

## CV Andreas Flache – as of February, 2011

### A Short biography

Andreas Flache is currently professor (adjunct-hoogleraar) for sociology, in particular modeling norms and networks, at the sociology department of the Faculty for Behavioral and Social Sciences, at the University of Groningen, The Netherlands. He is also a member of board of the research network ICS (Interuniversity Center for Social Science Theory and Methodology). His main research addresses social integration, cooperation problems, social networks and learning theory. Since 2005 he leads a research project titled “The importance of timing and structure: modeling effects of interpersonal contacts on social cohesion in diverse groups”. This project is financed by the Netherlands Organization of Scientific Research (NWO) based on a grant that Flache received in 2004 in the Innovational Research Incentives Scheme (VIDI). Flache applies agent based computational and game theoretical modeling, laboratory experiments, survey research and network research. He has published in recent years in, e.g., American Journal of Sociology, Journal of Conflict Resolution, Rationality and Society, Journal of Mathematical Sociology, and Proceedings of the National Academy of Sciences. For more information: <http://www.ppsw.rug.nl/~flache>.

### B Personal details

Title(s), initial(s), first name, surname:	prof. dr. Andreas Flache
Male/female:	male
Date and place of birth:	12. 05. 1963, Einbeck, Germany
Nationality:	German

### C Academic Grades and Academic Education

#### C.1 Master's ('Diplom') in Computer Science

University/College of Higher Education:	University of Koblenz-Landau, Germany
Date:	August 1991 ( <i>cum laude</i> )
Master's thesis:	A software tool for the empirical analysis of chaotical dynamics.
Supervisors:	K.G. Troitzsch, J. Ebert (University of Koblenz-Landau).

#### C.2 Doctorate in Social and Behavioral Sciences

University:	University of Groningen
Date:	19 December 1996 ( <i>cum laude</i> )
Supervisor ('Promotor'):	W.B.G. Liebrand (RUG), W. Raub (UU), F.N. Stokman (RUG)

Title of thesis: The double edge of networks. An Analysis of the Effect of Informal Networks on Cooperation in Social Dilemmas.

## D Academic Publications

In terms of ISI impact factors, the most important publications are:

- Mäs, Flache, Helbing. 2010 *PLoS Computational Biology*  
Impact 2010: 5.8
- Flache, Macy 2002. *Journal of Conflict Resolution*.  
Impact 2002: 1.253, ranked 4<sup>th</sup> in Political Sciences.
- Macy, Flache 2002. *Proceedings of the National Academy of Sciences U.S.A.*,  
Impact 2002: 10.7
- Macy, Flache, 2007. *American Journal of Sociology*  
Impact 2005: 3.262, ranked 1<sup>st</sup> in Sociology
- Macy, Flache. 1995. *Annual Review of Sociology*.  
Impact 1998: 2.563, ranked 2<sup>nd</sup> in Sociology.

### D.1 Publications in peer reviewed journals, or in peer reviewed top-proceedings (Artificial Intelligence)

1. **Flache**, A., & Macy, M.W. (forthcoming). Local Convergence and Global Diversity: From Interpersonal to Social Influence. *Journal of Conflict Resolution*.
2. Grow, A. & **Flache**, A. (forthcoming). How attitude certainty tempers the effects of faultlines in demographically diverse teams. *Computational and Mathematical Organization Theory*.
3. **Flache**, A., & Macy, M.W. 2011. "Small Worlds and Cultural Polarization." *Journal of Mathematical Sociology* 35.1. pp. 146. Special triple issue: "Micro-Macro Links and Micro-Foundations". Special issue editors: Marcel A. L. M. van Assen, Vincent Buskens, and Werner Raub.
4. Mäs M, **Flache** A, Helbing D. 2010. "Individualization as Driving Force of Clustering Phenomena in Humans." *PLoS Computational Biology* 6(10): e1000959. doi:10.1371/journal.pcbi.1000959
5. Lambooy, M., A. **Flache**, J. Siegers. 2009. "Shadow of the future, risk aversion and employee cooperation." *Rationality and Society* 21 (3): 307-336.
6. Takacs, K., B. Janky & A. **Flache**. 2008. Collective action and network change. *Social Networks* 30.3:177-189.
7. **Flache**, A, M. Mäs. 2008. How to get the timing right. A computational model of the effects of the timing of contacts on team cohesion in demographically diverse teams. *Computational and Mathematical Organization Theory* 14.1:23-51.
8. **Flache**, A, M. Mäs, 2008. Why do faultlines matter? A computational model of how strong demographic faultlines undermine team cohesion. *Simulation Modelling Practice and Theory* 16.2: 175-191.

9. Back, I., A. **Flache**. 2008. Interpersonal Commitment in an Evolutionary Perspective. *Rationality and Society* 20: 65 – 83.
10. Lambooj, M., **A. Flache**, K. Sanders & J. Siegers. **2007**. Encouraging employees to cooperate. The effects of sponsored training and promotion practices on employees' willingness to work overtime. *The International Journal of Human Resource Management* 18.10: 1748 – 1767.
11. M. Macy, A. **Flache**. **2007**. Reply: Collective Action and the Empirical Content of Stochastic Learning Models. *American Journal of Sociology*<sup>1</sup> 112.5:1546-1554.
12. **Flache**, A., Yamamoto, H. **2006**. The Rational Weakness of Strong Ties: Failure of Group Solidarity in a Highly Cohesive Group of Rational Agents. Translation (in Japanese) of Flache, 2002, JMS. *Sociological Theory and Methods* 21, 1, 131-156.
13. Back, I. and **Flache**, A. **2006**. The Viability of Cooperation Based on Interpersonal Commitment. *Journal of Artificial Societies and Social Simulation*<sup>2</sup> 9(1) <<http://jasss.soc.surrey.ac.uk/9/1/12.html>>.
14. **Flache**, A., M.W. Macy. **2006**. „Bottom-up“ Modelle sozialer Dynamiken. Agentenbasierte Computermodellierung und methodologischer Individualismus. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*, Sonderheft 44/2004 „Methoden der Sozialforschung“:536-559, edited by Diekmann, A.
15. Pujol, J.M., A. **Flache**, J. Delgado, R. Sanguessa. **2005**. How Can Social Networks ever become complex? Modelling the emergence of complex networks from local social exchanges. *Journal of Artificial Societies and Social Simulation*<sup>2</sup> (JASSS) 8(4) <<http://jasss.soc.surrey.ac.uk/8/4/12.html>>.
16. Pujol, J.M., Sanguessa, R., Delgado, J., **A. Flache**. **2005**. The Role of Clustering on the Emergence of Efficient Social Conventions. In Leslie Pack Kaelbling and Alessandro Saffiotti (ed.) Pp. 965-970 in: *Proceedings of the 19th International Joint Conference on Artificial Intelligence*<sup>3</sup>, IJCAI'05 (Edinburgh, Scotland).
17. **Flache**, A. **2004**. How may virtual communication shape cooperation in a work team? A formal model based on social exchange theory. *Analyse & Kritik* 26: 258-278. Special issue on “Trust and Community on the Internet” (Guest editors Lahno, Matzat).
18. **Flache**, A., R. Torenvlied. **2004**. When will they ever make up their minds? The social structure of unstable decision making. *Journal of Mathematical Sociology* 28.3:171-196.

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<sup>1</sup> ranked 1<sup>st</sup> in Sociology

<sup>2</sup> ISI-impact in 2005: 1.061, ranked 10th (of 59) in ISI subcategory Interdisciplinary Social Sciences

<sup>3</sup> In artificial intelligence, a paper in the IJCAI proceedings is considered a top publication. Some references: “IJCAI only accepted around 20% of the papers submitted to it in 2005, making it a more selective publication than many AI journals“. Source:

[http://en.wikipedia.org/wiki/International\\_Joint\\_Conference\\_on\\_Artificial\\_Intelligence](http://en.wikipedia.org/wiki/International_Joint_Conference_on_Artificial_Intelligence), retrieved 17/11/2006. See also <http://www.ntu.edu.sg/home/assourav/crank.htm>. See also

<http://citeseer.ist.psu.edu/impact.html> (IJCAI belongs to top 4.09% of computer science publication venues 2003).

19. Pujol, J.M., **Flache**, A., Sangüesa, R. and Delgado, J. **2004**. Emergence of Complex Networks through Local Optimization. *Proceedings of the 16th European Conference on Artificial Intelligence*<sup>4</sup>. ECAI-04. Valencia, Spain (2004).
20. **Flache**, A. **2003**. 'Je vrienden val je niet af'. De negatieve effecten van informele netwerken op groepssolidariteit in werkgroepen. *Gedrag & Organisatie* 2003-16,3: 179-200.
21. Wittek, R.P.M., **A. Flache**. **2003**. Rational Choice und Organisationstheorie. In: Allmendinger, J., T. Hinz. Organisationssoziologie. *Kölner Zeitschrift für Soziologie und Sozialpsychologie*<sup>3</sup>. Sonderheft 42:55-87.
22. **Flache**, M.W. Macy. **2002**. Stochastic Collusion and the Power Law of Learning: A General Reinforcement Learning Model of Cooperation. *Journal of Conflict Resolution*<sup>5</sup> 46(5):629-653.
23. Macy, M.W., **A. Flache**. **2002**. Learning Dynamics in Social Dilemmas. *Proceedings of the National Academy of Sciences U.S.A*<sup>6</sup>. May 14;99(10):7229-36.
24. **Flache**, A. **2002**. The Rational Weakness of Strong Ties. Failure of Group Solidarity in a Highly Cohesive Group of Rational Agents. *Journal of Mathematical Sociology* 26(3):189-216.
25. **Flache**, A., R. Hegselmann. **2001**. Do Irregular Grids make a Difference? Relaxing the Spatial Regularity Assumption in Cellular Models of Social Dynamics. *Journal of Artificial Societies and Social Simulation* 4 (4).  
<http://jasss.soc.surrey.ac.uk/4/4/6.html>
26. **Flache**, A. **2001**. Individual Risk Preferences and Collective Outcomes in the Evolution of Exchange Networks. *Rationality and Society* 13 (3):304-348.
27. Hegselmann, R., **A. Flache**, **2000**. Rational and Adaptive Playing. A comparative analysis for all possible Prisoner's Dilemmas. pp. 75-97 in: *Analyse & Kritik* 22 (1).
28. **Flache**, A., R. Hegselmann, **1999**. Altruism vs. Self-Interest in Social Support. Computer simulations of social support networks in cellular worlds. In: *Advances in Group Processes* 16:61-97.
29. **Flache**, A., R. Hegselmann, **1999**. Rationality vs. Learning in the Evolution of Solidarity Networks: A Theoretical Comparison. *Computational and Mathematical Organization Theory* 5:2:97-127.
30. Kitts, J., M.W. Macy, **A. Flache**, **1999**. Structural Learning: Conformity and Social Control in Task-Oriented Groups. *Computational and Mathematical Organization Theory* 5:2:129-145.

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<sup>4</sup> In artificial intelligence, a paper in the ECAI proceedings is considered a high-ranking publication. Some references: Acceptance rate van ECAI in 2004: 22.9% according to [http://www.adaptivebox.net/research/bookmark/CICON\\_stat.html#ECAI](http://www.adaptivebox.net/research/bookmark/CICON_stat.html#ECAI) (retrieved 11/17/2006). According to the website of the European Coordinating Committee for Artificial Intelligence, ECAI is considered "the leading conference in its field in Europe" (<http://www.eccai.org/ecai.shtml>).

<sup>5</sup> ranked 4<sup>th</sup> in Political Sciences in 2002

<sup>6</sup> Impact 2002: 10.7

31. Hegselmann, R., **A. Flache**, 1998. Understanding Complex Social Dynamics: A Plea For Cellular Automata Based Modelling. *Journal of Artificial Societies and Social Simulation* 1: <http://www.soc.surrey.ac.uk/JASSS/1/3/1.html>
32. **Flache, A.**, M.W. Macy, 1996. The Weakness of Strong Ties: Collective action failure in a highly cohesive group. *Journal of Mathematical Sociology* 21:3-28.
33. Macy, M.W., **A. Flache**, 1995. Beyond Rationality in Models of Choice. *Annual Review of Sociology*<sup>7</sup> 21:73-91.

## D.2 Books edited or published

34. **Flache A.**, M. Koekkoek. 2009 (eds.). Interventies voor een leefbare wijk. Van Theorie naar Praktijk en terug. Groningen: Van Gorcum.
35. D. Fetchenhauer, **A. Flache**, A.P. Buunk & S. Lindenberg (eds.). 2006. *Solidarity and Prosocial Behavior. An Integration of Sociological and Psychological Perspectives*. Series of Critical Issues in Social Justice (edited by Melvin J. Lerner). New York: Springer Science+Business Media.
36. **Flache, A.** 1996. *The Double Edge of Networks*. Amsterdam: Thesis Publishers.

## D.3 Chapters contributed to books

37. Macy, M.W., D. Centola, **A. Flache**, A. van de Rijt & R. Willer. (forthcoming). Social mechanisms and generative explanations: computational models with double agents. Pp. 250-265 in P. Demeulenaere (ed.). *Analytical Sociology and Social Mechanisms*. Cambridge: Cambridge University Press.
38. Michael Macy, Damon Centola, Andreas Flache, Arnout van de Rijt and Robb Willer. "Social Mechanisms and Generative Explanations: Computational Models with Double Agents." Forthcoming in Pierre Demeulenaere (ed.), *Proceedings of the Sorbonne Conference on Social Mechanisms and Analytic Sociology*, Cambridge University Press.
39. Macy, M.W., **A. Flache**. 2009. Agent Based Modelling: Social Order from the Bottom Up. Pp. 245-268 in Hedström, P. & P. Bearman (eds). *The Oxford Handbook of Analytical Sociology* (Oxford University Press).
40. **Flache, A.**, T.A.B. Snijders. 2008. Die Modellierung komplexer Netzwerke - Zum Nutzen agentenbasierter Modelle in der neuen Netzwerkforschung. Pp. 781-797 in: Rehberg, Karl-Siegbert, Verhandlungsband des 33. DGS-Kongresses "Die Natur der Gesellschaft", Campus-Verlag.
41. Back, I., **A. Flache**. 2007. Why Do We Like To Stay With Our Friends? Modelling the evolutionary dynamics of interpersonal commitment. Pp. 71-82 in: Takahashi, S., Sallach, D., and Rouchier, J. 2007 *Advancing Social Simulation: the First World Congress*. Springer-Verlag New York.

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<sup>7</sup> *Impact* 1998: 2.563, ranked 2<sup>nd</sup> in Sociology.

42. Back, I, A. **Flache**. **2007**. Fairness, Commitment and Inequality. Pp. 1-12 in: Social Simulation: Technologies, Advances and New Discoveries. Edited by Bruce Edmonds, Cesáreo Hernández Iglesias, and Klaus G. Troitzsch. Information Science Reference: Hershey, New York.
43. Lindenberg, S., D. Fetchenhauer, A. Flache & A.P. Buunk. **2006**. Solidarity and Prosocial Behavior: A framing approach. Pp. 3-19 in Fetchenhauer et al 2006. *Solidarity and Prosocial Behavior*.
44. **Flache**, A., Macy, M.W.M, Takács, K. (**2006**). What sustains stable cultural diversity and what undermines it? Axelrod and beyond. Proceedings of the First World Congress on Social Simulation, Kyoto, Japan, vol. 2. Pp. 9-16.
45. Back, I., **Flache**, A. (**2006**). 'Why Do We Like To Stay With Our Friends? Modelling the Evolutionary Dynamics of Interpersonal Commitment.' *Proceedings of the First World Congress on Social Simulation*, Kyoto, Japan, vol. 1: 87-94.
46. **Flache**, A., M.W. Macy. **2006**. Learning and Framing in Social Exchange. Pp 45-59 in Fetchenhauer et al 2006. *Solidarity and Prosocial Behavior*.
47. Van der Vegt, G., A. **Flache**. **2006**. Understanding the Joint Effects of Interdependence and Diversity on Solidarity in Work Teams. Pp 125-137 in Fetchenhauer et al 2006. *Solidarity and Prosocial Behavior*.
48. Sanders, K., A. **Flache**, G. van der Vegt & E. van de Vliert. **2006**. Employees' Organizational Solidarity within Modern Organizations: A Framing Perspective on the Effects of Social Embeddedness. Pp. 141-156 in Fetchenhauer et al 2006. *Solidarity and Prosocial Behavior*.
49. **Flache**, A., Macy, M.W. **2005**. Social Life from the Bottom Up: Agent Modeling and the New Sociology. Pp. 275-302 in: Macal, C.M., D. Sallach, & M.J. North (editors), *Proceedings of the Agent 2004 Conference on Social Dynamics: Interaction, Reflexivity and Emergence*, Chicago: Argonne National Laboratory and The University of Chicago. ISBN 0-9679168-5-2.
50. Back, I., A. **Flache**. **2005**. The Evolution of Cooperation based on Interpersonal Commitment. Pp. 268-279. In: Troitzsch, K.G., *Representing Social Reality. Pre-Proceedings of the Third Conference of the European Social Simulation Association, Koblenz, September 5-9*: Verlag Dietmar Fölbach. ISBN 3-934795-33-1.
51. **Flache**, A. **2004**. Stylized solutions for environmental dilemmas in a cellular world. In: Suleiman, R., D. Budescu, D. Messick, I. Fischer. *Contemporary Psychological Research on Social Dilemmas*. Cambridge:Cambridge University Press. ISBN: 0521808928.
52. Macy, M.W., J. Kitts, A. **Flache**, S. Benard. **2003**. Polarization in Dynamic Networks: A Hopfield model of emergent structure. Pp 162-173 in: Ronald Breiger, Kathleen Carley and Philippa Pattison. *Dynamic Social Network Modelling and Analysis: Workshop Summary and Papers*. Washington: The National Academies Press.

53. **Flache, A. 2002.** De zwakke kant van hechte netwerken. Pp.35-40 in: Hackeng, T., H. Veenhof (eds.). *Over de grenzen van het weten. Jaarboek 2001. Vereniging van Akademie-onderzoekers.* Amsterdam: KNAW.
54. Van Veen, K., **A. Flache**, J. Kratzer, R. Wittek. **2002.** Sociale netwerkanalyse voor kennismanagement: de blinde vlekken van wetenschap en praktijk. Pp. 263-277 in: Van Baalen, P., M. Weggeman, M., A. Witteveen (eds.). 'Kennis en Management'. Schiedam: Scriptum. (in Dutch).
55. Wittek, R. and **A. Flache. 2001.** Solidarität am Arbeitsplatz. Pp. 149-182 in: Bierhoff, H.W. and D. Fetchenhauer (eds.). *Solidarität. Konflikt, Umwelt und Dritte Welt.* Opladen: Leske und Budrich. (in German).
56. **Flache, A.,** M.W. Macy, W. Raub, **2000.** Do company towns solve free rider problems? A sensitivity analysis of a rational-choice explanation. In: Raub, W., J. Weesie (eds.). *The Management of Durable Relations: Theoretical and Empirical Models for Households and Organizations.* Amsterdam: Thela Thesis.
57. Hegselmann, R, **A. Flache**, V. Möller, **2000.** Cellular Automata Models as Modelling Tool. pp. 151-178 in: Suleiman R., K.G. Troitzsch, N. Gilbert (eds.). *Tools and Techniques in for Social Science Simulation.* Heidelberg: Physica.
58. **Flache, A.,** R. Hegselmann **1998.** Rational vs. adaptive egoism in support networks: How different micro foundations shape different macro hypotheses, in: Leinfellner, W., E. Köhler (eds), *Game Theory, Experience, Rationality. Foundations of Social Sciences, Economics and Ethics. In Honor of John C. Harsanyi* [Yearbook of the Institute Vienna Circle 5] 261-275. Dordrecht: Kluwer.
59. **Flache, A. 1992.** Empacs: A Softwaretool for the Empirical Analysis of Chaotic Systems, in: Faulbaum, F. (ed.) *SoftStat '91. Advances in Statistical Software 3* 169-176. Stuttgart: Gustav Fischer.
60. **Flache, A.,** V. Schmidt **1991.** Programmsystem IPMOS - Computersimulation beliebiger Weidlich-Haag-Modelle, in: Kreutz, H., J. Bacher. *Disziplin und Kreativität. Sozialwissenschaftliche Computersimulationen: theoretische Experimente und praktische Anwendung* 160-178. Opladen: Leske+Budrich.
61. **Flache, A.,** V. Schmidt **1990.** IPMOS - A Software Tool for Modeling and Analysis of Interacting Populations, in: Troitzsch, K.G.T, J. Gladitz. *Computer Aided Sociological Research* 339-351. Berlin (Ost): Akademie Verlag.
62. **Flache, A.,** V. Schmidt **1989.** IPMOS - Ein Softwarewerkzeug zur Mikromodellierung und Simulation interagierender Populationen, in: Faulbaum, F., R. Haux, K. Jöckel (Hrsg.) *Softstat '89. Fortschritte der Statistik Software 2, 5. Konferenz über die wissenschaftliche Anwendung von Statistik-Software, Heidelberg, 1989.* 426-433. Stuttgart: Gustav Fischer.

#### D.4 Citation analysis

Based on software PoP, search for “Flache, A” from 1990 to 2009. Areas “Business etc”, “Engineering, Computer Science etc” and “Social Sciences, Arts, Humanities”

Papers:80 Citations:766 Cites/paper: 9.58

h-index: 13

### D.5 Publication projects currently in progress

Blinded to respect anonymity of peer review. Currently (February 2011), Flache (co-) authors 6 papers under review at international peer-reviewed journals or edited volumes, and a further 3 completely drafted working papers in progress for submission.

### D.6 Evaluated research report

**Flache, A., R. Hegselmann 2000.** *Abschlussbericht zum DFG Projekt "Dynamik sozialer Dilemma-Situationen"*. University of Bayreuth, Department of Philosophie (350p).

On basis of this project report, the project was evaluated by external reviewers as “project of high quality that is relevant both for economic and social-philosophical questions”.

The report can be downloaded at:

<http://pe.uni-bayreuth.de/downloads/dfg/index.html>

### D.7 Presentations

#### D.7.1 Selection of presentations as invited speaker since 2002

*This refers to presentations for which traveling costs were covered by inviting institution*

1. Flache, A. **2009**. The complexities of social integration in a diverse society. Invited presentation given at the Complexity-NET ‘Engaging with Social Science’ workshop, 14th-15th January 2009, Gouviuex-Chantilly, France.
2. Flache, A. **2008**. Modeling integration in a diverse society: theoretical and methodological challenges. Invited paper presented at International Workshop on Challenges and Visions in the Social Sciences, ETH Zürich, August 18-23 2008. Organizer: Dirk Helbing.
3. Macy, M.W., Flache, A. **2007**. Agent-Based Modeling. Social Order from the Bottom Up. Invited paper presented at the Nuffield Analytical Sociology Workshop, June 15-16 2007. Nuffield College, Oxford. Host: Prof. Peter Hedstrom.
4. Flache, A. **2007**. Local Convergence and Global Diversity: The Robustness of Cultural Homophily. Invited presentation in Colloquium “Selected Challenges in the Social Sciences: Modeling and Simulation Approaches” at the ETH Zurich, Department of Humanities and Social Sciences, Chair of Sociology, in particular of Modeling and Simulation. Host: Prof. Dirk Helbing. Date: November 13, 2007.
5. Flache, A., T.A.B. Snijders. **2006**. Die Modellierung komplexer Netzwerke Zum Nutzen agentenbasierter Modelle in der neuen Netzwerkforschung. Beitrag zum Plenum Netzwerk-Gesellschaft der Sektion "Modellbildung und Simulation" am 33. Kongreß der Deutschen Gesellschaft für Soziologie in Kassel, 9.-13. Oktober 2006

6. Flache, A. (2006). 'When more contact may undermine intergroup integration. Formal models and (plans for) empirical applications'. Invited presentation at Department for Sociaal-Culturele Wetenschappen. Free University, Amsterdam, October 20, 2006.
7. Flache, A. **2005**. Why Globalized Communication may increase Cultural Polarization. Presentation given at *2005 International Workshop Games, Networks, and Cascades, Cornell Club (NYC)*, October 7-9, 2005.
8. Flache, A. **2005**. Wann ist Kontakt schlecht für soziale Integration? Paper presented in the „Kolloquium Soziologie“, ETH Zürich, June 14, 2005.
9. Flache, A. **2005**. Why the internet may increase global cultural polarization. Paper presented at *Colloquium of the Royal Netherlands Academy of Arts and Sciences (KNAW), on "Trust and Cooperation in Online Interactions"*, Amsterdam, May 2-3, 2005.
10. Flache, A. **2005**. When contact may make things worse. Social integration in diverse groups. Presentation given at given at *Sonderforschungsbereich 504 "Rationality Concepts, Decision Making and Economic Modeling"*, University of Mannheim, February 10, 2005.
11. Flache, A. **2003**. How may virtual communication shape cooperation in a work team? A formal model based on social exchange theory. Invited paper presented at the Zif-Workshop "Trust and Community on the Internet", July 31 – August 2, 2003, Bielefeld, Germany.
12. Flache, A. **2003**. When social control may fail to solve cooperation problems: Theoretical mechanisms and empirical evidence. Invited paper presented at the Japanese European Conference on Social Networks, Utrecht, May 2003.
13. Flache, A. **2003**. Which informal networks foster which organizational solidarity? Invited paper presented at the International Conference on Rational Choice and Social Institutions, Fukuoka, Japan, September 2003.
14. Flache, A. **2002**. When Social Control May Fail to Solve Cooperation Problems. Theoretical Mechanisms and Empirical Evidence. Invited presentation in the section "Solidarity and Social Norms – Models and Mechanisms" at the 31. Kongress der Deutschen Gesellschaft für Soziologie in Leipzig 7.-11. Oktober 2002.
15. Flache, A. **2002**. The weak side of social control. Models and Empirical Evidence. Invited presentation at the NIAS conference "Social Networks, Norms and Solidarity – New Approaches to Cooperation". June 9-11, 2002. Wassenaar, The Netherlands.
16. Flache, A. **2002**. Why Social Cohesion may undermine Collective Action: Models and Experiments. Invited Lecture in *Research on Monday Seminar Series*. May 6, 2002. Faculty of Economics of the Erasmus University Rotterdam and the Tinbergen Institute.

#### **D. 7.2. Recent conference or external presentations**

1. Flache, A., M.W. Macy. 2009. Local convergence and global diversity: from interpersonal to social influence. Paper presented at the Fall Meeting of the Deutsche Gesellschaft für Soziologie in Groningen, Netherlands, September 24-25, 2009.
2. Grow, A., A. Flache. 2009. A faultline model based on self-categorization theory: how uncertainty moderates the effect of demographic faultlines on opinion formation processes in work teams. Paper presented at the Fall Meeting of the Deutsche Gesellschaft für Soziologie in Groningen, Netherlands, September 24-25, 2009.
3. Mäs, M., A. Flache. 2009. The Emergence and Dissemination of Extremism. Paper presented at the Fall Meeting of the Deutsche Gesellschaft für Soziologie in Groningen, Netherlands, September 24-25, 2009.
4. Mäs, M. A. Flache. 2009. "Polarization in Groups with high Demographic Diversity". Presentation at the XXIX International Sunbelt Social Network Conference at San Diego, U.S.A, March 10 to March 15, 2009.
5. Stark, T.H., A. Flache. 2009. "Ethnic Segregation as Unintended Byproduct of Homophily". Presentation at the XXIX International Sunbelt Social Network Conference at San Diego, U.S.A, March 10 to March 15, 2009.
6. Flache, Andreas; Michael W. Macy. 2008. "Local Convergence and Global Diversity: From Interpersonal to Social Influence." Paper presented at 103rd Annual Meeting of the American Sociological Association. Session "Mathematical Sociology". Boston, August 2, 2008.
7. Flache, Andreas; Tobias Stark. 2008. Preference or opportunity? Why do we find more friendship segregation in more heterogeneous schools? Paper presented at 103rd Annual Meeting of the American Sociological Association. Session "Social Networks and Homophily". Boston, August 4, 2008.
8. Mäs, Michael; Andreas Flache and Károly Takács. 2008. "The Bridge over the Faultline. How crisscrossing actors prevent network segregation in diverse work teams". Paper presented at Sunbelt XXVIII International Sunbelt Social Network Conference St. Pete Beach, FL January 22-27, 2008.
9. Stark, Tobias; Michael Mäs; Andreas. 2008. "Homophily and Heterophobia in School Classes". Paper presented at Sunbelt XXVIII International Sunbelt Social Network Conference St. Pete Beach, FL January 22-27, 2008.
10. Flache, Andreas; Tobias Stark. 2008. Preference or opportunity? Why do we find more friendship segregation in more heterogeneous schools? Paper presented at the 7th Workshop on Networks in Economics and Sociology: Dynamic Networks. Organizers: Vincent Buskens, Rense Corten & Stephanie Rosenkranz. Utrecht June 19, 2008.
11. Mäs, Michael; Andreas Flache and Károly Takács. 2008 Faultlines and Polarization. The neglected Effects of Crisscrossing work team members. Paper presented at 2008 Annual Meeting of the Academy of Management. Session "A Faultline Perspective on Diversity in Teams". Anaheim, California, August 11, 2008.
12. Mäs, M. A. Flache. 2007. The later, the better? Modeling effects of relationship timing on social cohesion in demographically diverse teams. Presentation at the XXVII International Sunbelt Social Network Conference at Corfu, Greece, May 2007.

13. Takács, K, A. Flache, M. Mäs. 2007. Network Games of Social Influence. Presentation at the XXVII International Sunbelt Social Network Conference at Corfu, Greece, May 2007.
14. Back, I., A. Flache. 2007. Commitment and Networking under Uncertainty. Poster Presentation at the XXVII International Sunbelt Social Network Conference at Corfu, Greece, May 2007.
15. Flache, A., Macy, M.W. (2006). 'Why more contact may increase cultural polarization'. Paper presented at 101st American Sociological Association Annual Meeting. Session Mathematical Sociology I. Montreal, Canada, August 14.
16. Flache, A. (2006). 'Non-standard micro-assumptions and the robustness of macro-hypotheses: a challenge for rational choice theory?'. Invited presentation at the ICS Symposium Rational Choice Social Research. Empirical Insights, Theoretical Advances and Current Controversies, Groningen, November 10-11, 26.
17. Flache, A. (2006). 'Why more contact may increase cultural polarization'. Invited presentation at QMSS Seminar Networks and Behavior: Statistical Models and Advances in the Theory of Action. Groningen, September 14-15, 2006.
18. Back, I., A. Flache. 2005. The Evolution of Cooperation based on Interpersonal Commitment. Paper presented at the Third Conference of the European Social Simulation Association, Koblenz, September 5-9.

#### **D.8 Research proposals (financed, principal applicant)**

1. Flache, A. **2004**. The importance of timing and structure: modelling effects of interpersonal contacts on social cohesion in diverse groups. Financed research proposal in the Innovational Research Incentives Scheme of the Dutch Science Foundation (NWO). (600 k€).  
*Download: <http://www.ppsw.rug.nl/~flache/vidiFlache2004.pdf>*
2. Flache, A. **2001**. Network embeddedness and group solidarity at work. *Research proposal financed by the Royal Netherlands Academy of Arts and Sciences (KNAW)* (ca. 150 K€).  
*Download: <http://www.ppsw.rug.nl/~flache/knawFlache.pdf>*
3. Flache, A. **1999**. Network embeddedness and group solidarity: when do they come together? Research proposal financed by the Royal Netherlands Academy of Arts and Sciences (KNAW) (ca. 150 K€).  
*Download: <http://www.ppsw.rug.nl/~flache/knawOriginal.pdf>*

## **E Academic career and work experience since graduating**

### **E.1 Academic career**

(per appointment: ft units, tenured term / fixed-term (temporary))

1/1997-5/1999. *Fixed term.* 1.0 fte. Postdoc at the Department for Philosophy, University of Bayreuth, Germany. Research Project: "The dynamics of social-dilemma situations", financed by the German Science Foundation (DFG).

7/1999-7/2002. *Fixed term.* 1.0 fte. Research fellow of the Royal Netherlands Academy of Arts and Sciences, postdoc at the ICS, University of Groningen. Research project: "Network embeddedness and group solidarity: when do they come together?".

7/2002-7/2004. *Fixed term.* 1.0 fte. Senior research fellow of the Royal Netherlands Academy of Arts and Sciences, postdoc at the ICS, University of Groningen. Prolongation of project granted in 7/2002 until 7/2004: "Network embeddedness and group solidarity at work".

7/2004-5/2008. *Tenured term.* 1.0 fte. Assistant professor at the department of sociology, University of Groningen. Promoted to Associate Professor in 2006.

5/2008-*now.* Professor of Sociology (Adjunct Hoogleraar) with particular attention for modeling of norms and networks.

1/2005-*now.* Principal researcher of NWO-VIDI project "The importance of timing and structure: modelling effects of interpersonal contacts on social cohesion in diverse groups."

## **E.2 Research grants**

### **E. 2.1. Grants and fellowships, financed, principal applicant**

1. Research fellowship of the Royal Netherlands Academy of Arts and Sciences 1999-2002, ca. 150 K€.
2. Prolongation research fellowship of the Royal Netherlands Academy of Arts and Sciences 2002-2004, ca. 150 K€.
3. Personal grant to applicant from strategic personnel fund of the faculty of Behavioral and Social Sciences, RUG. 80 K€.
4. NWO-VIDI grant for project "The importance of timing and structure: modeling effects of interpersonal contacts on social cohesion in diverse groups." 2005-2009. 600k€.

### **E.2.2. Further research proposals as principal applicant or leading author**

1. Grant-proposal for Ph.D. project at NWO-PROO: Computersimulation of ethnical segregation. With R. Veenstra. Submitted application round 2004 – file number 411-04-603. Evaluation "A". Not financed.
2. Flache, A. 2002. "The Evolution of Social Rationality". Grant-proposal for single Ph.D. project in NWO programme "Evolution and Behaviour" - file number: 051-12-037 (main applicant Lindenberg, co-applicants Flache, Macy, De Vos, Buskens). Positively evaluated in preselection. Not financed.
3. Flache, A. 2002. "Solidarity at work and informal networks within semi-virtual

teams”. Grant-proposal for Ph.D. project in NWO programme “*Society and ICT*” (MES) – file number: 014-43-722 (main applicant Wittek, co-applicants Flache, De Vos, Matzat). Positively evaluated in preselection. Not financed.

### **E 2.3 Co-authorship of financed research proposals (selected)**

1. Graduate Programme Application Interuniversity Center for Social Science Theory and Methodology (ICS) – 2009. Principal applicant: Rafael Wittek. (ca. 800 K€)
2. Grant for subproject within project grant acquired via the ISW from the GOW (Gezamenlijk overleg wonigbouw corporaties Arnhem), together with Roel Bosker. Title of the subproject: School politics and the ethnic integration within dutch secondary schools. (ca 200 k€ for subproject, 4 year Ph.D. position). Principal applicant of overarching project: Karin van Oudenhoven-van der Zee.

### **E.3 Supervision of Ph.D. projects**

Since 2000, member of supervision committee of 8 Ph.D. projects in the ICS program with substantial share of daily supervision in all projects, main advisor in 4 projects (Back, Mäs, Stark, Munniksma). 3 supervised Ph. D. projects have been successfully completed at this point. *The status “promotor” was in these cases not eligible because Flache did not have the ius promovendi at that time.*

*Supervised Ph.D. theses successfully defended:*

Back, I. **2007**. ‘Evolution and Commitment’. Promotor: Snijders, Copromotors: **Flache**, De Vos. Defended September 17 at University of Groningen.

Lambooij, Mattijs. **2005**. "Promoting cooperation. Studies into the effects of long-term and short-term rewards on cooperation of employees". Defended November 22, **2005**, at Utrecht University. Promotors Sanders, Siegers, Copromotors: **Flache**, Van Emmerik).

Smaniotto, R. C. **2004**. ‘You scratch my back and I scratch yours versus Love thy neighbour’. Defended November 11 at University of Groningen. (Promotors: Stokman, Buunk, Copromotors: De Vos, **Flache**

Takacs, K. **2002**. ‘Social Networks and Intergroup Conflict’. Defended May 30, University of Groningen. Promotors: Stokman, Liebrand. Copromotors: Popping, **Flache**.

*Supervised Ph.D. projects not yet completed:*

Grow, A. (started in 2009, supervision as co-promotor). “Status Competition: Blessing or Curse?” Promotors: Wittek, Flache.

Munniksmä, A. (started in 2008). "The Influence of Parents on their Children's Intra- and Interethnic Relationships" Promotors: Flache, Veenstra, Verkuyten.

Stark, T. (started in September 2006). 'School policies and ethnic integration within dutch secondary schools. Promotors: Bosker, Copromotors: Flache, Veenstra. Project externally financed via the ISW – Instituut voor Sociale Weerbaarheid.

Mäs, M. (started in 2005). 'Timing and Structure of Contacts in Culturally Diverse Groups'. Promotors: Wittek, Raub, Copromotors: Flache, Takacs.

#### **E.4 Further (International) activities**

##### **E.4.1 Research visits**

1993 Kellogg Graduate School of Management, Northwestern University, Evanston, Illinois. 2 Month. Host: Prof. David Messick.

1994 Department of Sociology, Brandeis University, Waltham, Massachusetts. 3 Month. Host: Prof. M.W. Macy.

1996 CNR, Department of Cognitive Sciences, University of Rome. 1 Month. Host: Prof. R. Conte.

2001 Department of Sociology, Cornell University, Ithaca, N.Y. 3 Month. Host: Prof. M.W. Macy

2004 Department of Sociology, Cornell University, Ithaca, N.Y. 2 Weeks. Host: Prof. M.W. Macy, 2 weeks

2005. University of Mannheim, Sonderforschungsbereich 504 "Rationality Concepts, Decision Making and Economic Modeling", Host: V. Stocke (U Mannheim). 1 week.

2005 Department of Sociology, Cornell University, Ithaca, N.Y. 3 Weeks. Host: Prof. M.W. Macy.

2010 Invited for 1-month research visit (January) to the Department of Sociology, Modelling and Simulation at ETH Zürich, Switzerland.

##### **E.4.2. Research visits of international guests hosted by Flache**

2003 Ma. J. Pujol, University of Barcelona, Artificial Intelligence Department. 6 month.

2003 Prof. Macy, Cornell University. 3 month.

2002 Prof. Macy, Cornell University. 0.5 month.

#### **E.5 Memberships of committees, editorships, etc.**

##### **E.5.1. International**

- Organizer of the fall meeting of the Section on Modelbuilding and Simulation of the German Sociological Association (DFG), held in Groningen, 24/25 September 2009.
- Member of program committee of Fifth ESSA Conference (European Social Simulation Association), to be held in 2008.
- Council member of Section Rationality & Society of American Sociological Association (ASA), 2006-2008.
- Member of Award Committee for Best Paper Award – Mathematical Sociology Section of the American Sociological Association - 2007
- Member of program committee of M2M 2007 - Third International Model-to-Model Workshop (M2M 2007) - Marseille, France, 2-3 April, 2007.
- Member of program committee of Fourth ESSA Conference (European Social Simulation Association), to be held in Toulouse, France, September, 10-14, 2007
- Member of Program Committee of WCSS06 - First World Conference on Social Simulation, in Kyoto, Japan, August 21-25, 2006.
- Member of program committee of 2 workshops on “Epistemological Perspectives on Simulation” (EPOS), Koblenz, Germany (2004) and Brescia, Italy (fall 2006).
- Member of organizational committee and program committee of the *First Conference of the European Social Simulation Association*. Groningen, The Netherlands, September 18-21, 2003. Together with: Jager, W., Zoethout, K. (RUG), Janssen M., Indiana University.
- Organizer *First International Workshop on Solidarity and Prosocial Dispositions*, Schiermonnikoog, The Netherlands, March 2002. Together with Veenstra, R. (RUG).
- Associate editor *Advances in Complex Systems* (World Scientific), since 2007.
- Member editorial board *Journal of Artificial Societies and Social Simulation* since 2001.
- Reviewer for international peer reviewed journals  
American Journal of Sociology, Sociology of Education, Rationality and Society, Journal of Mathematical Sociology, Journal of Mathematical Psychology, Journal of Artificial Societies and Social Simulation, SCS Transactions - Applications of Modeling and Computer Simulation, Social Networks, Sociological Methods & Research, Kölner Zeitschrift für Soziologie und Sozialpsychologie, European Sociological Review, Computational and Mathematical Organization Theory.
- Reviewer for grant applications  
NWO, Swiss National Science Foundation, Israel Science Foundation (ISF)

#### **E. 5.2. National and local**

- Member of the Board of Directors of the Interuniversity Research School ICS – Interuniversity Center for Social Science Theory and Methodology

- Member of ISW – “Instituut voor Integratie en Sociale Weerbaarheid – Maatschappelijk Topinstituut”, at University of Groningen.
- Member of programme committee for NWO-programme “Dynamization of Innovation”.
- Member of preselection committee for NWO Open Competition 2<sup>nd</sup> round 2009.
- Member of “Onderwijscommissie Sociologie”.
- Member “Structuurcommissie hoogleraar sociologie” (succession Tom Snijders).
- Member “Structuurcommissie hoogleraar sociologie” (2009).

### **E.6 Invited External workshops**

1. Instructor Workshop “Agent-based modeling in the Social Sciences”, taught at the University of Mannheim, Graduate School of Economic & Social Sciences (GESS), Germany, **2009**.
2. Flache, A. **2005**. Workshop “Learning dynamics in social dilemmas” given at Sonderforschungsbereich 504 "Rationality Concepts, Decision Making and Economic Modeling", University of Mannheim, February 9, 2005.
3. Flache, A. **2004**. Lecture on “Social Multi-agent systems and decision dynamics” at First International Winterschool on Physics of socio-economic systems. Konstanz, Germany, February 20, 2004. Organizer: Prof. Frank Schweitzer.

## **F Teaching experience**

### **F.1 Courses taught and / or developed**

*Department of Sociology, University of Groningen:*

**2009**. Coordination and Teaching of Course “onderzoeksproject” (10 EC).

**2008-2009**: Coordination and teaching (with Steglich and Knol) of renewed course “Statistiek 1” (BA, 5EC). Coordination and teaching of module “Beschrijvende statistiek” (semester 1a).

**2006 -2009**: Participation in teaching and coordination of sociology stream in **research master** “Human Behavior in Social Contexts”.

Participation in teaching of 4 research master courses:

- “Organizations”
- “Organizations Research practical”
- “Theory and Model building” (teacher (with Buskens and Raub) and local coordinator)

- “Introduction Human Behavior in Social Contexts – Sociology”

**2003-2009:** Development and teaching of obligatory course “Application of theories”, 5EC, 2<sup>nd</sup> year bachelor. (2003-2006 with drs. D.A. Elsas)

**2004:** Development and teaching of obligatory course “Model building in the social sciences”, 6EC, 3<sup>rd</sup> year bachelor, course in research specialization. (with dr. C.E.G. Steglich)

**2002:** Development and teaching of interactive course “computer simulation of cooperation and conflict” (ca. 5EC).

**2001:** Coordination, further development of overall project and teaching (tutor) of project group in first year project “Tussen geld en geluk” (ca. 5EC) (with ma. Smaniotto and dr. Van Bruggen)

**2000:** Coordination, further development and teaching of project group (tutor) in first year project “Tussen geld en geluk” (ca 6EC) (with ma. Smaniotto)

**1999:** Participation (tutor) in teaching of the 1<sup>st</sup> year project "Tussen geld en geluk".

**1999:** Teaching and development of a two-week course modul in the 2<sup>nd</sup> year MTV-course "The systematic elaboration of theories on behavior", together with prof. Lindenberg and prof. Stokman.

**1993, 1994, 1995:** Teaching and development of „Game theory“ component and „practicals“ in the course „Sociological Theories and Methods “ (dr. H. de Vos).

**1993, 1994:** Participation in teaching of the Course „Theory Construction, Model Building and Network Analysis“ (prof. Lindenberg and prof. Stokman).

**1992:** Assistance in teaching of the Course „Introduction into Methods and Techniques“ (prof. Stokman).

*Department of Philosophy, University of Bayreuth:*

Development and Teaching of undergraduate courses (Proseminar, about 14 weeks, 2 hours per week):

**Winter 1998/1999:** Computermodelle der Kooperation (Computer models of co-operation).

**Summer 1998:** Anarchie und Kooperation: Michael Taylors Analyse kollektiven Handelns (Anarchy and co-operation: Michael Taylor’s analysis of collective action).

**Winter 1997/98:** Rationales Entscheiden (Rational decision making).

**Summer 1997:** Kollektives Handeln. Theorien und Computersimulationen (Collective Action: theories and computer simulations).

**Winter 1996/1997:** Soziale Netzwerke und Kooperation (Social networks and co-operation).

## **F.2 Masters thesis supervision**

1. Kim Steenbergen. 2009. Buren: waakzaam of wantrouwend? (referent)
2. Irene Permentier. 2009. Aanpassing mét grenzen. Hoe bevordert de timing van contact de eensgezindheid en samenwerking in een groep? (referent)

3. Coby van Niejenhuis. 2009. Beeldvorming en buitenschoolse activiteiten. (referent)
4. Johanneke Roseboom. 2008. Woonservicegebieden: grijs of gekleurd? Een onderzoek naar Turkse en Marokkaanse ouderen.
5. Willem Vos. 2008. Hoe zwart-wit is de schoolkeuze? Begeleider.
6. Nadia Lambertus. 2008. De organisatie als mozaïek van culturen. Onderzoek naar organisatieklimaat en acculturatie van allochtone medewerkers bij de Rijksoverheid (Referent).
7. Marion Beijer. 2008. Ingrijpen in pesten. Wat zorgt ervoor dat kinderen wel of niet ingrijpen. Referent.
8. De Vries, E. Completed in 2007. Altruïsme bestaat niet. Waarom doen mensen vrijwilligerswerk? Second advisor, also for traineeship.
9. Kruis, G. Completed in 2007. Religiositeit en vriendschapsvoorkeuren van allochtone kinderen. Second advisor, also for traineeship.
10. Bolks, J. Completed 2006. Bekend maakt bemind? Een exploratief onderzoek naar de rol van twee Arnhemse basisscholen in het sociale segregatieproces. Main advisor.
11. Vreeling, A. Completed 2006. Inburgeraars en Mensbeelden. Tussen homo economicus en Homo Sociologicus. Main advisor, also for traineeship.
12. Voorthuis, M. Completed 2006. Waarom geven mensen fooien? Second advisor.
13. Dijkstra, L.J. Completed 2005. Micro integration at a university. Main advisor, also for traineeship.
14. Nes, R. van. Completed 2004. Kortdurend ziekteverzuim binnen de Koninklijke Landmacht. Main advisor.
15. Dijkstra, E. Completed 2003. Solidair Gedrag in een Projectorganisatie. Main advisor.
16. Lafeber, J. Completed 2003. Segregatie op Basisscholen. Main advisor.
17. Meerman, S te. Completed 2002. De rol van informele netwerken in de Nederlandse Linux gebruikers gemeenschap. (main advisor).