Bibliography

[1] Zhuang Zhi. Book XIV part II section VII the revolution of heaven. Quoted in Prigogine and Stengers [142] when describing the "spontaneous and self-organising world" of science in the Chinese tradition. Available at: http://nothingistic.org/library/chuangtzu/chuang20.html (Last accessed 01/07/06).

[2] C. Rothermel. A mathematical model for predicting fire spread in wildland fuels. Technical report, United States Department of Agriculture, Forest Service, January 1972 1972. INT-115.

[3] E. Pastor, L. Zarate, E. Planas, and J. Arnaldos. Mathematical models and calculation systems for the study of wildland fire behaviour. *Progress in Energy and Combustion Science*, 29(2):139–153, 2003.

[4] Phil Cheney, Jim Gould, and W. R. Catchpole. The influence of fuel, weather and fire shape variables on fire-spread in grasslands. *International Journal of Wildland Fire*, 3(1):31–44, 1993.

[5] D. X. Viegas, P. R. Ribiero, and L. Maricato. An empirical model for the spread of a fireline inclined in relation to the slope gradient or to wind direction. In *Fourteenth Conference on Fire and Forest Meteorology*, volume 1, pages 325–342, 1998.

[6] D. X. Viegas. Weather, fuel status and fire occurrence: Predicting large fires. In J. M. Moreno, editor, *Large Forest Fires*, pages 31–48. Backbuys Publishers, Leiden, The Netherlands, 1998.

[7] D. X. Viegas. Forest fire propagation. *Philosophical Transactions: Mathematical, Physical and Engineering Sciences*, 356(1748):2907 – 2928, 1998.

[8] Domingos Xavier Viegas. Fire line rotation as a mechanism for fire spread on a uniform slope. *International Journal of Wildland Fire*, 11:11–23, 2002.

[9] Domingos X. Viegas. Slope and wind effects on fire propagation. *International Journal of Wildland Fire*, 13:143–156, 2004.

[10] Phil Cheney, Jim Gould, and Lachie McCaw. Bushfire behaviour and management: Project vesta, 2001 2001. http://www.ffp.csiro.au/nfm/fbm/vesta/, last accessed 23/02/2005.

[11] Keith C. Clarke, James A. Brass, and Philip J. Riggan. A cellular automaton model of wildfire propagation and extinction. *Photogrammetric Engineering & Remote Sensing*, 60(11):1355–1367, 1994.

[12] Stephen G Berjak and John W Hearne. An improved cellular automaton model for simulating fire in a spatially heterogeneous savanna system. *Ecological Modelling*, 148:133–151, 2002.

[13] W. W. Hargrove, R. H. Gardner, M. G. Turner, W. H. Romme, and D. G. Despain. Simulating fire patterns in heterogeneous landscapes. *Ecological Modelling*, 135(2-3):243–263, 2000.

[14] Andrew Sullivan and Ian Knight. A hybrid cellular automata/semi-physical model of fire growth. In *Asia-Pacific Conference on Complex Systems*, Cairns, 2004.

[15] Lewis Ntaimo, Bernard P. Zeigler, Maria J. Vasconcelos, and Bithika Khargharia. Forest fire spread and suppression in DEVS. *Simulation*, 80(10):479–500, 2004.

[16] Alexandre Muzy and Gabriel Wainer. Cell-DEVS quantization techniques in a fire spreading application. In *The 2002 Winter Simulation Conference*, pages 542–549, 2002.

[17] A . Muzy, G. Wainer, E. Innocenti, A. Aiello, and J. F. Santucci. Comparing simulation methods for fire spreading across a fuel bed. In *AIS*, 2002.

[18] A. M. G. Lopes, M. G. Cruz, and D. X. Viegas. Firestation — an integrated software system for the numerical simulation of fire spread on complex topography. *Environmental Modelling and Software*, 17(3):269–285, 2002.

[19] Javier Ameghino, Alejandro Troccoli, and Gabriel Wainer. Models of complex physical systems using Cell-DEVS. In *34th Annual Simulation Symposium*, pages 266–275, 2001.

[20] Stephen Wolfram. Minimal cellular automaton approximations to continuum systems. In Stephen Wolfram, editor, *Cellular Automata and Complexity: collected papers*. Addison-Wesley, 1994.

[21] Norman Margolus, Tommaso Toffoli, and Grard Vichniac. Cellular-automata supercomputers for fluid-dynamics modeling. *Phys. Rev. Lett.*, 56:1694–1696, 1986.

[22] Bernard P. Zeigler, Herbert Praehofer, and Tag Gon Kim. *Theory of Modelling and Simulation*. Academic Press, 2 edition, 2000.

[23] R. Craig, B. Heath, N. Raisbeck-Brown, M. Steber, Marsden J., and R. Smith. The distribution, extent and seasonality of large fires in australia, april 1998-march 2000, as mapped from noaa-avhrr imagery. In *Australian fire regimes: contemporary patterns (April 1998 - March 2000) and changes since European*

settlement, Australia State of the Environment Second Technical Paper Series (Biodiversity). Department of the Environment and Heritage, Canberra, 2002. (Available at: http://www.ea.gov.au/soe/techpapers/index.html, last accessed 26/12/2005).

[24] Terry L. Clark, Janice Coen, and Don Latham. Description of a coupled atmosphere-fire model. *International Journal of Wildland Fire*, 13:49–63, 2004.

[25] J. L. Coen. Simulation of wildfire incidents using couple atmosphere-fire modeling. In *5th Symp. Fire & Forest Meteor./2nd Intl. Wildland Fire Ecology and Fire Management Congress*, Orlando, 2003.

[26] J.L. Coen. Simulation of the big elk wildfire using coupled atmosphere-fire modeling. *International Journal of Wildland Fire*, 14:49–59, 2005.

[27] Rodman Linn, Jon Reisner, Jonah J. Colman, and Judith Winterkamp. Studying wildfire behaviour using FIRETEC. *International Journal of Wildland Fire*, 11:233–246, 2002.

[28] A Brandt. Multiscale scientific computation: Review 2001. *Multiscale and Multiresolution Methods: Theory and Applications*, 20:3–96, 2001.

[29] P. Johnston, G. Milne, and J. Kelso. A heat transfer simulation model for wildfire spread. In Viegas D. X., editor, *V Interational Conference on Forest Fire Research*, Portugal, 2006. (to appear).

[30] John von Neumann. *Theory of Self-Reproducing Automata*. University of Illinois Press, 1966. Available online at: http://www.walenz.org/vonNeumann/, last accessed 15/03/2006.

[31] E. F. Codd. *Cellular Automata*. ACM Monograph Series, 1968.

[32] G. J. Milne. CIRCAL: A calculus for circuit description integration. *VLSI Journal*, 1(2 and 3), 1983.

[33] G. J. Milne and R. Milner. Concurrent processes and their syntax. *ACM*, 26(2), 1983.

[34] G. J. Milne. Circal and the representation of communication, concurrency, and time. *ACM Trans. on Programming Languages and Systems*, 7(2):270–298, 1985.

[35] G. J. Milne. *Formal Verification and Specification of Digital Systems*. McGraw-Hill International, 1994.

[36] Bastien Chopard and Michel Droz. *Cellular Automata Modeling of Physical Systems*. Monographs and Texts in Statistical Physics. Cambridge University Press, 1998.

[37] Stephen Wolfram. Statistical mechanics of cellular automata. *Rev. Mod. Phys.*, 55:601–644, 1983.

[38] Stephen Wolfram. Computation theory of cellular automata. *Communications in Mathematical Physics (Historical Archive)*, 96(1):15–57, 1984.

[39] Henryk Fukś and Nino Boccara. Generalized deterministic traffic rules. *Int. J. Mod. Phys. C*, 9:1–12, 1998.

[40] U. Frisch, B. Hasslacher, and Y. Pomeau. Lattice-gas automata for the Navier-Stokes equation. *Phys. Rev. Lett.*, 56(14):1505–1508, 1986.

[41] J. Hardy, O. de Pazzis, and Y. Pomeau. Molecular dynamics of a classical lattice gas: Transport properties and time correlation functions. *Phys. Rev. A*, 13(5):1949–1961, 1976.

[42] C. A. R. Hoare. Communicating sequential processes. *Commun. ACM*, 21(8):666–677, 1978.

[43] R. Milner. *Communication and Concurrency*. Prentice Hall International Series in Computer Science. Prentice Hall, 1989.

[44] G. J. Milne and R. Milner. Concurrent processes and their syntax. *Journals of the ACM*, 26(2):302–321, 1979.

[45] G. J. Milne. The formal description and verification of hardware timing. *IEEE Transactions on Computers*, 40(7):711–826, 1991.

[46] Antonio Cerone and George J. Milne. A methodology for the formal analysis of asynchronous micropipelines. In *Proceedings of the Third International Conference on Formal Methods in Computer-Aided Design*, pages 246–262. Springer-Verlag, 2000.

[47] Joel Kelso and George Milne. Properties as processes: Their specification and verification. *Lecture Notes in Computer Science*, pages 503–517, 2005.

[48] Joel Kelso. Soundness of the concurrent composition property checking technique. Technical Report UWA-CSSE-05-003, The University of Western Australia, July 2005.

[49] Craig Chandler, Phillip Cheney, Philip Thomas, Louis Trabaud, and Dave Williams. *Forest Fire Behaviour and Effects*, volume 1 of *Fire in Forestry*. John Wiley and Sons, New York, 1983.

[50] Patricia L. Andrews and Collin D. Bevins. BehavePlus fire modelling system, version 2: overview. Technical report, USDA Fire Service, Rocky Mountain Research Station, November 2003 2003.

[51] Ronald J. McCormick, Thomas A. Brandner, and Timothy F. H. Allen. Towards a theory of meso-scale wildfire modeling — a complex systems approach using artificial neural networks. Technical report, University of Wisconsin-Madison.

[52] Ronald J. McCormick. On developing a meso-theoretical viewpoint of complex systems by exploring the use of artificial neural networks in modeling wildfires, August 2002 2002. Presented at ForestSAT Symposium, Heriot Watt University, Edinburgh.

[53] D. G. Green. Simulated effects of fire, dispersal and spatial pattern on competition within forest mosaics. *Vegetatio*, 82:139–153, 1989.

[54] Terry L. Clark, Mary Ann Jenkins, Janice Coen, and David Packham. A coupled atmosphere-fire model: Role of the convective froude number and dynamic fingering at the fireline. *International Journal of Wildland Fire*, 6(4):177–190, 1996.

[55] Gwynfor D Richards. An elliptical growth model of forest fire fronts and its numerical solution. *International Journal for Numerical Methods in Engineering*, 30(6):1163–1179, 1990.

[56] Ian Knight and John Coleman. A fire perimeter expansion algorithm based on huygen's wave propagation. *International Journal of Wildland Fire*, 3(2):73–84, 1993.

[57] Gwynfor D. Richards and Robert W. Bryce. A computer algorithm for simulating the spread of wildland fire perimeters for heterogeneous fuel and meteorological conditions. *International Journal of Wildland Fire*, 5(2):73–79, 1995.

[58] Gwynfor D. Richards. A general mathematical framework for modelling two-dimensional wildland fire spread. *International Journal of Wildland Fire*, 5(2):63–72, 1995.

[59] Mark A. Finney. FARSITE: fire area simulator — model development and evaluation. Technical report, United States Department of Agriculture Forest Service, Rocky Mountain Research Station, 1998 1998. Research Paper RMRS-RP-4 Revised.

[60] Ioannis Karafyllidis and Adonios Thanailakis. A model for predicting forest fire spreading using cellular automata. *Ecological Modelling*, 99(1):87–97, 1997.

[61] J. H. Balbi, P. A. Santoni, and J. L. Dupuy. Dynamic modelling of fire spread across a fuel bed. *International Journal of Wildland Fire*, 9(4):275–284, 1999.

[62] P. A. Santoni, J. H. Balbi, and J. L. Dupuy. Dynamic modelling of upslope fire growth. *International Journal of Wildland Fire*, 9(4):285–292, 1999.

[63] Xiaodong Li and William Magill. Modeling fire spread under environmental influence using a cellular automaton approach. *Complexity International*, 8, 2001.

[64] Giuseppe A. Trunfio. Predicting wildfire spreading through a hexagonal cellular automata model. *Lecture Notes in Computer Science*, pages 385–394, 2004.

[65] Zhang Yongzhong, Z.-D. Feng, Han Tao, Wu Liyu, Li Kegong, and Duan Xin. Simulating wildfire spreading processes in a spatially heterogeneous landscapes using an improved cellular automaton model. In *IGARSS 2004. 2004 IEEE International Geoscience and Remote Sensing, 20-24 Sept. 2004*, volume vol.5 of *IGARSS 2004. 2004 IEEE International Geoscience and Remote Sensing (IEEE Cat. No.04CH37612)*, pages 3371–4 BN – 0 7803 8742 2, Anchorage, AK, USA, 2004. IEEE.

[66] (ed) A. W. Burks. *Essays on Cellular Automata*. University of Illinois Press, 1970.

[67] Arthur Burks. Von Neumann's self-reproducing automata. In William Aspray Burks and Arthur, editors, *Papers of John Von Neumann on Computing and Computer Theory*, volume 12 of *The Charles Babbage Institute Reprint Series for the History of Computing*, pages 491–552. The MIT Press, London, 1 edition, 1987. Originally in Burks' *Essays on Cellular Automata*, University of Illinois Press (1970).

[68] Birgitt Schönfisch. Anisotropy in cellular automata. *BioSystems*, 41:29–41, 1997.

[69] Birgitt Schönfisch and André de Roos. Synchronous and asynchronous updating in cellular automata. *BioSystems*, 51:123–143, 1999.

[70] Jerry Tyszer. *Object-Oriented Computer Simulation of Discrete-Event Systems*. The Kluwer International Series on Discrete Event Dynamic Systems. Kluwer Academic Publishers, 1999.

[71] George S. Fishman. *Discrete-Event Simulation Modelling, Programming, and Analysis*. Springer Series in Operations Research. Springer, 2001.

[72] W R Franta. *The Process View of Simulation*, volume 4 of *Operating Systems and Programming Systems Series*. Elsevier North-Holland, 1977.

[73] E. W. Dijkstra. A note on two problems in connexion with graphs. *Numerische Mathematik*, 1(1):269–271, 1959.

[74] Bernard P. Zeigler. *Theory of Modelling and Simulation*. Robert E. Krieger Publishing Company, first edition, 1976.

[75] D. Kilminster and R. Machete. Prediction, behaviour, and ignorance. In *Nolta*, Bruges, Belgium, 2005.

[76] David G. Green. Shapes of simulated fires in discrete fuels. *Ecological Modelling*, 20(1):21–32, 1983.

[77] D. G. Green, A. M. Gill, and I. R. Noble. Fire shapes and the adequacy of fire-spread models. *Ecological Modelling*, 20(1):33–45, 1983.

[78] Hal E. Anderson. Predicting wind-driven wild land fire size and shape. Technical report, United States Department of Agriculture Forest Service, 1983. Research Paper INT-305.

[79] D. G. Anderson, E. A. Catchpole, N. J. DeMestre, and T. Parkes. Modeling the spread of grass fires. *J. Austral. Math. Soc. (Ser. B.)*, 23:451–456, 1982.

[80] R.J. Sneeuwjagt and G.B. Peet. Forest fire behaviour tables for western australia. Technical report, Dept. of Conservation and Land Management, Perth, 1985 1985.

[81] J. A. Beck. Equations for the forest fire behaviour tables for Western Australia. *CALMScience*, 1(3):325–348, 1995.

[82] G. Wallace. A numerical fire simulation model. *Int. J. Wildland Fire*, 3(2):111–116, 1993.

[83] W. R. Catchpole, E. A. Catchpole, B. W. Butler, R. C. Rothermel, G. A. Morris, and D. J. Latham. Rate of spread of free-burning fires in woody fuels in a wind tunnel. *Combustion Science and Technology*, 131:1–37, 1998.

[84] Gwynfor D. Richards. The mathematical modelling and computer simulation of wildland fire perimeter growth over a 3-dimensional surface. *International Journal of Wildland Fire*, 9(3):213–221, 1999.

[85] Mark A Finney. Fire growth using minimum travel time methods. *Canadian Journal of Forest Research*, 32(8):1420–1424, 2002.

[86] M A. Finney. Calculation of fire spread rates across random landscapes. *International Journal of Wildland Fire*, 12:167–174, 2003.

[87] David G. Green, Andrew Tridgell, and A. Malcolm Gill. Interactive simulation of bushfires in heterogeneous fuels. *Mathematical and Computer Modelling*, 13(12):57–66, 1990.

[88] I A French, E A Anderson, and E. A. Catchpole. Graphical simulation of bushfire spread. *Mathematical and Computer Modelling*, 13(12):67–71, 1990.

[89] George L. Ball and D. Philip Guertin. Improved fire growth modeling. *International Journal of Wildland Fire*, 2(2):47–54, 1992.

[90] Andrew Sullivan, Ian Knight, Rodney Weber, and John Finnigan. Application of complex systems science to the analysis of the behaviour of bushfires: A scoping study. Technical report, CSIRO Forestry and Forest Products, December 2003 2003. No. 1393.

[91] D. Vakalis, H. Sarimveis, C. Kiranoudis, A. Alexandridis, and G. Bafas. A GIS based operational system for wildland fire crisis management I. mathematical modelling and simulation. *Applied Mathematical Modelling*, 28:389–410, 2004.

[92] D. Vakalis, H. Sarimveis, C. T. Kiranoudis, A. Alexandridis, and G. Bafas. A GIS based operational system for wildland fire crisis management II. system architecture and case studies. *Applied Mathematical Modelling*, 28:411–425, 2004.

[93] Alexandre Muzy, Eric Innocenti, Jean-Fran¸cois Santucci, and David R. C. Hill. Optimization of cell spaces for the modeling of fire spreading. In *36th annual symposium on Simulation*, pages 289–296, 2003.

[94] Alexandre Muzy, Eric Innocenti, Antoine Aiello, Jean-Francois Santucci, and Gabriel Wainer. Specification of discrete event models for fire spreading. *SIMULATION*, 81(2):103–117, 2005.

[95] Christiaan Huygens. *Treatise on Light*. London, MacMillan and co. (1912), 1690.

[96] Tommaso Toffoli. Cellular automata as an alternative to (rather than an approximation of) differential equations in modeling physics. *Physica D: Nonlinear Phenomena*, 10(1-2):117–127, 1984.

[97] Norman Margolus. Physics-like models of computation. *Physica D: Nonlinear Phenomena*, 10(1-2):81–95, 1984.

[98] Gerard Y. Vichniac. Simulating physics with cellular automata. *Physica D: Nonlinear Phenomena*, 10(1-2):96–116, 1984.

[99] Henryk Fukś. Solution of the density classification problem with two cellular automata rules. *Phys. Rev. E*, 55(3):2081–2084, 1997.

[100] M. Mitchell, P. T. Hraber, and J. P. Crutchfield. Revisiting the edge of chaos: Evolving cellular automata to perform computations. *Complex Systems*, 7:89–130, 1993.

[101] M. Mitchell, J. P. Crutchfield, and P. T. Hraber. Evolving cellular automata to perform calculations: Mechanisms and impediments. *Physica D*, 75:361–391, 1994.

[102] Tosio Kitagawa. Cell space approaches in biomathematics. *Mathematical Biosciences*, 19(1-2):27–71, 1974.

[103] Lutz Priese. A note on asynchronous cellular automata. *Journal of Computer and System Sciences*, 17:237–252, 1978.

[104] T. E. Ingerson and R. L. Buvel. Structure in asynchronous cellular automata. *Physica D: Nonlinear Phenomena*, 10(1-2):59–68, 1984.

[105] Birgitt Schönfisch and André de Roos. Synchronous and asynchronous upating in cellular automata. In *Third Conference on Cellular Automata for Reseach Towards Industry (ACRI)*, 1998.

[106] J. R. Weimar. Coupling microscopic and macroscopic cellular automata. *International Journal of Parallel Computing*, 27:601–611, 2001.

[107] Navot Israeli and Nigel Goldenfeld. Computational irreducibility and the predictability of complex physical systems. *Physical Review Letters*, 92(7):074105–4, 2004.

[108] W O'Regan, P Kourtz, and S Nozaki. Bias in the contagion analog to fire spread. *Forest Science*, 22(1):61–68, 1976.

[109] David G. Green and Suzanne Sadedin. Interactions matter–complexity in landscapes and ecosystems. *Ecological Complexity Simulating the spatial and temporal dynamics of landscapes using generic and complex models*, 2(2):117–130, 2005.

[110] Bernard P. Zeigler and Sanakait Vahie. DEVS formalism and methodology: Unity of conception/diversity of application. In *Winter Simulation Conference*, pages 574–579, 1993.

[111] G. Wainer and Norbert Giambisi. Timed Cell-DEVS: modelling and simulation of cell spaces. In *Discrete Event Modeling and Simulation: Enabling Future Technologies*. Springer-Verlag, 2001.

[112] Gabriel A. Wainer and Norbert Giambisi. Application of the Cell-DEVS paradigm for cell spaces modelling and simulation. *Simulation*, 76(1):22–39, 2001.

[113] I. Mitrani. *Simulation techniques for discrete event systems*, volume 14 of *Cambridge Computer Science Texts*. Cambridge University Press, 1982.

[114] Javier Ameghino, E Glinsky, and G. Wainer. Applying Cell-DEVS in models of complex systems. In *Summer Computer Simulation Conference*, Montreal QC, Canada, 2003.

[115] G. Wainer. Modeling and simulation of complex systems with Cell-DEVS. In *Winter Simulation Conference*, Washington DC, 2004.

[116] Bernard P. Zeigler and Tuncer I. Oren. Multifacetted, multiparadigm modelling perspectives: Tools for the 90's. In J Wilson, J Henrikson, and S Roberts, editors, *Winter Simulation Conference*, pages 708–712, Washington, 1986.

[117] R. H. Bradbury, D. G. Green, and N Snoad. Are ecosystems complex systems? In T. R. J. Bossomaier and D. G. Green, editors, *Complex Systems*. Cambirdge University Press, 2000.

[118] D. G. Green, N. Klomp, G. Rimmington, and S. Sadedin. *Complexity in Landscape Ecology*, volume 4 of *Landscape Series*. Springer, 2006.

[119] Nazim A. Fatès and Michel Morvan. An experimental study of robustness to asynchronism for evolutionary cellular automata. *Complex Systems*, 11:1–30, 1997.

[120] D. Cornforth, D. G. Green, D. Newth, and M. Kirley. Do artificial ants march in step? ordered asynchronous processes and modularity in biological systems. In *Artificial Life VIII*, pages 28–32, 2002.

[121] G. Wainer and Norbert Giambisi. N-dimensional Cell-DEVS. Technical report, Departmento De Computación, 1997.

[122] Phil Cheney. Fire behaviour. In A. M. Gill, R. H. Groves, and I. R. Noble, editors, *Fire and the Australian Biota*, pages 157–155. Australian Academy of Science, Canberra, 1981.

[123] Per Bak, Kan Chen, and Chao Tang. A forest-fire model and some thoughts on turbulence. *Physics Letters A*, 147(5-6):297–300, 1990.

[124] Mathworks. Matlab, 2006. Information at: http://www.mathworks.com (last accessed: 24/01/06).

[125] P. Greig-Smith. Pattern in vegetation. *The Journal of Ecology*, 67(3):755–779, 1979.

[126] D. G. Green, A. P. N. House, and S. M House. Simulating spatial pattern in forest ecosystems. *Mathematics and Computers in Simulation*, 27:191–198, 1985.

[127] A. Okabe, B Boots, and K. Sugihara. *Spatial Tessellations: Concepts and Applications of Voronoi Diagrams*. Wiley Series in Probability and Mathematical Statistics. John Wiley & Sons, Chichester, New York, Brisbane, Toronto, Singapore, 1992.

[128] T. Herben and T. Hara. Spatial pattern formation in plant communities. In Sekimura T., Noji S., Ueno N., and Maini P.K., editors, *Morphogenesis and Pattern Formation in Biological Systems - Experiments and Models*, pages 223–235. Springer-Verlag, 2003.

[129] Jianguo Wu. From balance-of-nature to hierarchical patch dynamics: a paradigm shift in ecology. *Q. Rev. Biol.*, 70:439–466, 1995.

[130] Jianguo Wu and John L. David. A spatially explicit hierarchical approach to modeling complex ecological systems: theory and applications. *Ecological Modelling*, 153(1-2):7–26, 2002.

[131] Fangliang He, Pierre Legendre, Claude Bellehumeur, and James V. LaFrankie. Diversity pattern and spatial scale: a study of a tropical rain forest of malaysia. *Environmental and Ecological Statistics*, 1(4):265–286, 1994.

[132] Lutz Tischendorf. Modelling individual movements in heterogeneous landscapes: potentials of a new approach. *Ecological Modelling*, 103(1):33–42, 1997.

[133] C Burnett and Thomas Blaschke. A multi-scale segmentation/object relationship modelling methodology for landscape analysis. *Ecological Modelling*, 168:233–249, 2003.

[134] Ye Qi and Jianguo Wu. Effects of changing spatial resolution on the results of landscape pattern analysis using spatial autocorrelation indices. *Landscape Ecology*, 11(1):39–49, 1996.

[135] G.J. Hay, D.J. Marceau, P. Dub, and A. Bouchard. A multiscale framework for landscape analysis: Object-specific analysis and upscaling. *Landscape Ecology*, 16(6):471–490, 2001.

[136] Suleyman Sevinc. Theories of discrete event model abstraction. In *Proceedings of the 23rd conference on Winter simulation*, pages 1115–1119. IEEE Computer Society, 1991. Phoenix, Arizona, United States.

[137] Kangsun Lee and Paul A. Fishwick. Dynamic model abstraction. In *Winter Simulation Conference*, pages 764–771, 1996.

[138] K. Lee and P. Fishwick. Semi-automated method for dynamic model abstraction, 1997 1997.

[139] P. J. Courtois. On time and space decomposition of complex structures. *Commun. ACM*, 28(6):590–603, 1985.

[140] Norbert Giambiasi and Jean Claude Carmona. Generalized discrete event abstraction of continuous systems: Gdevs formalism. *Simulation Modelling Practice and Theory*, 14(1):47–70, 2006.

[141] A.G. McArthur. Grassland fire danger meter Mk V. Technical report, Country Fire Authority of Victoria, Melbourne, 1977. Electronic version available at: http://www.esa.act.gov.au/firebreak/mcarthur_meter.html, last accessed 05/07/2006.

[142] Ilya Prigogine and Isabelle Stengers. *Order out of Chaos: Man's New Dialogue With Nature*. Bantam Books, 1984.