Blake (1992). "Total Quality Management of Journal Reviews." *MIS Quarterly*, 16(2).
- ◆ Lee, Allen (2000). "A Senior Editor's Expectations and Procedures in the Review of a Manuscript: What an Associate Editor Should Know." *MIS Quarterly*.
- ◆ Lee, Allen (1995). "Reviewing a Manuscript for Publication." *Journal of Operations Management*, 13(1), pp. 87-92 - <http://www.people.vcu.edu/~aslee/referee.htm>
- ◆ Lee, Allen (2000). "Submitting a Manuscript for Publication: Some Advice and an Insider's View." *MIS Quarterly*, 24(2).
- ◆ Maxwell, Scott and Cole, David (1995). "Tips for Writing (and Reading) Methodological Articles." *Psychological Bulletin*, 118 (2), pp. 193-198.
- ◆ Zmud, Bob (1998). "A Personal Perspective on the State of Journal Refereeing." *MIS Quarterly*, 22(3).

Week 2 – Web Resources

Agenda

- ◆ Web resources on 'reviewing' - A set of URLs which would help prospective reviewers on how to review a paper. We will explore available Web resources that can help individuals to understand the reviewing, publication and research process. This could be subsumed under the notion: "how to write an academic article".

Week 3 – The Publication Process – Samples of the process

Agenda

- ◆ Discuss examples of good versus bad reviews
- ◆ We will go over some examples of paper submissions, reviews, responses to the reviews and AE/SE, paper revisions, resubmissions, through to publication

Reading (might want to purchase – excellent book)

Publishing in the Organizational Sciences, 2nd Edition, L. Cummings and P. Frost (eds.), Sage Publications, Thousand Oaks, CA, 1995.

- a. "Why I recommended that your manuscript be rejected and what you can do about it" by R. Daft pp. 164-182.
- b. "The Reviewer as Defense Attorney" by L. Pondy, 183-194.

Weeks 4 and 5 – IS Article Review

Agenda

- Select an article that you would like to review and distribute copies to the course participants and me. You will critically analyze your chosen article and then lead the discussion on the review of this paper.
- Discuss the strengths and weaknesses of the article you have chosen to review. Was the article well motivated, did it explain what it was going to do, was the subject interesting, was the structure understandable, what methodology was used, was it appropriate, were the results reasonable, what was learned from the research, what were the implications for practice, what were the implications for future research, did it satisfactorily address the 'so what' question, etc.

Week 6 (if there is time)

Agenda

- ◆ The politics of grants and grant writing
- ◆ Issues in Publishing Research
 - IRB
 - Ethics/Code of Conduct (publishing similar papers in different outlets)
 - Publishing options: journals, conferences, book chapters, books, etc.
 - Journal rankings
 - Plagiarism
 - Co-authorship vs. sole authorship
 - Citation analysis
- ◆ Academic vs. Practitioner research and publication
- ◆ Teaching/Teaching resources
- ◆ Service - Dept, College, University, Profession, Community, etc.
- ◆ Balance between teaching/research/service
- ◆ Tenurethe scourge of the North American academic
- ◆ Collegiality
- ◆ Alternative PhD program models
 - North American Business School
 - Computer Science / Technical PhD (design science)
 - German PhD model
 - DBA (Executive program)

Some Good Readings:

1.) Some Review/ Conceptual Papers

Alavi, M. and Leidner, D. "Review: Knowledge Management and Knowledge Management Systems: Conceptual Foundations and Research Issues", *MIS Quarterly*, 25(1), 2001, pp.107-136

Dickson, G.W., Senn, J. and Chervany, N., "Research in management information systems: The Minnesota experiments", *Management Science*, 23(9) 1977, pp.913-923.

R. Hirschheim, "The Effect of *A Priori* Views of the Social Implications of Computing: The Case of Office Automation", *ACM Computing Surveys*, Vol.18, No.2, June 1986, pp.165-195.

K. Lyytinen and R. Hirschheim, "Information Systems Failures: A Survey and Classification of the Empirical Literature", *Oxford Surveys in Information Technology*, Vol.4, 1987, pp.257-309.

G. Zinkhan and R. Hirschheim, "Truth in Marketing Theory and Research: An Alternative Perspective", *Journal of Marketing*, Vol.56, No.2, April 1992, pp.80-88.

R. Hirschheim and H. Klein, "Realizing Emancipatory Principles in Information Systems Development: The Case for ETHICS", *MIS Quarterly*, Vol.18, No.1, March 1994, pp.83-109.

R. Hirschheim, H. Klein, and K. Lyytinen, "Exploring the Intellectual Structures of Information Systems Development: A Social Action Theoretic Analysis", *Accounting, Management and Information Technologies*, Vol.6, No.1/2, 1996, pp.1-64.

Hirschheim, R. and Klein, H., "Crisis in the IS Field? A Critical Reflection on the State of the Discipline", *Journal of the Association for Information Systems*, 4(5) October 2003, pp. 237-293

S. Smithson and R. Hirschheim, "Analyzing Information Systems Evaluation: Another Look at an Old Problem", *European Journal of Information Systems*, Vol. 7, No. 3, Sept. 1998, pp.158-174.

J. Iivari, R. Hirschheim and H. Klein, "A Paradigmatic Analysis Contrasting Information Systems Development Approaches and Methodologies", *Information Systems Research*, Vol.9, No.2, June 1998, pp.164-193.

Ives, B. and M. Olson, "User Involvement and MIS Success: A Review of Research", *Management Science*, Volume 30, Number 5, May 1984, pp.586-603.

Kling, R. Social Analyses of Computing: Theoretical Perspectives in Recent Empirical Research. *ACM Computing Surveys*. 12(1), 1980, pp.61-110.

Lee, A. "The MIS Field, the Publication Process, and the Future Course of MIS Quarterly," *MIS Quarterly*, 23(1), 1999, pp. v-xi.

Markus, M.L. and Robey, D., "Information technology and organizational change: causal structure in theory and research," *Management Science*. 34(5) May 1988, pp.583-598.

Mason, R. and Mitroff, I., "A Program for Research on Management Information Systems," *Management Science*, 19(5), 1973, pp.475-487.

Rao, V. S. and Jarvenpaa, S., "Computer Support of Groups: Theory-Based Models for GDSS Research.", *Management Science*, Volume 37, Number 10, October 1991, pp.1347-1362.

Ramanujan, S. and Cooper R.B. "A Human Information Processing Perspective on Software Maintenance", *OMEGA*, Vol. 22 No. 2 (1994).

Zmud, R., "Individual Differences and MIS Success: A Review of the Empirical Literature", *Management Science*, Volume 25, Number 10, October 1979, pp.966-979.

2.) Reference Readings

1. Writing Guides:

- a. *Writing for Scholarly Publication*, 1999, by A. S. Huff, Sage Publications, Thousand Oaks, CA
 - b. *A Guide to Academic Writing*, 1993, by J. A. Cantor, Greenwood Press, Westport, CT.
 - c. *Successful Publishing in Scholarly Journals*, 1994, by B. A. Thyer, Sage Press, Thousand Oaks, CA.
 - d. *Writing for Academic Publication*, 1995, by F. Parker and K. Riley, Parlay Press, Superior, WI
 - e. *Publish, Don't Perish*, 1992, by J. M. Moxley, Praeger Press, Westport, CT.
 - f. *Persist and Publish*, 1991, by R. E. Matkin and T. F. Riggan, University Press of Colorado, Boulder, CO
 - g. *Tricks of the Trade*, 1998, by H. S. Becker, The University of Chicago Press, Chicago, IL.
 - h. *Writing for Professional Publication*, 199, by K. T. Henson, Allyn and Bacon, Needham Heights, MA.
 - i. *The Work of Writing*, 2001, by E. Rankin, Jossey Bass, San Francisco, CA
 - j. *Academic Writing*, 1995, by J. Giltrow, Broadview Press, Ontario, Canada
2. Reference Type Books available:
- a. *The Chicago Manual of Style*, 1993, 14th Edition, The University of Chicago Press, Chicago, IL.
 - b. *Publication Manual of the American Psychological Association*, 2001, 5th Edition, American Psychological Association, Washington, DC
 - c. *ProCite User's Guide for Windows and Macintosh*, 2000 ISI ResearchSoft, Berkeley, CA.
 - d. *The Elements of Style* (by Strunk, W. and White, E.B.) 4th Edition, 2000
3. Career and Thesis Writing Guide type books:
- a. *Guide to the Successful Thesis and Dissertation*, 1998, by J. E. Mauch and J. W. Birch, Marcel Dekker, Inc. NY.
 - b. *Guide to Writing Empirical Papers, Theses and Dissertations*, 2002, by G. David Garson, Marcel Dekker, Inc. NY.
 - c. *Writing the Winning Dissertation*, 1998, by A.A. Glatthorn, Corwin Press, Inc. Thousand Oaks, CA.
 - d. **Writing the Doctoral Dissertation*, 1997, 2nd Edition, by Gordon B. Davis and Clyde A. Parker, Barron's Educational Series, New York.
 - e. *The Chicago Guide to Your Academic Career*, 2001, J. A. Godlsmith, J. Komlos, and P.S. Gold, The University of Chicago Press, Chicago, IL.

Bibliography (recommended readings from several sources):

2. Cummings, L. and Frost, P. (eds) (1995) *Publishing in the Organizational Sciences*, 2nd Edition, Sage Publishing
3. Lee, Allen, (1995), "Reviewing a Manuscript for Publication", *Journal of Operations Management*, 13(1) 87-92. (Available at <http://www.people.vcu.edu/~alee/referee.htm>)
4. Straub, D., Ang, S. and Evaristo, R. (1994), "Normative Stands for IS Research", *DATABASE*, 25(1), 21-34.
5. Benos, D.J., Kirk, K.L., and Hall, J.E. "How to Review a Paper" Available at: <http://advan.physiology.org/cgi/content/full/27/2/47>
6. Avital, M. Boland, R. J. Singh, J. et. al. "12 Points to Consider in Responding to Thesis Advisers' and Reviewers' Comments" available at: <http://avital.case.edu/edocs/response.html>
7. Van Maanen, J. (1991) "Some notes on the importance of writing in organizational studies", in J. Cash and P. Lawrence (eds), *Information Systems Research Challenge: Qualitative Research Methods*, Harvard Business School, Boston, MA, pp. 27-34.
8. Webster, J. and Watson, R.T (2002) "Analyzing the Past to Prepare for the Future: Writing a Literature Review", *MIS Quarterly*, 26(2), xiii-xxiii.

9. Schminke, M (2004). From the Editor: Raising the Bamboo Curtain. *Academy of Management Journal*, 47(3), 310-314.
10. Weick, K. E. (1989) "Theory Construction as Disciplined Imagination", *Academy of Management Review*, 14(4), October, pp. 516-531.
11. Ives, B. (1992), Editors' Comments: Bridging Research and Practice," *MIS Quarterly*, March, pp. iii-vi.
12. Lee, A. (1999), "The MIS Field, the Publication Process, and the Future Course of MIS Quarterly", *MIS Quarterly*, 23(1), pp. v-xi.
13. Berthon, P., Litt, L. Ewing, M. and Carr, C.L. (2002) "Potential Research Space in MIS: A Framework for Envisioning and Evaluating Research Replication, Extension and Generation", *Information Systems Research*, 13(4), 2002, pp. 416-427.
14. Instructions for Authors and instructions for Reviewers (read both) for our A+ journals (you should always read this for any publication you submit):
 - a. MISQ - <http://www.misq.org>
 - b. ISR - <http://isr.katz.pitt.edu>
 - c. JAIS - <http://jais.isworld.org>
 - d. AMR - <http://www.aom.pace.edu/amr>
 - e. JMIS - <http://jmis.bentley.edu/>
15. Calfee, R. C. and Valencia, R.R. *APA Guide to Preparing Manuscripts for Journal Publication*, available at: <http://www.apa.org/journals/guide.html>
16. *Publication Manual of the American Psychological Association*, (2001), American Psychological Association (APA), 5th edition.
17. Koch, N. and Davison, R. (2003), "Dealing with Plagiarism in the IS Research Community: A Look at Factors that Drive Plagiarism and Ways to Address Them", *MIS Quarterly*, 27(4), pp. 511-532.
18. Davison, R.M. Muro, M. and Straub, D. (2004). "Introduction to the AIS Code of Research Conduct", *Communications of the Association for Information Systems*, 13(1), pp. 1-8.
19. AIS Research Conduct Committee. (2004). "AIS Code of Research Conduct", *Communications of the Association for Information Systems*, 13(1), pp. 9-16.
20. IRB (Institutional Review Board) Guidebook available at: http://biotech.law.lsu.edu/research/fed/OHRP/gb/irb_preface.htm - tells how to deal with human subjects regulations. LSU's version is available through: [http://appl022.lsu.edu/osp/osp.nsf/\\$Content/LSU%20IRB%20Documents](http://appl022.lsu.edu/osp/osp.nsf/$Content/LSU%20IRB%20Documents)
21. Other websites with advice:
 - a. <http://www-2.cs.cmu.edu/afs/cs.cmu.edu/user/mleone/web/how-to.html>
 - b. <http://www.misq.org/archivist/vol/no22/issue2/edstat.html> - Bob Zmud's comments on writing a "pure theory" manuscript.
 - c. <http://www.isworld.org/phd/phd.htm> - the PhD Reference page on IS World
 - d. <http://www.isworld.org/#research> - the research section on IS World.