

Sociology 511
Formal Models of Cultural Analysis

Class meetings: Tuesdays and Thursdays, 2:00–3:15, in Social Sciences Rm. 415

I see cultural sociology not as a subfield concerned with a particular institutional sphere (such as the arts or popular culture), but rather as a general approach to sociological work that highlights the constructed nature of social order and the active agency of human beings who, as Geertz asserts, are suspended in webs of meaning that they themselves have spun.¹ Therefore, in my view the kinds of formal methods that are most appropriate for cultural analysis, and the models and methods I will emphasize in this course, are relational, and they are focused on a particular approach to the study of meaning, which views meaning as an interweaving of practices and significations.

Courses on formal methods for cultural analysis could, in principle, take many diverse forms. In order for you to understand the limits of this course, as well as the contributions to teaching serviceable procedures for cultural analysis that I hope to make, I encourage you to look over the specific topics covered in the readings listed below. Four interrelated topics are covered in this seminar, with the reading list organized accordingly:

- A. DUALITY AND LATTICES
- B. FIELDS AND CORRESPONDENCE ANALYSIS
- C. TEXT ANALYTICS AND BIG DATA
- D. NETWORKS AND CULTURE

I hope to provide you, by the end of the course, with solid experience in running computer programs that can assist you in performing the kinds of cultural analyses that are featured on the reading list. This is very much a “hands-on” course, in that I will focus on “how to do” the analyses, and ask you to be interested in learning how to do the analyses for yourself. I will introduce a simple, super-easy to use, but fairly powerful Galois lattice program. I will provide hands-on experience with packages that do correspondence analysis, text analytics, topic modeling, and natural language processing. I will even have a few things to say about social network analysis. Quite a few of these techniques are best carried out in the R computing environment, which I will introduce, along with a super user-friendly suite of programs (ConText) by Jana Diesner, for many aspects of text analytics and the construction of networks from natural language texts. All the programs are available to you free of charge, and all run on Macs as well as PCs (though a little coaxing will be required to run the lattice program on a Mac). I do not assume any specific knowledge of computer programming, nor do I assume technical / mathematical knowledge beyond a good undergraduate “stats” course. Please note that the TA in this course is me. *Please* let me know when you can’t get a program to run, have trouble installing it, etc., all these issues are normal, and almost all can be fixed—the sooner the

¹ Clifford Geertz, *The Interpretation of Cultures: Selected Essays* (1973), p. 5. My formulation here owes much to John Mohr’s “The Cultural Turn in American Sociology—A Report from the Field.” *Culture* 17 (2-3), Spring 2003; newsletter of the ASA Section on the Sociology of Culture.

better.

Course web page: I will make extensive use of a course web site, D2L. **You will find it helpful to “click” often on this site, usually at least once before each class meeting!** Almost all the readings (except for those in the “little green books” by Clausen and by Le Roux & Rouanet) will appear on the web page. The web address (url) is: <http://d2l.arizona.edu/>

Course Requirements

Rationale: I want to use the requirements to encourage reading, thinking, grappling and playing with the data, models, and formal techniques, for looking for connections across different theoretical orientations and methods, and for stimulating the kind of discussion that seminar participants will look forward to engaging in.

1. Full participation in a seminar of this type is essential, and needs to be based on thorough preparation for each class. Participation will include

(a) in-class discussion, and

(b) I will ask participants to contribute to the Discussion page of our D2L course website on a regular basis (about once a week, at your discretion). You may pose general comments and / or questions about the readings for the next class, or comments about how different topics might fit together, or how your own research informs your thinking about these topics, and more.

Grades for participation: **A** = participation that crystallizes issues, recognizes patterns, engages in data analyses (in however an exploratory fashion), provokes discussion (in class and by contributing to the “Discussion” section of the course web page), is supportive and respectful of other participants, and reflects consistently thoughtful reading and preparation. **B** = participation that demonstrates consistently thoughtful reading and preparation. **C** or below = occasional demonstration of thoughtful reading and preparation. 20% of final grade.

2. I will often assign homework, and occasionally (with advance notice) collect it. All homework is **ungraded**. These assignments will usually involve repeating some analysis that the readings or my in-class handouts describe. The aim is to empower you as a researcher who can conduct analyses and understand what you’re doing. Simply completing the homework in a responsible manner will count in determining your final grade (20%).

3. There will be a midterm exercise. I might for example give you a published article and the data on which it is based, and ask you to discuss/criticize/extend the author’s analysis by means of playing around with the same data, by using the programs we will have discussed in class. This is an *exercise*, not a magnum opus. I’ll give you a week or so to do it. (20% of final grade.)

4. A term paper, which will take one of four forms according to your interest: a data analysis paper / exercise (“A Reanalysis of Smith’s Study of X” or “A New Analysis of My Own Data on Y”); a research proposal making use of concepts we have covered; a conventional library-research term paper (e.g., “Approaches to the Study of the Culture of Science”); or a critical essay (e.g., “What’s Wrong with Existing Methods for Studying Art Worlds”). The paper will be due on the regularly scheduled day of finals, though I will be asking for discussion with me, a rough outline, and progress report earlier in the semester. 40% of final course grade.

Office Hours: My office hours will be Thursdays after class, or by appointment. I am always interested in talking with you, so we can always work together to figure out a time to talk. Also, as mentioned previously, the TA in the class is me. Especially because we will be using computer programs that are new to you, many “minor” questions will arise that will get in your way unless they are resolved quickly. See me about these, either in class, during office hours, or (a very good option) via the Discussion page on our course website.

More course rules and policies: These are given on pp. 10-11 below, and are binding – so please read them at the beginning of the course.

Reading List

Note: Before each class I will “clue you in” on which specific readings I intend to emphasize. Some of these topics may spill into more than one class session. We may not get to all the numbered topics. For our first substantive class (on January 20; note that on Monday, Jan. 18 the University observes Martin Luther King’s birthday) please read all the readings shown for “class 1” just below.

A. DUALITY AND LATTICES

1. Practice theory and the logics of culture

Pp. 305-14 in Mohr, John W., and Vincent Duquenne . 1997. "The Duality of Culture and Practice: Poverty Relief in New York City, 1888-1917." *Theory and Society* 26 (2/3):305-356.
<http://dx.doi.org/10.1023/A:1006896022092>

Please read the whole essay, but esp. pp. 242-253 and 260: Friedland, Roger, and Robert P. Alford. 1991. “Bringing Society Back In: Symbols, Practices, and Institutional Contradictions.” Pp. 232-263 in Walter W. Powell and Paul J. DiMaggio (eds.), *The New Institutionalism in Organizational Analysis*. University of Chicago Press. → on course D2L website

Pp. 3-13 and 24-30 [or more] in Geertz, Clifford. 1973. “Thick Description.” Pp. 3-30 in Geertz, *The Interpretation of Cultures : Selected Essays* . New York: Basic Books. → an e-book available via UA Libraries online; also, the book’s full text is available here:
<https://chairflogficphiloscult.files.wordpress.com/2013/02/clifford-geertz-the-interpretation-of-cultures.pdf>

Swidler, Ann . 1996. "Review: Geertz's Ambiguous Legacy." *Contemporary Sociology* 25 (3):299-302.
<http://www.jstor.org/stable/2077435>

2. How to construct and interpret a Galois lattice

Pp. 102-04 in Breiger, R.L. . 2000. "A Tool Kit for Practice Theory." *Poetics* 27 (2-3):91-115.
[http://dx.doi.org/10.1016/S0304-422X\(99\)00026-1](http://dx.doi.org/10.1016/S0304-422X(99)00026-1)

Freeman, Linton C., and Douglas R. White . 1993. "Using Galois Lattices to Represent Network Data." *Sociological Methodology* 23 127-146. <http://www.jstor.org/stable/271008>

Optional: Wille, Rudolf . 1992. "Concept Lattices and Conceptual Knowledge Systems." *Computers & Mathematics with Applications* 23 (6-9):493-515. [http://dx.doi.org/10.1016/0898-1221\(92\)90120-7](http://dx.doi.org/10.1016/0898-1221(92)90120-7)

Optional: Kumar, Ch Aswani, Sergio M. Dias, and Newton J. Vieira. 2015. "Knowledge Reduction in Formal Contexts using Non-Negative Matrix Factorization." *Mathematics and Computers in Simulation* 109: 46-63. <http://dx.doi.org/10.1016/j.matcom.2014.08.004>

3. Lattices and the duality of categories and practices

Pp. 314-56 in Mohr & Duquenne, *op. cit.* [class 1]

[*optional:*] Elzinga, P., J. Poelmans, S. Viaene, G. Dedene and S. Morsing. 2010. "Terrorist Threat Assessment with Formal Concept Analysis." IEEE International Conference on Intelligence and Security Informatics (Vancouver, Canada, May):77-82. <http://dx.doi.org/10.1109/ISI.2010.5484773>

4. What does love mean?

Yeung, King-To . 2005. "What does Love Mean? Exploring Network Culture in Two Network Settings." *Social Forces* 84 (1):391-420. <http://dx.doi.org/10.1353/sof.2005.0132>

5. Where do categories come from?

Pp. 1400-1409 in Goldberg, Amir. 2011. "Mapping Shared Understandings using Relational Class Analysis: The Case of the Cultural Omnivore Reexamined." *American Journal of Sociology* 116 (5):pp. 1397-1436. <http://www.jstor.org.ezproxy2.library.arizona.edu/stable/10.1086/657976>

Esp. chs. 2 and 3 (and, within that, esp. pp. 31-37, 71-79, and 96-99) in Amir Goldberg, *Where Do Social Categories Come From? A Comparative Analysis of Online Interaction and Categorical Emergence in Music and Finance*. Ph.D. dissertation, Princeton University Department of Sociology, 2012. → on D2L

Esp. pp. 353-362 in Boutyline, Andrei. 2017. "'Improving the Measurement of Shared Cultural Schemas with Correlational Class Analysis: Theory and Method." *Sociological Science* 4:353-93. <http://dx.doi.org/10.15195/v4.a15>

B. FIELDS AND CORRESPONDENCE ANALYSIS

6. Correspondence Analysis as ideology and vision

Pp. 91-95 in Breiger, Ronald L. . 2000. "A Tool Kit for Practice Theory." *Poetics* 27 (2-3):91-115. [class 2]

Excerpts from Bourdieu, "The Practice of Reflexive Sociology (The Paris Workshop)," pp. 218-235 in Bourdieu, Pierre, and Loïc J. D. Wacquant. 1992. *An Invitation to Reflexive Sociology* . Chicago: University of Chicago Press. → on D2L course page

Pp. 260-67 and p. 526 in Bourdieu, Pierre. 1984. *Distinction : A Social Critique of the Judgement of Taste* . Cambridge, Mass.: Harvard University Press. → on D2L course page

Rouanet, Henry, Werner Ackermann, and Brigitte Le Roux . 2000. "The Geometric Analysis of Questionnaires: The Lesson of Bourdieu's La Distinction (Corrected Version Sept. 2004)." *Bulletin de Méthodologie Sociologique* (65):5-15. → on D2L course page

Ch. 1 (pp. 1-13) in Le Roux, Brigitte, and Henry Rouanet. 2010. *Multiple Correspondence Analysis*. Thousand Oaks, CA: SAGE.

The French approach to data analysis (rough and no doubt imprecise translation by RB of a few excerpts from Henry Rouanet et Brigitte Le Roux, *Analyse des données multidimensionnelles: Statistique en sciences humaines*. Paris: Dunod, 1993.) → on D2L course page.

Sallaz, Jeffrey J., and Jane Zavisca . 2007. "Bourdieu in American Sociology, 1980–2004." *Annual Review of Sociology* 33:21-41. <http://dx.doi.org/10.1146/annurev.soc.33.040406.131627>

7. Correspondence Analysis as method (1)

Chs. 1-2 in Clausen, Sten-Erik. 1998. *Applied Correspondence Analysis : An Introduction* . Thousand Oaks, CA: Sage Publications.

8. Correspondence Analysis as a method (2)

Chs. 3-4 in Clausen, *ibid*.

9. The distinctively French approach to Multiple Correspondence Analysis (MCA)

Ch. 3 (pp. 34-67, esp. 34-52) in Brigitte Le Roux and Henry Rouanet, *Multiple Correspondence Analysis*. Thousand Oaks, CA: Sage Publications.

Hjellbrekke, Johs and Olav Korsnes. 2009. "Quantifying the Field of Power in Norway." Pp. 31-45 in *Quantifying Theory: Pierre Bourdieu*, edited by Karen Robson and Chris Sanders. Springer, Dordrecht. https://link.springer.com/chapter/10.1007/978-1-4020-9450-7_3

[optional:] Robson, Karen and Chris (.). Sanders. 2009. *Quantifying Theory: Pierre Bourdieu*. Dordrecht: Springer. <https://link.springer.com/book/10.1007%2F978-1-4020-9450-7>

10. How to interpret a Correspondence Analysis

Ch. 3 (pp. 52-67) in Le Roux and Rounet (see previous class).

Harcourt, Bernard E. . 2002. "Measured Interpretation: Introducing the Method of Correspondence Analysis to Legal Studies." *University of Illinois Law Review* 2002 (4):979-1018. http://chicagounbound.uchicago.edu/cgi/viewcontent.cgi?article=2472&context=journal_articles

11. Culture as consensus (or: test theory without an answer key)

Our focus:

Waubert de Puiseau, Berenike, André Abfal, Edgar Erdfelder and Daniel M. Bernstein. 2012. "Extracting the Truth from Conflicting Eyewitness Reports: A Formal Modeling Approach." *Journal of Experimental Psychology. Applied* 18:390-403.

<http://lifespanscognition.org/wp-content/uploads/2016/11/WaubertDePuisseuA%C3%9FfalgErdfelderBernstein-JEPApplied2012.pdf>

Borgatti, Stephen P. and Daniel S. Halgin. n.d. "Consensus Analysis." University of Kentucky, unpublished: 1-19. <http://steveborgatti.com/papers/BHConsensus.pdf>

[optional:] Freeman, Linton C. 2003. "Finding Social Groups: A Meta-Analysis of the Southern Women Data." Pp. 39-77 in R.L. Breiger, K.M. Carley, P.E. Pattison (eds.), *Dynamic Social Network Modeling and Analysis: Workshop Summary and Papers*. Washington, DC: National Academies Press. <https://www.nap.edu/read/10735/chapter/4>

Origins of the culture-as-consensus model:

Romney, A. K., Susan C. Weller and William H. Batchelder. 1986. "Culture as Consensus: A Theory of Culture and Informant Accuracy." *American Anthropologist* 88:313-38. <http://dx.doi.org/10.1525/aa.1986.88.2.02a00020>

Batchelder, William H. and A. K. Romney. 1988. "Test Theory without an Answer Key." *Psychometrika* 53:71-92. <http://dx.doi.org/10.1007/bf02294195>

Maximum-likelihood and Bayesian approaches:

Aßfalg, André and Edgar Erdfelder. 2012. "CAML—Maximum Likelihood Consensus Analysis." *Behavior Research Methods* 44:189-201. <https://link.springer.com/article/10.3758/s13428-011-0138-0>

Oravecz, Zita, Joachim Vandekerckhove and William H. Batchelder. 2014. "Bayesian Cultural Consensus Theory." *Field Methods* 26:207-22. <http://dx.doi.org/10.1177/1525822X13520280>

12. Statistical methods for studying cross-national similarities and differences in semantic structure

Romney, A. K., Carmella C. Moore and Craig D. Rusch. 1997. "Cultural Universals: Measuring the Semantic Structure of Emotion Terms in English and Japanese." *Proceedings of the National Academy of Sciences of the United States of America* 94:5489-94. <http://www.pnas.org/content/94/10/5489.full.pdf+html>

Romney, A. K., Carmella C. Moore, William H. Batchelder and Ti-Lien Hsia. 2000. "Statistical Methods for Characterizing Similarities and Differences between Semantic Structures." *Proceedings of the National Academy of Sciences of the United States of America* 97:518-23. <http://www.pnas.org/content/97/1/518.abstract>

13. What is the relationship between Correspondence Analysis (CA), Dual Lattices (FCA), Ragin's QCA (Qualitative Comparative Analysis), and social networks (SNA)? – Part 1

Wolff, Karl Erich, and Siegfried Gabler. 1998, "Comparison of Visualizations in Formal Concept Analysis and Correspondence Analysis" in *Visualization of Categorical Data*, eds. J. Blasius & M. Greenacre, Academic Press, San Diego, pp. 85-97. <http://www.sciencedirect.com.ezproxy2.library.arizona.edu/science/book/9780122990458>

Yamasaki, S. & Spreitzer, A. 2006, "Beyond Methodological Tenets. The Worlds of QCA and SNA and their Benefits to Policy Analysis" in *Innovative Comparative Methods for Policy Analysis: Beyond the Quantitative-Qualitative Divide*, eds. B. Rihoux & H. Grimm, Springer, New York, pp. 95-120.

<http://link.springer.com.ezproxy2.library.arizona.edu/book/10.1007%2F0-387-28829-5>

Redding, Kent, and Jocelyn S. Viterna. 1999. "Political Demands, Political Opportunities: Explaining the Differential Success of Left-Libertarian Parties." *Social Forces* 78 (2):491-510.

<http://www.jstor.org/stable/3005565>

14. ... Part 2 (CA, FCA, QCA, SNA)

Breiger, R.L. . 2009. "On the Duality of Cases and Variables: Correspondence Analysis (CA) and Qualitative Comparative Analysis (QCA)." Pp. 243-259 in *The SAGE Handbook of Case-Based Methods*, edited by D. Byrne, and C.C. Ragin. London: SAGE Publications Ltd. → D2L course page

Epstein, J., D. Duerr, L. Kenworthy, and C. Ragin. 2008. "Comparative Employment Performance: A Fuzzy-Set Analysis." Pp. 67-90 in *Method and Substance in Macrocomparative Analysis*, edited by L. Kenworthy, and A. Hicks. Palgrave Macmillan. → D2L course page

[*optional*] Thiem, Alrik and Adrian Duşa. 2013. *Qualitative Comparative Analysis with R*. New York, NY: Springer. [Available as an e-book via UA Library]

[*optional*] Breiger, R.L., Eric Schoon, David Melamed, Victor Asal, and R. Karl Rethemeyer. 2014. "Comparative Configurational Analysis as a Two-Mode Network Problem: A Study of Terrorist Group Engagement in the Drug Trade." *Social Networks* 36:23-39. <http://dx.doi.org/10.1016/j.socnet.2013.04.002>

[*optional*: on the relation between correspondence analysis and latent class analysis (CA and LCA):] Van Der Heijden, Peter G M, Zvi Gilula and Van Der Ark, L Andries. 1999. "An Extended Study into the Relationship between Correspondence Analysis and Latent Class Analysis." *Sociological Methodology* 29:147-86. <http://dx.doi.org/10.1111/0081-1750.00063>

[*optional*: on combining lattice analysis and Qualitative Comparative Analysis via survey data (FCA and QCA):] Schaefer, David R. 2010. "A Configurational Approach to Homophily using Lattice Visualization." *Connections* 30:21-40 → D2L course page.

C. TEXT ANALYTICS AND BIG DATA

15. Two early approaches and two contemporary ones

Mills, C. Wright. 1940. "Situated Actions and Vocabularies of Motive." *American Sociological Review* 5: 904-913. <http://www.jstor.org/stable/2084524>

Luhn, Hans Peter. 1957. "A Statistical Approach to Mechanized Encoding and Searching of Literary Information." *IBM Journal of Research and Development* 1 (4):309-317. http://ieeexplore.ieee.org/xpls/abs_all.jsp?arnumber=5392697&tag=1

Savage, Mike . 2009. "Contemporary Sociology and the Challenge of Descriptive Assemblage." *European Journal of Social Theory* 12 (1):155-174. <http://est.sagepub.com/cgi/content/abstract/12/1/155>

Mohr, John W., Robin Wagner-Pacifici, and Ronald L. Breiger. 2015. "Toward a Computational Hermeneutics." *Big Data & Society* 2(2). <http://bds.sagepub.com/content/spbds/2/2/2053951715613809.full.pdf>

16. Latent Semantic Analysis

Landauer, Thomas K., Peter W. Foltz, and Darrell Laham. 1998. "An Introduction to Latent Semantic Analysis." *Discourse Processes* 25 (2):259-284.

<http://search.ebscohost.com/login.aspx?direct=true&db=a2h&AN=12676122&site=ehost-live>

Dumais, S. T., et al. 1988. "Using Latent Semantic Analysis to Improve Access to Textual Information." Proceedings of the SIGCHI Conference on Human Factors in Computing Systems, Washington, DC, 281-285. <http://doi.acm.org/10.1145/57167.57214>

Alex Thomo, "Latent Semantic Analysis (Tutorial)"

<http://www.engr.uvic.ca/~seng474/svd.pdf>

17. Topic Modeling (1)

Blei, David M. 2012. "Probabilistic Topic Models." *Communications of the ACM* 55 (4):77-84.

<http://doi.acm.org/10.1145/2133806.2133826>

Introduction to Jana Diesner's program, **ConText** [Connections and Texts: an extremely user-friendly suite of programs for the construction of network data from natural language text data, topic modeling, sentiment analysis, text visualization, and much more. Runs on Mac and PC. No cost to obtain.]

<http://context.lis.illinois.edu/>

Diesner, Jana. 2015. "Small Decisions with Big Impact on Data Analytics." *Big Data & Society* 2(2).

<http://bds.sagepub.com/content/spbds/2/2/2053951715617185.full.pdf>

Mohr, John W., Robin Wagner-Pacifici, Ronald L. Breiger, and Petko Bogdanov. 2013. "Graphing the Grammar of Motives in U.S. National Security Strategies: Cultural Interpretation, Automated Text Analysis and the Drama of Global Politics." *Poetics* 41 (6):670-700.

<http://dx.doi.org/10.1016/j.poetic.2013.08.003>

Grün, Bettina, and Kurt Hornik. 2011. "Topicmodels: An R Package for Fitting Topic Models." *Journal of Statistical Software* 40 (13):1-30. <http://www.jstatsoft.org/v40/i13>

18. Topic Modeling (2)

DiMaggio, Paul, Manish Nag, and David Blei. 2013. "Exploiting Affinities between Topic Modeling and the Sociological Perspective on Culture: Application to Newspaper Coverage of U.S. Government Arts Funding." *Poetics* 41 (6):570-606. <http://dx.doi.org/10.1016/j.poetic.2013.08.004>

DiMaggio, Paul. 2015. "Adapting Computational Text Analysis to Social Science (and Vice Versa)." *Big Data & Society* 2(2). <http://bds.sagepub.com/content/spbds/2/2/2053951715602908.full.pdf>

19. Restless Events and the "But" paper

Wagner-Pacifici, Robin. 2010. "Theorizing the Restlessness of Events." *American Journal of Sociology* 115 (5):pp. 1351-1386. <http://www.jstor.org/stable/10.1086/65129>

Wagner-Pacifici, Robin, Ronald L. Breiger, and John W. Mohr. 2012. "Narratives of Security in Times of Transition: Interpretive and Formal Analysis of the U.S. National Security Strategy Statements, 1998-2010." Paper presented at ISSS-ISAC 2012, Chapel Hill, NC. → on D2L page

Breiger, R.L. 2015. "Scaling Down." *Big Data & Society* 2(2).
<http://bds.sagepub.com/content/spbds/2/2/2053951715602497.full.pdf>

20. Turning Tweets into Knowledge

Analytics Edge (edX) / Open Course / Courseware / Unit 5: Text Analytics / Turning Tweets into Knowledge. Videos 1-6. <https://www.edx.org/> (and then navigate to the course called "Analytics Edge," course number MITx – 15.071x, where you will see the archived course materials that we will use. I recommend that you sign up for an account – it's free.)
 In addition to watching Videos 1-6 (see above), please read:

Lazer, David and Jason Radford. 2017. "Data Ex Machina: Introduction to Big Data." *Annual Review of Sociology* 43: 19-39.
<https://doi.org/10.1146/annurev-soc-060116-053457>

21. Classification and Prediction of Supreme Court voting

Unit 4 (Classification Trees; Judge, Jury, Classifier): Videos 1-4: Predicting Supreme Court voting
<https://www.edx.org/course/analytics-edge-mitx-15-071x-0>

22. Predicting Sentiment with Tweets

Unit 5 (Text Analytics; Turning Tweets into Knowledge): Videos 7- 8: Predicting sentiment in tweets
<https://www.edx.org/course/analytics-edge-mitx-15-071x-0>

Golder, Scott A., and Michael W. Macy. 2011. "Diurnal and Seasonal Mood Vary with Work, Sleep, and Daylength across Diverse Cultures." *Science* 333 (6051), 30 Sept.
<http://science.sciencemag.org/content/333/6051/1878.full>

23. Scraping Tweets, and Working with Them

Zhao, Yanchang, "Text Mining with R – Twitter Data Analysis." Workshop, Deakin University, Melbourne, Australia, 28 May 2015.
<http://www.rdatamining.com/docs/text-mining-with-r-of-twitter-data-analysis>

24. Qualitative Discourse Analysis Package (QDAP)

Ghenis, Max. "Statistics meets rhetoric: A text analysis of 'I Have a Dream' in R." *Anything but R-bitrary*, January 20, 2014.
<http://anythingbutrbitrary.blogspot.com/2014/01/statistics-meets-rhetoric-text-analysis.html>

Biernacki, R. 2014. "Humanist Interpretation Versus Coding Text Samples." *Qualitative Sociology* 37 (2):173-188.
<http://dx.doi.org/10.1007/s11133-014-9277-9>

D. NETWORKS AND CULTURE

23. Clustering Movie Recommendations and Beliefs

Analytics Edge (EdX) [see above].
 Unit 6 (Clustering; Movie Recommendations): Videos 1-8
<https://www.edx.org/course/analytics-edge-mitx-15-071x-0>

Esp. pp. 1389 – 1397 in Boutyline, Andrei and Stephen Vaisey. 2017. "Belief Network Analysis: A Relational Approach to Understanding the Structure of Attitudes." *American Journal of Sociology* 122:1371-1447. <http://dx.doi.org/10.1086/691274>

24. Discourse fields and social conflict

Rule, Alix, Jean-Philippe Cointet and Peter S. Bearman. 2015. "Lexical Shifts, Substantive Changes, and Continuity in State of the Union Discourse, 1790–2014." *Proceedings of the National Academy of Sciences* 112:10837 – 10844. <http://dx.doi.org/10.1073/pnas.1512221112>

Cunningham, David, Colleen Nugent, and Caitlin Slodden . 2010. "The Durability of Collective Memory: Reconciling the "Greensboro Massacre"." *Social Forces* 88 (4):1517-1542.
http://muse.jhu.edu.ezproxy2.library.arizona.edu/journals/social_forces/toc/sof.88.4.html

25. What's the big deal about networks and culture?

Breiger, R.L., and Kyle Puetz, 2015. "Culture and Networks." *International Encyclopedia of the Social and Behavioral Sciences*, 2nd ed., 557-562.
<http://dx.doi.org/10.1016/B978-0-08-097086-8.10443-X>

Ahn, Yong-Yeol, et al. 2011. "Flavor Network and the Principles of Food Pairing." *Scientific Reports* 1 (196), 2011. (doi:10.1038/srep00196)
<http://www.nature.com/articles/srep00196>

Singh, Sourabh. 2016. "What is Relational Structure? Introducing History to the Debates on the Relation between Fields and Social Networks." *Sociological Theory* 34:128-50.
<http://stx.sagepub.com/content/34/2/128.abstract>

Prinsen, Fleur, Mariëtte d. Haan and Kevin M. Leander. 2015. "Networked Identity: How Immigrant Youth Employ Online Identity Resources." *Young* 23:19-38. <http://you.sagepub.com/content/23/1/19.abstract>

Parkinson, Sarah E. 2013. "Organizing Rebellion: Rethinking High-Risk Mobilization and Social Networks in War." *American Political Science Review* 107:418. <http://dx.doi.org/10.1017/S0003055413000208>

Healy, Kieran. 2015. "The Performativity of Networks." *European Journal of Sociology* 56 (02):175-205.
http://journals.cambridge.org/article_S0003975615000107

Fuhse, Jan, and Sophie Mützel. 2011. "Tackling Connections, Structure, and Meaning in Networks: Quantitative and Qualitative Methods in Sociological Network Research." *Quality & Quantity* 45 (5):1067-1089. <http://dx.doi.org/10.1007/s11135-011-9492-3>

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Course rules and policies²

See pages 2-3 (above) for the course requirements.

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There is a short video "Academic Integrity Video" (under *Media and Social Networking* at <http://deanofstudents.arizona.edu/>). You are expected to watch this video before the class time.

² This is to acknowledge that I have taken this section on rules and policies just about *verbatim* from Joseph Galaskiewicz's Soc 527 syllabus (R.B.) – see the section on "Academic Honesty" below.

Accommodations

Students with disabilities who may require academic adjustments and/or reasonable accommodations in order to fulfill course requirements must register with the Disability Resource Center (DRC) and request the DRC send the instructor official notification of your accommodation needs as soon as possible. You must also come in and speak with the instructor about your requirements. The DRC web page is <http://drc.arizona.edu/>

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You are expected to follow the student code of conduct (<http://deanofstudents.arizona.edu/studentcodeofconduct>); disruptive and/or threatening behavior will not be tolerated. The use of cell phones, mp3 players, etc. is not allowed during class and there is no text messaging. You may be asked to leave the class if you are judged to be a disruption to either the instructors or your fellow students.