

**David O'Sullivan**

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**Refereed journal articles**

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- O'Sullivan, D. Accepted. Changing neighborhoods—neighborhoods changing: A framework for spatially explicit agent-based models of social systems. *Sociological Methods and Research*.
- Manson, S. M. and D. O'Sullivan. 2006. Complexity theory in the study of space and place. *Environment and Planning A*, **38**(4), 677–92.
- O'Sullivan, D., J. P. Messina, S. M. Manson and T. W. Crawford. 2006. Space, place, and complexity science. *Environment and Planning A*, **38**(4), 611–17.
- Crawford, T. W., J. P. Messina, S. M. Manson and D. O'Sullivan. 2005. Complexity science, complex systems, and land-use research. *Environment and Planning B: Planning & Design*, **32**(5), 792–98.
- O'Sullivan, D. 2004. Complexity science and human geography. *Transactions of the Institute of British Geographers*, **29**(3), 282–95.
- O'Sullivan, D. 2002. Toward micro-scale spatial modelling of gentrification. *Journal of Geographical Systems*, **4**(3), 251–74.
- O'Sullivan, D. 2001. Graph-cellular automata: a generalised discrete urban and regional model. *Environment and Planning B: Planning & Design*, **28**(5), 687–705.
- Haklay, M., T. Schelhorn, D. O'Sullivan and M. Thurstain-Goodwin. 2001. "So go down town": Simulating pedestrian movement in town centres. *Environment and Planning B: Planning & Design*, **28**(3), 343–59.
- Torrens, P. T. and D. O'Sullivan, 2001. Cellular automata and urban simulation: where do we go from here? *Environment and Planning B: Planning & Design*, **28**(2), 163–68.
- O'Sullivan, D. 2001. Exploring spatial process dynamics using irregular cellular automaton models. *Geographical Analysis*, **33**(1), 1–18.
- O'Sullivan, D. and M. Haklay. 2000. Agent-based models and individualism: is the world agent-based? *Environment and Planning A*, **32**(8), 1409–25.

**Book chapters and refereed proceedings volumes**

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- O'Sullivan, D. 2004. Too much of the wrong kind of data: implications for the practice of micro-scale spatial modelling. In Goodchild and Janelle (eds), *Spatially Integrated Social Science: Examples of Best Practice* (Oxford University Press: Oxford), 95–107.
- O'Sullivan, D., J. R. Macgill and C. Yu. 2003. Agent-based residential segregation: a hierarchically structured spatial model. In Macal, North and Sallach (eds), *Agent 2003: Challenges in Social Simulation*, 493–507 (Argonne National Laboratory: Chicago).
- O'Sullivan, D. 2002. Understanding the difference that space can make: toward a geographical agent modeling environment. In Macal and Sallach (eds), *Agent 2002: Ecology, Exchange, and Evolution*, 13–25 (Argonne National Laboratory: Chicago).
- O'Sullivan, D. and P. M. Torrens. 2001. Cellular models of urban systems. In S. Bandini and T. Worsch (eds), *Theoretical and Practical Issues on Cellular Automata*, Proceedings of the 4th International Conference on Cellular Automata for Research and Industry (ACRI 2000), October 4–6, Karlsruhe, Germany (Springer-Verlag: London), 108–16.

**Invited presentations**

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- 2006 Dynamic spatial models of urban processes. *World University Network Global GIS Academy Virtual Seminar Series*, e-seminar, December 13/14.
- 2005 Simulating urban dynamics. Presented to New Zealand Geographical Society, Old Government House, Auckland, New Zealand, October 12.

- Simulating urban neighbourhood change. Presented to University of Canterbury, Department of Geography, Seminar Series. Christchurch, New Zealand, September 14.
- Simulating urban neighbourhood dynamics. Presented to University of Melbourne, Department of Geomatics, Seminar Series. Melbourne, Australia, August 11.
- 2004 Schelling bound and unbound: modeling residential segregation with complex spatial structure. Presented to *Complex Systems Advanced Academic Workshop* at Center for the Study of Complex Systems, University of Michigan, Ann Arbor, MI, March 11.
- 2003 The geography of complexity: learning from models of gentrification. Presented to Center for the Study of Complex Systems, University of Michigan, Ann Arbor MI, March 13.

### **Other Presentations (by self except as indicated \*)**

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- 2006 (with T. Clephane and R. Amor) 2006. Integrating agent models and GIS: towards an extensible open source solution. *International Geographical Union 2006*, Queensland University of Technology, Brisbane, Aust., Jul 3–7.
- 2005 (with J. R. Macgill) Impacts of neighbourhood scale on the dynamics of segregation. *SIRC 2005: 17<sup>th</sup> Annual Colloquium of the Spatial Information Research Centre*, University of Otago, Dunedin, New Zealand, Nov 24–25.
- (with G. L. W. Perry and J. D. A. Millington\*) Science Fictions: Narrative as a tool for model-based research. *Annual Conference of the Royal Geographical Society with the Institute of British Geographers*, Royal Geographical Society, London, Aug 31 – Sep 2.
- (with M. Haklay\*) Complexity science in geography: understanding the limits of narratives. *Annual Conference of the Royal Geographical Society with the Institute of British Geographers*, Royal Geographical Society, London, Aug 31 – Sep 2.
- (with J. R. Macgill) Modelling urban residential neighbourhood dynamics. *EXYSTENCE Workshop on Modelling Urban Social Dynamics*, University of Sussex, Guilford, UK, Apr 7–8.
- 2003 (with J. R. Macgill and C. Yu) Agent-based residential segregation: a hierarchically structured spatial model. *Agent 2003*, University of Chicago, Argonne National Laboratory, Oct 2–4
- Complexity science and human geography. *99<sup>th</sup> Annual Meeting of the Association of American Geographers*, New Orleans, LA, Mar 5–8.
- 2002 Understanding the difference that space can make: toward a geographical agent modeling environment. *Agent 2002*, University of Chicago, Argonne National Laboratory, Oct 10–12.
- What about people in geographic information science? *GIScience 2002*, University of Colorado at Boulder, Sep 25–28
- 2001 Toward micro-scale modeling of gentrification in relational spaces. *97<sup>th</sup> Annual Meeting of the Association of American Geographers*, New York City, NY, Feb 27–Mar 3.
- 2000 (with P. M. Torrens\*) Cities, cells and complexity: developing a research agenda for urban geocomputation. *Geocomputation 2000*, University of Greenwich, London, Aug 25–28.

### **Related workshop, conference activities**

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- 2007 Program Committee, International Workshop on Social Space and Geographic Space, Melbourne, Australia
- 2006–07 Program Committee, International Cartographic Association Workshops on Geospatial Analysis and Modeling (2 events)
- 2004–05 Program Committee EU funded *EXYSTENCE Workshop on Modelling Urban Social Dynamics*, University of Sussex, Guilford, UK.
- Apr 2004 Co-organiser with S. M. Manson, J. P. Messina and T. W. Crawford of two paper sessions on ‘Geographical Perspectives on Complexity’ at the 100<sup>th</sup> Annual Meeting of the Association of American Geographers, March 2004.
- Oct 2000 Co-organiser with P. M. Torrens, Workshop on ‘Urban Cellular Automata: Where Are We Now?’ Centre for Advanced Spatial Analysis, University College London.