

SHORT VITA/BIO: DOUGLAS R. WHITE, Anthropology and Social Science Professor, IMBS, UC-Irvine

Complex Network Dynamics, Foundations of Social Theory, Ethnosociology, Structural Ethnohistory, Political Economy, Global Change, Mathematical Models/Computing, Social Demography and Longitudinal Field Sites
Kinship and Marriage Networks, Migration, Gender, Exchange, Indian North America, Mesoamerica, Europe, Old World

Website: <http://eclectic.ss.uci.edu/~drwhite> ([http=live link in pdf](#))

Email: drwhite[atuci.edu 05/04/09

Wikisite: <http://intersci.ss.uci.edu/wiki> (Founder, WikiSysop)

Personal data: born 1942, married, 1 child

Awards, Fellowships, Degrees

Viviana Zelizer Distinguished Scholarship Award 2007, Best Paper in Economic Sociology (2005-2006), with Walter Powell, Ken Koput and Jason Owen-Smith, American Sociological Association

Outstanding Article award 2004, Mathematical Sociology, with James Moody, American Sociological Association, Fellow, Leibnitz Program (Thomas Schweizer, head) German Research Society, University of Köln 1996-7-8.

Bourse de Haute Niveau, Ministry of Research and Technology, Laboratoire d'Analyse Secondaire et des Méthodes Appliquées à la Sociologie. Paris, 1991-92.

Distinguished Senior U.S. Scientist Award, Alexander von Humboldt Foundation, Ethnosociologie, 1990-92.

Fellow, Center for Advanced Studies, Western Behavioral Science Institute, 1981-84.

Ph.D. University of Minnesota, Anthropology and Social Theory, 1969.

Predocctoral Fellow, National Institute of Mental Health, 1964-67.

Visiting Fellow, Anthropology and Mathematical Sociology, Columbia, 1965-66.

CIC Traveling Scholar, Anthropology/Mathematical Psychology, Michigan, 1964-65.

NSF Cooperative Fellow. University of Minnesota, 1963-64.

American Field Service Scholarship, Madrid, school year 1958-59.

Academic

Professor, UC Irvine. 1982-present, Social Networks. 1989-present, Anthropology. 1994-present. Institute for Mathematical Behavioral Science. 1979-99, Social Relations. 1979-89, Comparative Culture & Social Science.

Associate Professor, 1976-79. Comparative Culture and Social Sciences, UC Irvine.

Assistant/Associate Professor, 1969-74/1974-76. Department of Anthropology, University of Pittsburgh.

Concurrent

External Faculty. 2004-2010. Santa Fe Institute (renewed every 3 years).

Visiting Scholar. 2009 (2 mo.) Anthropology. University of Washington

Visiting Professor. 2008 (1 mo.) Sociology. ETH Zürich.

Visiting Professor. 2008 (1 mo.) Sociology. Xi'an, China.

Visiting Professor. 2007 (1 mo.) Sociology. Columbia University, New York.

Visiting Professor. 2007 (1 mo.) Sociology. Central European University, Budapest.

Visiting Professor. 2005 (1 mo.) Social Science. University of Ljubljana, Slovenia.

Visiting Professor. 2003 (1 mo.) Sociology. University of North Carolina.

Visiting Professor. 1999-2003 (1 mo@yr.) Ecole des Hautes Etudes en Sciences Sociales (EHESS). Paris.

Invited Researcher. 2001 (1 mo.). Institut National des Etudes Demographiques. Paris.

Co-Responsible Scientifique, 1998-. Scientific Workshops and Informatics. Ph.D. program in Social Spaces, Relations, Configurations. Laboratoire de Demographie Historique, EHESS. Paris.

Directeur d'Etudes Associé, 1991-92. Maison des Sciences de l'Homme, Paris.

Alexander von Humboldt Research Award, 1990-92. Institut für Völkerkunde, University of Köln.

Instructor, 1974. ICPSR. Research Methodology Summer Program, University of Michigan.

Visiting Associate Professor, Anthropology, 1974-75. University of Texas-Austin.

Co-Director, Methodology. 1971-73. Language Attitudes Research Project, Finance Ministry, Irish Republic.

Research Associate, on-line database implementation, 1970. Project IMPRESS (John Kemeny), Dartmouth.

Staff Anthropologist, Instructor. 1968. Summer Seminar in Quantitative Anthropology, NSF.

Administrative

Science Chair. 2008-2009. Scientific Committee of the French Réseau national des systèmes complexes (RNSC).

Governing Council, Complexity Science Society, 2005-2009 (formerly European CSS)

Chair & Co-Founder. 2006-. Social Dynamics and Complexity; 2003-6. Social Dynamics and Evolution; focused research groups and PhD program w/in Mathematical Behavioral Sciences; 1994-96, Senate Committee on

International Education; 1982-83, Graduate Program in Social Networks; 1980-81, Academic Senate Committee

on Courses; 1980-81, Social Structure Group (Co-Founder); 1979-80, Social Networks Research Program.

Graduate Director: 1995-2004. Social Networks Ph.D. Program, UCI.

Executive Committees: 1994-96, 1980-81, Academic Senate, Irvine; 1976-78. School of Social Sciences.

President, 1986-90; Chair 1986-present. Linkages: World Development Research Council.

Recent Extramural Funding. Agence National de Recherche. Informatic Treatment of Kinship Phenomena in Anthropology and History, 2005-07. \$137,000 (PIs Houseman and Grange). **National Science Foundation research grants:** Predictive Social Cohesion Theory 1999-2002. \$85,000; 1988-90; Network Analysis of Kinship, Social Transmission and Exchange: Cooperative Research at UCI, UNI Cologne, CNRS Paris 1993-95. **Numerous small grants:** Santa Fe Institute Core Funding for MacroSocial System Dynamics, 2004, \$25,000; social science database and computing systems, planning grants, conferences, NSF student trainee grants.

Professional (selected)

General Editor. *Structure and Dynamics*. UC eScholarship journal. *World Cultures*. eJournal. 1985-1990.
President Elect and President 1992-1993: Social Science Computing Association.
Charter Member: Society for Anthropological Sciences. The Classification Society-No. American Branch, Society for Cross-Cultural Research, INSNA, Society for Psychological Anthropology, Cognitive Sciences Society.
NSF Review Panel, Anthropology; numerous editorial boards and professional memberships.

Selected publications, books

2005 **Network Analysis and Ethnographic Problems: Process Models of a Turkish Nomad Clan**. drw & Ulla Johansen. Boston: Lexington Press/AltaMira. 2006 Paper <http://www.worldcatlibraries.org/oclc/122927949?tab=details>
2002 **Networks and Complexity** Special Issue, *Complexity* 8(1) <http://tinyurl.com/5klwl8>
<http://eclectic.ss.uci.edu/~drwhite/Complexity/SpecialIssue.htm>
1998 **Kinship, Networks and Exchange**, eds. Thomas Schweizer, drw. Cambridge University Press.
http://www.worldcatlibraries.org/oclc/36103977&referer=brief_results
1996 **Social Network And Discrete Structure Analysis**, Special Issue, *Social Networks* 18(3), eds. drw and V. Duquenne. Elsevier Press. http://www.elsevier.com/wps/find/journalspecialissues.cws_home/505596/specialissues
1993 **Foundations for Social and Biological Evolution**, A. Iberall, D. Wilkinson, drw. Laguna, CA: CDC Press.
1989 **Research Methods in Social Network Analysis**, eds. L. C. Freeman, drw, A. K. Romney. George Mason Press. Reprinted 1991, Transaction Press. <http://www.worldcatlibraries.org/oclc/24010835?tab=holdings>

Selected publications, articles

2009 Frank Schweitzer, Didier Sornette, A. Vespignani, G. Fagiolo, F. Vega-Redondo, Douglas R. White. Economic Networks: The New Challenges. *Science* 24 July: 422-425.
<http://www.sciencemag.org/cgi/reprint/325/5939/422.pdf>
2009 Frank Schweitzer, Didier Sornette, G. Fagiolo, F. Vega-Redondo, Douglas R. White. Economic Networks: What do we know and what do we need to know? *Advances in Complex Systems* (ACS) 12(4-5):407-422.
<http://www.worldscinet.com/acs/12/1204n05/S0219525909002337.html>
2009 Frank Schweitzer, Didier Sornette, G. Fagiolo, F. Vega-Redondo, Douglas R. White. Economic Networks: What do we know and what do we need to know? *Advances in Complex Systems* (ACS) 12(4-5):407-422.
<http://www.worldscinet.com/acs/12/1204n05/S0219525909002337.html>
2009 Accepted. Kinship, Class, and Community. In P. Carrington, J. C. Scott (Eds.), *Sage Handbook of Social Networks*. <http://intersci.ss.uci.edu/wiki/pub/SubstantiveKinshipShortDb113.pdf>
2009 Accepted. Kinship Network Analysis. Hamberger, K., Houseman, M., White, D. R.. In P. Carrington, J. C. Scott (Eds.), *Sage Handbook of Social Networks*. <http://intersci.ss.uci.edu/wiki/pub/SubstantiveKinshipShortDb113.pdf>
2009 Accepted. Cognition and Social Networks. Blackwell *Handbook of Cognitive Anthropology*, Edited by D. Kronenfeld, G. Bennardo, V. De Munch, M. Fischer. Blackwell (UK). http://intersci.ss.uci.edu/wiki/pub/FS_HLSchneggWhite_Dec_12_08_BW.pdf
2009 Getting connected: Networks of kinship and compadrazgo in rural Tlaxcala, Mexico. M. Schnegg and Douglas R. White. *Networks, Resources, and Economic Action*. Eds. Waltraud Kokot and Michael Schnegg. Reimer Verlag Berlin. http://intersci.ss.uci.edu/wiki/pub/FS_HLSchneggWhite_Dec_12_08_BW.pdf
2009 Innovation in the Context of Networks, Hierarchy and Cohesion. In D. Lane, G. West, S. van der Leeuw, D. Pumain (Eds.), *A New Perspective on Innovation and Social Change*. Chapter 5: pp. 153-193. Dordrecht: Springer Methodos Series. <http://eclectic.ss.uci.edu/~drwhite/pub/ch5revMay-20.pdf>
2009 Dynamics of Human Behavior, 29pp. *Encyclopedia of Complexity and Systems Science*, Heidelberg: Springer DE. <http://www.santafe.edu/research/publications/wpabstract/200809042>
2008 Oscillatory dynamics of city-size distributions in world historical systems. (drw, L. Tambayong, and N. Kejzar). Pp. 190-225. In, G. Modelski, T. Devezas and W. Thompson, eds. *Globalization as Evolutionary Process: Modeling Global Change*. London: Routledge.
http://eclectic.ss.uci.edu/~drwhite/pub/WhiteKejzarTambaVienna_Q.pdf
2008 Standard Cross-Cultural Sample. In W. A. Darity Jr (Ed.), *International Encyclopedia of the Social Sciences*, 2nd ed. Vol. 8 (pp. 88-93) Macmillan Reference USA <http://eclectic.ss.uci.edu/~drwhite/pub/SCCSencycl1.1.pdf>
2007 Role Models for Complex Networks, Jörg Reichart and Douglas R. White. *European Physical Journal B* 60: 217-224. http://eclectic.ss.uci.edu/~drwhite/pub/RW_6Page_JournalFormat.pdf Selected as a 'Highlights' paper of

- Europhysics News* 8(1) 2008.
- 2007 Network Structures in Industrial Pricing: The Effect of Emergent Roles in Tokyo Supplier-Chain Hierarchies. Tsutomu Nakano and Douglas R. White. *Structure and Dynamics* 2(3): 904-926.
<http://repositories.cdlib.org/imbs/socdyn/sdeas/vol2/iss3/>
- 2006 A Generative Model for Feedback Networks. drw, Nataša Kežar, Constantino Tsallis, Doyne Farmer, and Scott White. *Physical Review E*, 016119 11pp. <http://arxiv.org/abs/cond-mat/0508028> <http://tinyurl.com/ylpbn3>
- 2005 Network Dynamics and Field Evolution: The Growth of Interorganizational Collaboration in the Life Sciences. (W. W. Powell, drw, K. W. Koput & J. Owen-Smith) *American Journal of Sociology* 110(4):901-975. Viviana Viviana Zelizer Best Paper in Economic Sociology Award (2005-2006), American Sociological Association
<http://www.journals.uchicago.edu/AJS/journal/contents/v110n4.html>
- 2005 Multiple Measures of Alyawarra Kinship. (Woodrow W. Denham and drw) *Field Methods* 17: 70-101.
<http://fmx.sagepub.com/content/vol17/issue1/>
- 2004 Network Analysis, Social Dynamics and Feedback in Social Systems. *Cybernetics and Systems* 35(2-3):173-192. <http://taylorandfrancis.metapress.com/openurl.asp?genre=issue&eissn=1087-6553&volume=35&issue=2>
- 2004 Networks, Fields and Organizations: Micro-dynamics, scale and cohesive embeddings (drw, W. W. Powell, J. Owen-Smith, J. Moody) *Computational and Mathematical Organization Theory* 10(1):95-117.
<http://www.springerlink.com/openurl.asp?genre=issue&eissn=1572-9346&volume=10&issue=1>
- 2004 Ring Cohesion Theory in Marriage and Social Networks. *Mathématiques et sciences humaines* 168:5-28
<http://www.ehess.fr/revue-msh/recherche.php?numero=168> <http://eclectic.ss.uci.edu/download/MarriageNetTools.htm>
- 2003 Structural Cohesion and Embeddedness: A Hierarchical Conception of Social Groups. (J. Moody, drw) *American Sociological Review* 68(1):1-25. 2004 Outstanding Article Award in Mathematical Sociology, American Sociological Association. <http://www.asanet.org/journals/ASRFeb03MoodyWhite.pdf>
- 2002 The Navigability of Strong Ties: Small Worlds, Tie Strength and Network Topology. (drw & M. Houseman) *Complexity*, 8(1), 72-81. <http://eclectic.ss.uci.edu/~drwhite/Complexity/K&C-a.pdf>
- 2001 The Cohesiveness of Blocks in Social Networks: Node Connectivity and Conditional Density. (drw & Frank Harary), *Sociological Methodology* 2001 (31):305-359. <http://eclectic.ss.uci.edu/~drwhite/sm-w23.PDF>
- 1999 Controlled Simulation of Marriage Systems. *Journal of Artificial Societies and Social Simulation* 2(3).
<http://jasss.soc.surrey.ac.uk/2/3/5.html>
- 1997 Class, Property and Structural Endogamy: Visualizing Networked Histories. (L. A. Brudner & drw). *Theory and Society* 25(2):161-208. <http://repositories.cdlib.org/postprints/3/>
- 1996 Kinship Networks and Discrete Structure Theory: Applications and Implications. (drw & P. Jorion). *Social Networks* 18:267-314. <http://eclectic.ss.uci.edu/~drwhite/pw/White-Jorion1992.pdf>
- 1994 Centrality Measures for Oriented Graphs. (drw & S. Borgatti) *Social Networks* 16:335- 346.
<http://tinyurl.com/6n2c6q>
- 1993 Using Galois lattices to represent network data. (L. C. Freeman & drw) *Sociological Methodology* 1993 (23):127-146. [http://links.jstor.org/sici?sici=0081-1750\(1993\)23<127%3AUGLTRN>2.0.CO%3B2-9](http://links.jstor.org/sici?sici=0081-1750(1993)23<127%3AUGLTRN>2.0.CO%3B2-9)
- 1992 Structure and Dynamics of the Global Economy: Network Analysis of International Trade 1965-1980. (D. Smith & drw) *Social Forces* 70:857-894. <http://eclectic.ss.uci.edu/~drwhite/WorldTrade/Cray.pdf>
- 1991 World-System and Regional Linkages as Causally Implicated in Local Level Conflicts at the Ethnographic Horizon. *Zeitschrift fur Ethnologie* 115:111-37.
- 1988 Evidence for a Long Term Process Scale for Social Change in Modern Man Settled in Place via Agriculture and Engaged in Trade and War. (A. Iberall & drw) *GeoJournal* 17:311- 338.
- 1983 Graph and Semigroup Homomorphisms. (drw & K. P. Reitz) *Social Networks* 5:193-234.
<http://eclectic.ss.uci.edu/~drwhite/pub/whitereitz.pdf>
- 1982 Multivariate Modeling with Interdependent Network Data. (M. M. Dow, drw, M .L. Burton) *Behavior Science Research* 17:216-245. <http://ccr.sagepub.com/cgi/content/abstract/17/3-4/216>
- 1977 Entailment Theory and Method: A Cross-Cultural Analysis of the Sexual Division of Labor. (drw, M. Burton, L. Brudner) *Behavior Science Research* 12:1-24. <http://eclectic.ss.uci.edu/~drwhite/pub/Entail77.pdf>
- 1974 Mathematical Anthropology, In J. J. Honigmann, ed., *Handbook of Social and Cultural Anthropology*, pp 369-446. <http://eclectic.ss.uci.edu/~drwhite/pub/MathAnth74-1.pdf>
- 1971 Natchez Class and Rank Reconsidered. (drw, G. P. Murdock, R. Scaglione) *Ethnology* 10:369- 388.
<http://eclectic.ss.uci.edu/~drwhite/pub/NatchezPeople.pdf>
- 1969 Standard Cross-Cultural Sample (G. P. Murdock & drw) *Ethnology* 8:329-369.
<http://eclectic.ss.uci.edu/~drwhite/pub/SCCS1969.pdf>
- 1968 Societal Research Archives System: Retrieval, Quality Control and Analysis of Comparative Data. *Social Science Information* 7(3): 78-94. Reprinted 1971 Societal Research Archives System, In R.Naroll and R. Cohen, eds. *Handbook of Method in Cultural Anthropology*, 676-685.