

Frontiers of Kinship Network Analysis

(Book Proposal) Douglas R. White, Paul Jorion, Michael Houseman, Lilyan A. Brudner, Vladimir Batagelj, Andrej Mrvar, Thomas Schweizer, Ulla Johansen, Michael Schnegg, Klaus Hamberger, Isabelle Daillant, Laurent Barry, George P. Murdock, and Richard Scaglione, edited by **Douglas R. White** [Book proposal](#) - (Earlier [Draft 1: Frontiers of Kinship Network Analysis](#))

TOPICS: network cohesion in kinship, parental graphs, structural endogamy, social class, property transmission, complexity, small worlds, simulations, visualization, motifs/cycles, dividedness, sidedness, Dravidian systems, kinship theorems, network ethnography.

PART 1: Kinship Network Analysis (KNA): the parental graph breakthrough

1. 1992 [Representing and Computing Kinship: A New Approach](#). Douglas R. White & Paul Jorion. *Current Anthropology* 33(4): 454-463.
2. 1996 [Kinship networks and discrete structure theory: Applications and implications](#). Douglas R. White and Paul Jorion. Special Issue on Social Network and Discrete Structure Analysis. *Social Networks* 18(3): 267-314.
3. 1999 [Analyzing Large Kinship and Marriage Networks with Pgraph and Pajek](#). Douglas R. White, Vladimir Batagelj and Andrej Mrvar. *Social Science Computer Review* 17(3):245-274.
4. 1997 [Structural Endogamy and the Graphe de Parenté](#) Douglas R. White. *Mathématiques, Informatique, et Sciences Humaines* 137:107-125.
5. 1997 [Class, Property and Structural Endogamy: Visualizing Networked Histories](#). Lilyan A. Brudner & Douglas R. White. *Theory and Society* 25(2):161-208. [Reprinting Issue](#)

PART 2: Controlled simulation as a means of discovery

6. 1999 [Controlled Simulation of Marriage Systems](#). Douglas R. White. *Journal of Artificial Societies and Social Simulation* 2(3).
7. 1998 [Kinship, Property Transmission, and Stratification in Javanese Villages](#). Douglas R. White & Thomas Schweizer. pp. 59-89 in [Kinship, Networks and Exchange](#), eds. Thomas Schweizer and Douglas R. White. [Cambridge University Press](#). [view book contents and reviews](#)
8. 1998 [Kinship, Networks and Exchange](#), eds. Thomas Schweizer and Douglas R. White. [Cambridge University Press](#). [view book contents and reviews](#) (Include Section headings).

PART 3: Dual organization in self-organizing bipartite networks

9. 1998a [Taking Sides: Marriage Networks and Dravidian Kinship in Lowland South America](#) Michael Houseman and Douglas R. White. In, *Transformations of Kinship*. pp. 214-243, in eds.

Maurice Godelier, Thomas Trautmann and F.Tjon Sie Fat. Washington, DC: Smithsonian Institution Press.

10. 1998b **Network Mediation of Exchange Structures: Ambilateral Sidedness and Property Flows in Pul Eliya**. Michael Houseman & Douglas R. White. pp. 59-89 in Kinship, Networks and Exchange, eds. Thomas Schweizer and Douglas R. White. [Cambridge University Press](#). [where to get the book](#) - [alternative draft Google book](#). - [view book contents](#) - [Pul Eliya](#)

PART 4: Sided kin terms and Dravidian sided networks: Signed graph theorems and structures

11. 2010 **Egocentric and Sociocentric Structure in Classificatory Kinship Systems: Four Theorems**. Douglas R. White. [Mathematical Anthropology and Cultural Theory](#) 3(6) art 6: 1-19. (When do local and global sided network structure converge so that there is a correspondence with sided kinship terminology?)
12. 2005 **Multiple Measures of Alyawarra Kinship**. [Woodrow W. Denham](#) and Douglas R. White. [Field Methods](#) 17: 70-101. [<http://fmx.sagepub.com/cgi/content/abstract/17/1/70> abstract - [Charles Kemp-click for his talk](#), Griffiths, T. L. & Tenenbaum, J. B. (2004) Discovering latent classes in relational data. [AI Memo 2004-019](#) - [see Part 4 on blocking Alyawarra kin terms](#) Another artificial Intelligence paper that uses the Alyawarra kinship data in ways directly related to the work by Charles Kemp et al. at MIT a few years ago. (2007) [Statistical Predicate Invention](#) (SPI) Stanley Kok + Pedro Domingos WWD. They test SPI using a ten-fold cross-validation on four data sets, one of which is our 142 person Alyawarra kinship data and "then introduced MRC, an approach to SPI based on second-order Markov logic. MRC forms multiple relational clusterings of the symbols in the data and iteratively refines them." The best performance is for the kinship data.

PART 5: Networks and complexity: Middle Eastern clan structure

13. 2005 **Chapter 1: Introduction: Networks, Ethnography and Emergence**. In, [Network Analysis and Ethnographic Problems: Process Models of a Turkish Nomad Clan](#). Douglas R. White & Ulla Johansen. Boston: Lexington Press. [Network Analysis and Ethnographic Problems](#): Wikimedia book summary. [Wikipedia:Network Analysis and Ethnographic Problems](#)
14. 2002 **Navigability of Strong Ties: - Small Worlds, Tie Strength and Network Topology (pdf)**. Douglas R. White & Michael Houseman. [Complexity](#) 8(1):72-81 - [Special Issue](#) - [Santa Fe Institute working papers](#)
15. 2004 **Ring Cohesion Theory in Marriage and Social Networks**. Douglas R. White. [Mathématiques et sciences humaines](#) 43(168):5-28 [Marriage net tools](#). Social Networks special issue edited by Alain Degenne.

PART 6: Kinship structure and marriage cycles

16. 2004 [Matrimonial Ring Structures](#) Klaus Hamberger, Michael Houseman, Isabelle Daillant, Douglas R. White and Laurent Barry. [Mathématiques et sciences humaines](#) 43(168):83-121. [TIPP Kinship and computing](#) replaces: [Marriage net tools](#) - This article has an [interactive graphics page](#)
17. 2011 [Kinship Network Analysis](#). Klaus Hamberger, Michael Houseman, Douglas R. White, Chapter 35: In, John C. Scott and Peter Carrington, (Eds.), Sage Handbook of Social Networks.

PART 7: Breakthroughs in understanding kinship at multiple levels

18. 2001 [P-Systems: A Structural Model for Kinship Studies](#). Frank Harary and Douglas R. White [Connections](#) 24(2):35-46.
19. 2011 [The multilevel networks approach to kinship](#). Douglas R. White. For submission to [Annales Sociologiques](#) as a special issue or published in a book edited by Klaus Hamberger, François Hèran, and Michael Houseman. Chapter 5, special issue: [Penser la Parenté: Méthodes, modèles, debates](#).
20. 2011 [Kinship, Class, and Community](#). Douglas R. White. Chapter 10: In, John C. Scott and Peter Carrington, Eds., Sage Handbook of Social Networks. preprint at P.L.Lazarsfeld Center, Columbia University, alternate pdf
21. 2011 [Social Networks, Cognition and Culture](#). Douglas R. White. Chapter 18, Pp. 331-354, Blackwell Companion to Handbook of Cognitive Anthropology, Table of Contents. Eds. David Kronenfeld, Giovanni Bennardo, Victor De Munch, and Michael Fischer

PART 8: Further ethnographic studies

22. 1971 [Natchez Class and Rank Reconsidered](#). Douglas R. White. (Difference equations, royal/commoner genealogies, prosopography of an Indigenous American nobility, and solution to the historical-demographic Natchez Paradox) Douglas R. White, George P. Murdock, Richard Scaglione. [Ethnology](#) 10:369- 388.
23. 1996 [Les structures réticulaires de la pratique matrimoniale](#) Michael Houseman & Douglas R. White. [L'Homme](#) 139: 59-85.
24. 2009 [Getting Connected: Networks of Kinship and Compadrazgo in rural Tlaxcala, Mexico](#). Michael Schnegg and Douglas R. White. Pp. 37-52, In, [Networks, Resources and Economic Action: Ethnographic Case Studies in Honor of Hartmut Lang](#). Eds. Glemens Greiner and Waltraud Kokot. Dietrich Reimer Verlag Berlin
25. 2010 [Comment "On the Structure of Dravidian Relationship Systems" by Barbosa de Almeida](#). Douglas R. White. [Mathematical Anthropology and Cultural Theory](#) 3(6) art 4: 1-9.