

February 2019

Details

- Current position: Research Fellow & Co-Director, CURE (Collaboratory for Urban Resilience & Energy),¹
School of Environment Education & Development,
Manchester University, M13 9PL
- Age & status 62, married, 3 children
- Qualifications: BSc in Architecture, 1983 (University College London)
Diploma in Architecture, 1987 (Manchester Metropolitan University)
Professional Practice III, 1988, (Royal Institute of British Architects)
- Professional roles: Fellow of Royal Society of Arts
Principal, SAMI Consulting (www.samiconsulting.co.uk)
1999-2007: UK Coordinator, EU Network for Sustainable Urban & Regional Development
1989-2002: Councillor, Town & Country Planning Association
1986-1994: Regional Coordinator, RIBA Community Architecture Group
- Employment history 2001 – present: Co-Director, Centre for Urban Resilience & Energy, Manchester University
1997 – 2001: Research Fellow, Manchester University
1994 – 1997: Research Coordinator, Centre for Employment Research, Manchester Metropolitan University
1991 – 1994: General Manager, Settle-Carlisle Railway Company
1983 – 1991: Architect in public, private & civic sectors
1976 – 1981: North Star Design (specialist carpentry & installations)

Further information

Research site: www.manchester.ac.uk/synergistics

Working site: www.urban3.net

CURE main site: www.manchester.ac.uk/cure

Contact

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¹ Note: CURE (previously Centre for Urban & Regional Ecology) was relaunched in late 2013 as the Collaboratory for Urban Resilience & Energy, within the Manchester Urban Institute: see <http://urban-energy.org/2013/11/05/cure-launch-lecture/>

Summary



Resume

Joe Ravetz is Co-Director of the Centre for Urban Resilience & Energy at the Manchester Urban Institute, University of Manchester. He has pioneered the art of strategic thinking for sustainable cities and regions, which brings together environment-climate policy, urban planning and design, new economics and governance, innovation and futures studies, systems thinking and complexity science. With a background as an architect, planner and development manager, he is also a creative graphic facilitator and foresight trainer. His main publications are *'City-Region 2020: integrated planning for a sustainable environment'*; *'Environment and City'*; and the forthcoming *'Deeper City: collective intelligence and the pathways from smart to wise'* (Earthscan / Routledge). He is on the editorial boards of *Foresight Journal*, *International Journal of Sustainable Development*, and *Sustainable Mediterranean Construction*; coordinator of the Greater Manchester Policy Exchange; Principal at the non-profit SAMI Consulting; policy advisor currently to Naples (Italy). He also delivers training, seminars, consultancy, keynotes and reviews in many countries.

Outlook

In all this the over-arching theme is about inter-connection: the reality of cities, not as boxes labelled 'economics' or 'environment', but rather as whole systems which evolve and interact. To respond to this we need new kinds of whole-system thinking. The CURE programs have to date included spatial development, resource modelling, environmental policy & management, energy / climate change studies, land / landscape studies, policy evaluation and participation. But the strategic agenda is more about the inter-connections between them: this can be explored via complexity science, transition and innovation studies, futures and foresight methods. These and similar methods have informed a 2-decade intellectual journey, which began with exploration of the 'inter-connectedness of *things*', and ended with the landmark publication *City-Region 2020*. Experience from practice then shifted the focus towards the 'inter-connectedness of *thinking*': the process of multiple value-generation between multiple stakeholders, and the potential for 'creative synergy and urban intelligence' in response to global challenges. All this is set out in the forthcoming book *'Urban 3.0: creative synergy and social intelligence for the One Planet century'* (Routledge / Earthscan).²

² Some early outputs & recent blogposts can be seen on:

<http://urban-energy.org/2013/11/05/beyond-the-sustainable-city-region-prospects-for-urban-intelligence/>

<http://urban-energy.org/2013/12/04/10days/>

<http://samiconsulting.wordpress.com/2014/01/24/housing-crisis-what-crisis-what-next/>

<http://cor.europa.eu/pages/EventTemplate.aspx?view=detail&id=d1e23dfc-27f1-4069-a884-fc4bbd5d63ce>

Experience & interests

Joe Ravetz is a leading thinker on sustainable futures for urban and regional development. His landmark study '*City-Region 2020 – integrated planning for a sustainable environment*' brought new insights with methods and tools, based on the Sustainable City-Region programme and the living laboratory of Greater Manchester. From this work the Centre for Urban & Regional Ecology (CURE)³ was formed in collaboration with Professor John Handley. Joe has raised over £2.5 million in research funding, and built a unique portfolio of policy-relevant research, with five main strands:

- ***Foresight, futures and information studies***: including foresight and scenario methods, information technology applications, science policy / knowledge management, and innovation studies.
- ***Environment-development studies***: urban-regional modelling, alternative economic strategies, resource flows and externalities, business-environment issues:
- ***Spatial development studies***: spatial frameworks, landuse & infrastructure planning, urban design and policy analysis at local, regional and national levels.
- ***Sustainable production & consumption studies***: business-environment issues, heterodox economics, cultural consumption and place identity.
- ***'Synergistics'***: an innovative and trans-disciplinary approach to understanding and mapping the evolution of complex inter-connected and multi-layer systems of social learning and collective intelligence, which combines economic, environmental, social, cultural, political and spatial dimensions.

Each of these comprises a range of projects at the regional, UK, EU and other levels, working across sectors such as housing, transport, land-use, energy and environmental management, economic development, organizational studies and so on. This involves long term collaborations with organizations in Manchester such as the Institute for Innovation Research, Sustainable Consumption Institute, and Tyndall Centre for Climate Change: a range of Universities including Salford, Maastricht, Naples, Vienna, Versailles, and British Columbia: and inter-governmental organizations such as the WWF One Planet Economy programme and UN Industrial Development Organization.

The over-arching agendas for all this are several. One is the transition towards a more sustainable economy, society and development pattern: and the new kinds of knowledge, learning and policy processes which can enable that. These insights emerged through the Sustainable City-Region and One Planet Economy programmes, and others on the sustainability policy-research interface.

³ Note: CURE was relaunched in late 2013 as the Centre for Urban Resilience & Energy: see <http://urban-energy.org/2013/11/05/cure-launch-lecture/>

The results have produced a powerful research approach, which is demonstrated in the forthcoming book *'Urban 3.0: creative synergy and social intelligence'* (Routledge / Earthscan). This brings insights from complexity / transition theory, and innovation / enterprise policy, in the form of 'synergistic mapping' of 'value-added' – economic, social, cultural, etc – and the emergence of shared intelligence. Such combined mappings, help to design policy interventions for complex problems, as combinations of economic, institutional, behavioural, ethical and technology actions. This can then be applied to the 'grand challenges' of the 21st century: climate change, prosperity vs austerity, resilience vs fragmentation, economic growth on a finite planet, and others.

Joe Ravetz has an important role as Principal for SAMI Consulting, a strategic management and foresight company, operating in public and private sectors in the UK and EU. He is also a member of the editorial board of *International Journal of Sustainable Development*, *Foresight Journal* (Emerald Publishing), and *Sustainable Mediterranean Construction*, and Coordinator of the Greater Manchester Policy Exchange programme. In addition he delivers many training courses, seminars, keynote presentations and review services around the UK and EU. Recent initiatives include the series of Foresight training and capacity building courses for the United Nations Industrial Development Organization and Manchester Institute of Innovation Research: the United Nations Habitat Urban Forum / World Habitat Day conferences in 2006 and 2008, 2012 and 2014: the Futures Forum of the Royal Town Planning Institute, the International Human Dimensions of Environmental Change Programme Land-Ocean Interaction initiative, UNEP Man & Biosphere Programme UK Urban Forum: sustainability policy training for the UK National School of Government, etc. There are also many review and referee services: such as for the IPCC Fourth Assessment Report, European Science Foundation and European Research Council, Canadian Social Science & Humanities Research Council, together with ESRC / EPSRC in the UK.

Joe Ravetz is also a skilled graphic facilitator for foresight-sustainability type workshops and seminars, and a keen advocate of concept mapping and 'deliberative visualization'. He is interested in the potential of ICT for 'urban intelligence', and has developed two recent software prototypes, the Synergy Forum and the Local Forum.

Publications

In pipeline:

- Ravetz, J. (forthcoming). Global urbanization futures: green and sustainable, or brown and vulnerable. In: Pippin Anderson, Ian Douglas, David Goode, Mike Houck, David Maddox, Harini Nagendra, and Tan Puay Yok (Eds). *Routledge Handbook of Urban Ecology (Second edition)*. NY, Routledge
- Adrianto D.W. and Ravetz, J. (forthcoming). Indonesia - A bioregional prospect for the Malang peri-urban area: In: Fanfani, D., Mataràn, Ruiz A., Salvati, L., (eds). *Bioregional planning and design: European perspectives on a transitional century*. Springer
- Ravetz, J, Beilin, R, Connelly, A, Tantanasi, I (in writing). Resilience of what for whom?? Mapping the landscape and exploring new combinations in theory and practice. *Global Environmental Change*
- Ravetz, J, Mäntysalo, R, Neuvonen, A, The New Normative: Planning Carbon Neutral Regional Futures. (special issue on future studies). *Regional Studies*
- Ravetz, J, (in writing). Integrated Envisioning at the foresight frontier: experience from the Finland urban system. *Futures*.
- Ravetz, J, (in writing): Towards a science of ‘smart’ and ‘wise’: on the comparative study of collective intelligence in four countries. *Urban Studies*
- Rajan, S.C, Ravetz, J, & Montemor, R. (Eds) (contract agreed). *International Handbook of Peri-urban Studies*. Springer

In press:

Ravetz, J, (forthcoming) *Deeper City: collective intelligence and the synergistic pathways from smart to wise*. NY, Routledge / Earthscan:

<http://www.routledge.com/books/details/9780415628976/>

Ravetz J (forthcoming): Evaluation with synergistic mapping, in the ‘smart-wise peri-rural-urban-mind-lab-scape’. In - Maria Cerreta, Luigi Fusco Girard (Eds) *Smart landscapes: Hybrid decision-making processes for spatial innovation*. Berlin, Springer

Recent publications

Ravetz, J, (2017): Master planning by and for the urban shared mind: towards a ‘neighbourhood 3.0’. In: Husam Al Waer and Barbara Illsley (Eds): *Placemaking: Rethinking the master planning process*: London, ICE Publishing: pp39-55

Ravetz, J (2017): From ‘smart’ cities to ‘wise’: pathways for intelligent sustainability. In: Bylund, J, (Ed), *Urban Transitions Pathways*, Brussels, JPI-Urban Europe, available on - <http://jpi-urbaneurope.eu/connecting-the-dots-by-obstacles-friction-and-traction-ahead-for-the-sria-urban-transitions-pathways/>

Duckworth, M, Lye, D, **Ravetz, J**, Ringland, G. (Eds) (2016). *Strategic Foresight: Towards the 3rd Strategic Programme of Horizon 2020*. Brussels, DG Research and Innovation. Available on: <http://bookshop.europa.eu/en/strategic-foresight-pbKI0215938/>

Ravetz, J, & Ravetz, A, (2016). Seeing the wood for the trees: Social Science 3.0 and the role of visual thinking. *Innovation: the European Journal of Social Science Research*, Vol 30(01):104 - 120. <http://dx.doi.org/10.1080/13511610.2016.1224155>

Ravetz, J, & Miles, I.D, (2016) Foresight in cities: on the possibility of a “strategic urban intelligence”, *Foresight*, Vol.18(5), pp469-490, <http://dx.doi.org/10.1108/FS-06-2015-0037> (**‘Highly Commended’ paper in the 2017 Emerald Literati Network Awards for Excellence**)

Ravetz, J, (2016): Sustainable Urban Futures: Contested Transitions and Creative Pathways: In: Kevin Archer and Kris Bezdecny (Eds), *International Handbook of Cities and the Environment*: (pp119-159). Cheltenham, Edward Elgar

Ravetz, J (2015): *The Future of the Urban Environment & Ecosystem Services in the UK*: (Report to the Government Office of Science, Future of Cities programme): London, Government Office of Science. Available on: <https://www.gov.uk/government/publications/future-of-cities-ecosystem-services>

Ravetz, J, (2015): From ecosystems to eco-urban systems. *Environmental Scientist*, Vol 124, Sept 2015

Ravetz, J, (2015): Urban ecosystems – simply complex or more so? *Environmental Scientist*, Vol 124, Sept 2015

Ravetz, J, Fertner, C, & Nielsen, T.S, (2015): The dynamics of peri-urbanization. (Chinese translation) *Journal of Urban & Regional Research*: July 2015, Vol.7,No.2, Series No.18: Pub.Tsinghua University, China

Ravetz, (2015) Valuation and evaluation in complex real systems: A synergistic mapping and policy template. *Bollettino del Centra Calza Bini*, vol. 14(2):251-267: Universita del Stugli di Napoli Federico II, Naples, Italy: <http://www.serena.unina.it/index.php/bdc/issue/view/196>

Ravetz, J (2014): Inter-connected responses for inter-connected problems: synergistic thinking for local urban development in a global urban system: *International Journal of Global Environmental Issues*, special issue on local economic development. Vol. 13(2/3/4):362-388 <http://www.inderscience.com/info/inarticle.php?artid=64506>

Nilsson, K, Nielsen, T.S, Aalbers, C, Bell, S, Boitier, B, Chery, J.P, Fertner, C, Groschowski, M, Haase, D, Loibl, W, Pauleit, P, Pintar, M, Piorr, A, **Ravetz, J**, Ristimäki, M, Rounsevell, M, Tosics, I, Westerink, J, Zasada, I: (2014) Strategies for Sustainable Urban Development and Urban-Rural Linkages, (2014), *European Journal of Spatial Development*. <http://www.nordregio.se/Global/EJSD/Research/briefings/article4.pdf> (last accessed April 2014)

Ravetz, J. (2013) New Futures for Older Ports: Synergistic Development in a Global Urban System. *Sustainability* **2013**, 5, 5100-5118. <http://www.mdpi.com/2071-1050/5/12/5100>

Ravetz, J, (2013) Introduction: from 'sustainable' city-regions to synergistic, *Town & Country Planning*, Vol **8**(10):402-407

Ravetz, J, (2013), Urban futures – what will we need to know? *Town & Country Planning*, Vol **8**(10):443-408

Ravetz, J (2013): Beyond the linear: the role of visual thinking and visualization, In: O'Riordan, T and Lenton, T, (Eds): *Addressing Tipping Points for a Precarious Future*: Oxford University Press for the British Academy: pp289-299

Ravetz, J, Fertner, C, & Nielsen, T.S, (2013): The dynamics of peri-urbanization: In: Pauleit, S., Bell, S., and Aalbers, C., (eds), *Peri-Urban Futures: Land Use and Sustainability*, Berlin: Springer. Available on http://link.springer.com/chapter/10.1007%2F978-3-642-30529-0_2

Ravetz, J & Warhurst, P (2013): Towards the new local-global: the emerging peri-urban of the Manchester city-region: In: Pauleit, S., Bell, S., and Aalbers, C., (eds), *Peri-Urban Futures: Land Use and Sustainability*, Berlin: Springer. Available on <http://link.springer.com/book/10.1007/978-3-642-30529-0/page/1>

Ravetz, J (2012) Urban Synergy Foresight: In: Forward Planning Studies Unit (Ed): *Urban governance in the EU: current challenges and forward prospects*, Brussels, EU Committee of the Regions, pp31-44. Available on: http://urban-intergroup.eu/wp-content/files_mf/corurbangoverancefinal.pdf

Ravetz, J, Fusco Girard, L, Bornstein, L. (2012): *A research and policy development agenda: fostering creative, equitable, and sustainable port cities*: BDC - Bollettino del Centro Calza Bini, 2012, vol. 12, no. 1, pp. 67-69 (www.serena.unina.it/index.php/bdc)

Ravetz, J, Miles I, Popper R (2011): *ERA Toolkit: Applications of Wild Cards and Weak Signals to the Grand Challenges & Thematic Priorities of the European Research Area*: Manchester Institute of Innovation Research, University of Manchester. <http://community.iknowfutures.eu/news/toolkit.php>

Piorr A, Ravetz, J, Tosics I, (2011), *Peri-urbanisation in Europe: Towards a European Policy to Sustain Urban-Rural Futures*: (Synthesis report of the PLUREL project): Luxembourg, European Commission Communications Unit, with University of Copenhagen. Available on http://www.plurel.net/Synthesis_report_Peri-urbanisation_in_Europe-115.aspx

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- Ravetz, J (2009): Towards the low carbon economy: transforming the way things work: *Environmental Scientist (Special issue on environmental futures)*, July 2009, pp25-30

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- Ravetz, J (2009): New technology applications: risks and opportunities for environmental governance: *Environmental Scientist (Special issue on environmental futures)*, July 2009, pp36-52
- Ravetz, J., (2008) Resource flow analysis for sustainable construction: metrics for an integrated supply chain approach: *Proceedings of the Institute of Civil Engineering, Waste and Resource Management*, 161(WR2):51-66 (Winner of Institute of Civil Engineers Telford Award for best paper published in 2008)
- Ravetz, J., (2008) State of the stock: what do we know about existing buildings and their future prospects, *Energy Policy* 36:4462–4470
- Ravetz, J (2007) Sustainable Development Strategy and the CSR, In: Talbot C & Baker M (Eds) *The Alternative Comprehensive Spending Review 2007*, Manchester University Press pp138-154
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Recent initiatives

(Summary for 2012-2018)

Joe Ravetz: **Sept-Jan 2019**

- Appointed as Associate of the Manchester Institute for Innovation Research
- Keynote at the EU Joint Research Centre Workshop "Regional Innovation Strategy 3 in Greece: Consolidating Governance and Raising Ambition", Thessaloniki,
- Led the workshop on 'integrated envisions' at the 'Beyond Technical' consortium meeting, Helsinki, (Finland Academy of Science).
- Led a workshop on the 'smart settlement' development program with Homes England, IBI Consulting and East Cheshire District.
- Universidade Baja California Mexicali, visiting professor, with activities including: public keynote: 2 day '*Mind-Lab*' with faculty / researchers, development of 'smart-wise' collective intelligence for the city-region, with a unique focus on political corruption: 1.5 day '*Synergy Lab*' with local squatter community of brickmakers, facing eviction and/or poverty, a very practical focus with around 25 stakeholders, exploring pathways & road-mapping for the way forward: Public lectures etc.
- University of California San Diego - faculty keynote 'how cities learn and think'
- University of Naples Federico Secundo, collaborative program: synergistic planning workshop with the Metropolitan Regional Authority of Naples
- University of Surrey, collaborative partnership with Dept of Computer Science, on participatory systems modelling & network analysis for sustainable natural capital.
- IPPR workshop panellist: 'Mayors, industrial strategies and the future of inclusive growth'.
- Foresight Future of Cities – organized scoping meeting at the Regional Studies Winter Conference London.
- Belmont Forum London workshop on SUGI (Sustainable Urbanization Global Initiative) Food-Energy-Water Nexus, 'inspirational introduction' keynote, June 2018.
- Helsinki, 'Beyond the technical' consortium, facilitator of project workshop on 'Integrated Envisions, June 2018'
- Brandenburg Technical University, keynote lecture on 'cities in evolution or co-evolution' May 22nd
- Lisbon, European Trade Union Institute, facilitator of Foresight-III workshop on the future of the EU trade union movement.
- Malta Energy Institute, MCAST, keynote for European Green Week
- Qatar Foundation: Energy & Carbon Transitions program: coordinator / facilitator of route-mapping workshop. Doha, April 2018.
- Convenor of Greater Manchester Green Summit workshop 'Towards a Zero-Carbon City-Region': (for the Mini-Lab project).

- Facilitator of the ‘Envisioning’ workshop, Helsinki, (for the ‘Beyond Technical’ project for the Finland Academy of Science)
- Leader of the Smart-Wise Cities research pilot in India (Kolkata and Bhubaneswar), with various seminars and workshops, (funded by EPSRC Smart Cities in the global south program).
- Qatar International Energy & Carbon Transitions Conference: presentation on ‘*Low carbon pathways and the deeper ecological mind*’ Doha, Nov 2017.
- Qatar Green Building Council, seminar on Low Carbon Transitions, Nov 2017
- University of Paris-Saclay, Examiner for Phd by B.Tran, ‘Folksonomies as representations of sustainable development’.
- University of Naples Federico II Institute for Research on Innovation and Services for Development, expert advisor on H2020 project, ‘*Circular models Leveraging Investments in Cultural heritage adaptive reuse*’, Dec 2017
- Manchester School of Architecture public lecture: ‘peripheral resilience: green-blue post-cities and the deeper ecological mind’.
- Manchester Leadership Programme lecture - ‘sustainability and beyond’
- Eversheds Sutherland conference ‘Remaking Manchester - Placemaking and transformation’ – panellist.
- European Science Foundation: new member of College of Experts, Strasbourg
- Session leader for the Chinese National Development and Reform Commission (UK Study Visit), (June 2017).
- JPI-Urban Europe conference on urban transformations: session panelist on ‘strategic planning’: May 2017
- Keynote & facilitator for major policy-research workshop, on Risk & Resilience in the Built Environment: Melbourne April 2017
- Keynote for seminar - Europe’s City-regions: The Key Drivers For A Future Smart, Sustainable And Inclusive Europe, European Policy Unit, RMIT, Melbourne, May 2017
- Keynote for Smart Cities & Communities European delegation, Manchester, March 2017
- Keynote & facilitation at the Ecosystems Services & Poverty Alleviation workshop on urban transformation, London March 2017
- Keynote at the Indian Institute of Technology Chennai symposium on ‘peri-urbanization prospects and perils’. Jan 2017
- Keynote at the Inclusive Growth for Smart Development workshop at the Inclusive Growth launch programme, Bradford, March 2017
- UGEC (Urbanization & Global Environmental Change) research development on Food-Energy-Water Nexus, Invited member of working group, New York, Jan 2017.
- Audio podcast on ‘cities from smart to wise’- <http://www.cityverve.org.uk/citycast-episode-5-with-dr-joe-ravetz-university-of-manchester/>
-
- United Nations Economic Commission for Africa, Senior Experts Dialogue on “*African Cities As Innovation Hubs For Africa’s Transformation*”, Johannesburg, (Keynote speaker), Nov 2016

- JPI-Urban Europe, Urban Transformations workshop, (panellist), Oct 2016
- *Akademie for Raumforschung und Landesplanung* conference, Munster, Germany: ‘Space in Crisis – The Future of Small & Medium-Sized Cities’, (Keynote), Dec. 2016
- ICCR Foundation (International Institute for Social Science Research), Vienna, workshop on ‘The future of the social sciences’ (Panellist), Nov 2016
- N8 Northern Summit, ‘Northern Futures - Collaboration for Inclusive Growth and Prosperity’, (Panellist & Manchester host), Nov 2016
- People’s Plan for Greater Manchester, Alternative Economic Development, (panellist), Nov 2016
- University College London workshop on ‘Rural-urban development, an international perspective’(Presentation), October 2016.
- Academy of Science Finland, workshop on ‘Redefine: beyond MALPE coordination to integrative envisioning’, (Keynote). Aug 2016.
- Aalto University School of Engineering, Masters on Transport & Landuse Planning, (Academic Advisor), Oct 2016.
- Morgan Centre for Research into Everyday Lives, workshop on ‘Sketching the Social World’. (Keynote on visual thinking), July 2016
- MBS International Course on Foresight, (Guest Lecturer), July 2016.
- Keynote lecture for Global Sustainable Development Symposium: Granada, Spain, June 2016
- Guest lecture for York Centre for Complex Systems Analysis, June 2016
- RCUK-India Urban Transformations programme, presentation at bilateral workshop in Jaipur, India, March 2016.
- Keynote at the Ayojan School of Architecture & Planning, Jaipur, India: ‘From smart cities to wise cities: learning and thinking for an urban shared mind’.
- Keynote / seminar at University Los Andes, Bogota, Colombia: ‘technology foresight for the new economic world’
- RCUK ‘Urban Living Pilot’: Coordinator of multi-university consortium proposal (UoM, MMU, Salford), in collaboration with AGMA, NE, TFGM, NHS, GMP, etc (not selected).
- Presentation at ‘Unleashing Urban Innovation’ workshop, Manchester. March 2016.
- Seminar series as Visiting Professor at Naples Institute for Advanced Studies, University Federico Secundo, April 2016.
- Foresight study completed on Horizon 2020 Third Strategic Programme, for EC DG Research & Innovation: (co-convenor with SAMI consulting).
- UK Defra Horizon Scanning project completed, as Coordinator of Expert Review Panel.
- Speaker for the UK Foresight on Future of Cities: Visions meeting, Sept 2015.
- Keynote at Dundee School of Architecture & Planning on ‘Thinking cities and climate change action’, Sept 2015.
- Discussant for the Independent Transport Commission HSR Greater Manchester Workshop, Oct 2015:
- Convened CURE Annual Forum on Foresighting a Future for Cities, June 2015.

- Convened workshop for the Government Office of Science Future of Cities Academic Network.
- Presented the ‘synergistic governance’ method at the International Workshop on “Policies supporting Sustainable Transitions in Europe”: coordinated by Center for Design and Innovation for Sustainable Transitions, Aalborg University – Copenhagen Campus:
- Urban Zone national program for sustainable urban development: JR is running capacity building program in Helsinki for the Finnish Environment Agency, including Environment Foresight workshop, Urban Zone workshop & public lecture - [http://www.syke.fi/en-US/SYKE_Info/Communications_material/News/Dr Joe Ravetz is a visual thinker\(32649\)](http://www.syke.fi/en-US/SYKE_Info/Communications_material/News/Dr_Joe_Ravetz_is_a_visual_thinker(32649))
- Keynote at the Future Climate Forum – ‘State of the Climate’ Series, on Cities & Climate Change, Manchester, Feb 2015.
- Keynote on ‘Greater Manchester Futures’ for the GM Climate Change Implementation Plan – Academic Workshop at THINKLab, Salford, coordinated GM Low Carbon Hub Research Forum.
- Commissioned on ‘the Future of Urban Ecosystems’ for the UK Foresight Future Cities project: <http://www.bis.gov.uk/foresight/our-work/projects/current-projects/future-of-cities>
- Member of the winning team of the world’s 2nd largest economics prize (!!)
<http://www.policyexchange.org.uk/media-centre/press-releases/item/david-rudlin-wins-the-250000-wolfson-economics-prize-2014>
- Presentation to RCUK conference on Transport Futures, Imperial College Business School: ‘Social transport intelligence: self-organizing value chains for smarter cities & citizens’: for the Research Councils UK Sustainable Society Network+ (SSN+) and the New Economic Models in the Digital Economy network (NEMODE)
- Hosted Greater Manchester Low Carbon Research Forum workshop, May 2014.
- Keynote presentation June 2014, with interactive visual techniques, to art-science-policy conference on ‘Facing Extinction’: at University of Creative Arts, Farnham: <http://gustavmetzgerucafarnham.wordpress.com/>
- the Sustainable Consumption Institute’s first relaunched Seminar is with Joe Ravetz, entitled - “Low-carbon synergy and social intelligence – the internal logic of a transition pathway?": <http://www.sci.manchester.ac.uk/events/sci-external-seminar-series>
- Organized international workshop at the World Urban Forum 2014, Colombia, on the ‘Cities Prosperity Index’ (CPI),
- Guest speaker on ‘smart cities & climate change’: Interactive Academic Engagement with Policy Stakeholders – ESRC Knowledge Exchange Trials, <http://www.humanities.manchester.ac.uk/socialchange/events/knowledge-exchange-trials/index.html>
- Keynote for International Roundtable for UN Habitat Global Parliamentarians: ‘Urban Economics, port and historic cities’: Split, Croatia
- Keynote for Royal Town Planning Institute conference on Urban Design: ‘Urban design 3.0: creative synergy & shared intelligence’. Manchester

- Session at: x.Future.Innovation.Cities: NESTA experimental workshop exploring the impact of emerging technologies on our future urban landscapes.
- Facilitator of interactive session at – ‘Creativity & Visual Knowledge - a conversation between the Arts and Sciences’, John Rylands Library, Manchester University
- Appointed as scientific advisor to the Municipality of Naples, Italy
- Appointed as scientific advisor to the Municipality of Vellore, Tamil Nadu
- Expert advisor to UN-Habitat Secretariat of the ‘Cities Prosperity Index’ (CPI), with workshop at the United Nations Middle East Regional Centre, Tehran.
- Nominated as expert representing the British Academy, for the European Commission Horizon 2020 Advisory Groups, on themes related to sustainable development.
- Keynote for Royal Town Planning Institute conference: “The urban-rural challenge: planning for in-between spaces”. Leeds Metropolitan University.
- Keynote lecture at the University of Sharjah, Dubai, UAE, School of Architectural Engineering, on ‘a synergistic approach to built environment design’.
- Launched the results of the National Research Foresight in Mauritius on 21st March, with the Minister for Education & Science and various expert working groups. http://www.mrc.org.mu/in-house_projects/national_research_foresight_exercise
- public lecture at the Glasgow Institute for Contemporary Arts, on: “inter-connected policy for inter-connected problems in healthy cities”. Following this Joe Ravetz ran a ½-day expert workshop at the Glasgow Centre for Population Health, with public health & related professionals. <http://www.gcph.co.uk/events/126>
- Joint Co-Chair of the Smart Cities Roadmap, part of the Smart Cities & Communities European Innovation Partnership: building a ‘rolling agenda’ for IT-driven innovation in urban mobility, energy efficient housing and smart grid power – <http://eu-smartcities.eu/>
- Joe Ravetz gave the keynote address to the UN Habitat parallel event World Urban Forum international conference on Port Cities – Magnets for Sustainable Development, Naples, Sept 2012
- Joe Ravetz is coordinating the EPSRC funded *Manchester Energy Foresight* project under the KTA programme (www.energy.manchester.ac.uk): and also the *Manchester Security Foresight* project (www.mbs.ac.uk/securityforesight)
- Joe Ravetz and Magda Sibley gave a joint keynote presentation to the UNESCO International Scientific Committee on the Economics of Conservation, at the conference in Malta on ‘Ports as New Magnets for Urban Sustainable Development’
- Joe Ravetz is a panellist at the EPSRC workshop ‘Energy & Complexity: the Way Forward’, at the Environmental Change Institute, Oxford.
- Joe Ravetz gave keynote presentations on ‘Foresight Scoping and Mapping’, and ‘Cities, Megacities, Ecumenopolis’, for the International Foresight Training Course, at the Manchester Institute of Innovation Research, MBS.

- Joe Ravetz is giving the keynote on ‘Sustainable Cities – the European Experience’ at the Scottish Parliament expert workshop on ‘Coordinated Agenda for Marine, Environment and Rural Affairs Science’, Edinburgh.
- Joe Ravetz is giving a keynote to: **ICLEI** Informed Cities Forum 2011: Rio+20, local performance and the role of research: 26-27 October 2011, Naples, Italy
- Presentation on ‘city futures and synergistic thinking’ at the UN Habitat World Urban Forum consultation workshop on ‘Futuring and city futures’, Naples, Sept 2012
- Keynote & paper to EU Committee of the Regions: Available on: http://urban-intergroup.eu/wp-content/files_mf/corurbangoverancefinal.pdf
- Keynote address & working papers to the EC DG -Regio Urban Expert Group on Cohesion Policy, June 2010: http://ec.europa.eu/regional_policy/conferences/citiesoftomorrow/programme_june.cfm
- Keynote address to the French Ministry of Sustainable Development, Housing & Planning, January 2011: <http://www.developpement-durable.gouv.fr/Le-colloque-Faire-la-ville-durable.html>
- Session facilitator at UK Sustainable Development Commission final conference March 2011: <http://bigsustainability.org/tag/joe-ravetz/>
- Keynote to the Leeds City-Region conference, April 2011: <http://www.leedsmet.ac.uk/as/cudem/3D40B9DCADAC4037A499B69826DB346F.htm>
- Prizewinner in the ‘Guardian Report’ climate change policy innovation portfolio, presented to the Copenhagen IGCC, 2009, awarded for the ‘Carbon Mortgage’ scheme. <http://www.guardian.co.uk/environment/2009/jul/13/manchester-report-mortgage?intcmp=239>
- Keynote address to the Institute for Environmental Science, April 2009: <http://becominggreenblog.blogspot.com/2009/04/language-of-sustainability.html>
- Greater Manchester Policy Exchange, (coordinated Joe Ravetz): www.manchester.ac.uk/policy-exchange
- Keynote address on ‘*Pathways to a One Planet Economy*’ at the ESRC interdisciplinary workshop on ‘Complexity economics’, Leeds, May 2009, http://www.see.leeds.ac.uk/research/sri/projects/esrc-research-seminars/Complexity%20Economics%20forSustainability_seminar_2_summary_final.pdf
- Coordinator of international workshop on ‘Post-Normal Science: Retrospect and Prospect’: St Annes College, Oxford, June 2009
- Coordinator of workshop at the International Society for Human Ecology conference, June 2009, on the theme of ‘*the meaning of human ecology: a multi-layer exploration*’

Funded projects

From 1997: shaded areas show medium-larger projects (over £50k net value to CURE)

| DATES | | SPONSOR / CLIENT | PROJECT TITLE | ROLE |
|--------------|-----------|--|---|-------------|
| From | To | | | |
| 2019 | 2021 | UKRI – ‘Towards a Sustainable Earth’ | PERI-CENE – Peri-urban climate & environment | P.I. |
| 2018 | 2018 | EPSRC Smart Cities Global South | Smart Wise Cities in India | P.I. |
| 2018 | 2018 | GMCA | Natural Course Water Governance | P.I. |
| 2017 | 2020 | JPI Urban Europe | Learning Loops in urban environment | Co-I |
| 2017 | 2018 | Manchester-Melbourne Collaboration | Fire & Flood: toward resilient cities | P.I. |
| 2016 | 2019 | Academy of Science Finland | BEMINE: – integrated visioning | Partner |
| 2016 | 2018 | ESRC Impact Acceleration | Metropolitan INnovation & Intelligence Lab (MINI-LAB) | P.I. |
| 2015 | 2015 | EC – DG Research & Innovation | Foresight study on Horizon 2020 Third Strategic Programme | Partner |
| 2015 | 2015 | DEFRA | Environmental Futures Horizon Scanning | Partner |
| 2014 | 2015 | Government Office of Science, Foresight Unit | Future of Greater Manchester | Partner |
| 2014 | 2014 | Government Office of Science, Foresight Unit | Future of Cities Foresight: commissioned report on ‘Urban Ecosystems’ | P.I. |
| 2014 | 2017 | European Commission, DG Research, FP7 | CASI: Common Assessment for Sustainability Innovation | Partner |
| 2013 | 2013 | European Commission, DG Energy (CEPS / GOPA) | Smart Cities & Communities Stakeholder Platform | Partner |
| 2012 | 2013 | EPSRC Knowledge Transfer Action | Manchester Energy Foresight | Lead |
| 2012 | 2013 | EPSRC KTA | Manchester Security Foresight | Lead |
| 2012 | 2013 | EU Occupational Safety & Health Agency (coord.SAMI) | Green Jobs scenarios project | Partner |
| 2011 | 2013 | Mauritius Research Council | Mauritius National Research Foresight Exercise | Lead |
| 2011 | 2012 | Natural England (coord.SAMI) | Scenarios for the Natural Environment 2060 | Partner |
| 2010 | 2012 | European Commission, DG Research, FP7 | IKNOW – interconnecting knowledge | Partner |
| 2010 | | UNIDO (United Nations Industrial Development Organization) | Foresight for Low Carbon Automotive Sector in Turkey & Eastern Europe | Lead |

| | | | | |
|------|------|---|---|----------------|
| 2010 | | DEFRA (coord.SAMI) | Future proofing for CAP reform trade negotiations | Partner |
| 2010 | | European Commission, DG Trade | Trade impact assessment for the Andean & Libyan trade agreements | Partner |
| 2008 | | Rockefeller Foundation / Institute for Alternative Futures | Foresight for Smart Globalization | Partner |
| 2007 | 2012 | European Commission, DG Research, FP6 | PLUREL – ‘peri-urban land use relationships’ | UK lead |
| 2007 | 2009 | Environment Agency (England & Wales) | Application of futures methods to policy intelligence | Lead |
| 2007 | 2008 | Welsh Assembly Government (WWF-Cymru) | One Planet Wales | Lead |
| 2007 | 2008 | World Wildlife Fund UK | Sustainable communities in the West Midlands | Lead |
| 2006 | 2007 | World Wildlife Fund UK | One Planet West Midlands | Lead |
| 2006 | 2007 | Yorkshire Forward (Regional Development Agency) | Leeds 2050 | Partner |
| 2006 | 2010 | UNIDO (United Nations Industrial Development Organization) | Technology Foresight: training & capacity building | Lead / Partner |
| 2006 | 2011 | EPSRC (SUE-2 program) | SUREGEN – Sustainable Urban Regeneration | Partner |
| 2005 | 2009 | WWF-UK | OPEN - One Planet Economy Network | Lead |
| 2005 | 2008 | South East England Development Agency / DEFRA | One Planet Economy Regional Assessment (OPERA) | Lead |
| 2005 | 2008 | World Wildlife Fund UK: Biffaward | Eco-Budget UK / One Planet Economy | Lead |
| 2005 | 2007 | Sustainability North West for Biffaward | Eco-Region NW: An interactive toolkit for resource productivity | Lead |
| 2005 | 2007 | European Commission 6 th Framework Programme | EUROCOOP: European Cooperation for regional innovation strategies | UK lead |
| 2005 | 2006 | SE Regional Assembly | Stabilizing the Ecological Footprint in the SE Strategy | Lead |
| 2004 | 2007 | European Commission 6 th Framework Programme | INTELCITIES: ‘Intelligent Cities’ | Partner |
| 2004 | | University of British Columbia, Canada, SDRI | Georgia Basin Futures Project | Expert |
| 2004 | | Stockholm Environment Institute / North West Regional Association | A Preliminary Ecological Footprint of the NW Region | Partner |
| 2004 | 2005 | Ecosys / White Young Green Environmental Ltd / | ASSESS: benchmarking for env. business & waste management | Partner |
| 2004 | | ONS (Office of National Statistics) | UK Material Flow Accounts: methodologies for TMR & overburden | Partner |
| 2003 | 2006 | European Commission 6 th Framework Programme | INSURE: regional sustainability indicators & systems dynamics model | UK lead |

| | | | | |
|------|------|--|--|---------|
| 2003 | 2005 | European Commission, 5 th Framework Programme | REGIONET – evaluation of regional sustainable development | UK lead |
| 2003 | 2004 | Environment Agency (England & Wales) | 'Scenarios': futures studies methodologies & applications to policy & management | Lead |
| 2003 | 2004 | DEFRA (Department of Environment Food & Rural Affairs) | DEFRA science Forward Look 10 year strategy | Partner |
| 2003 | 2004 | Stockholm Environment Institute / Ecosys / SEEDA | Taking Stock: a mass balance & footprint analysis of the SE Region | Lead |
| 2003 | | NWRA - climate | Spatial implications of climate change | Lead |
| 2003 | | ESRC & Institute of Alternative Futures, | Scenarios for rural economies & landuse | Sub/c |
| 2003 | | Manchester City Council | Building Schools for the future: Ecological footprint appraisal | Lead |
| 2002 | 2005 | Environment Agency: with Cambridge Econometrics | REWARD - Regional & Welsh Appraisal of Resources & Development | Partner |
| 2002 | 2004 | Enviro-Centre / Biffaward | Intermodal transport for waste & recyclables | Lead |
| 2002 | 2003 | Irish Environmental Protection Agency | National Spatial Strategy: sustainable settlements modelling programme | Lead |
| 2002 | | North West Regional Association | Sustainability communications framework | Lead |
| 2001 | 2002 | UK Countryside Agency | Sustainable Development in the Countryside Around Towns | Lead |
| 2001 | 2002 | Sustainability NW | Application of the Atlas NW | Lead |
| 2001 | 2002 | United Nations University Tokyo, Institute of Advanced Studies | Urban Environmental Transition – scaling from local to global | Expert |
| 2001 | | EU-DG Environment / JRC-ISPRA (Sustainable Towns & Cities) | Review of Local Sustainability Indicators | Lead |
| 2000 | 2001 | RTPI (Royal Town Planning Institute) | UK Spatial Planning Framework | Partner |
| 1999 | 2000 | Irish Environmental Protection Agency / University of Limerick | National Spatial Strategy: methodologies for sustainable settlements planning | Lead |
| 1999 | 2000 | Yorkshire & Humber Regional Assembly | Regional Climate Change Strategy Development | Partner |
| 1999 | | EU-JRC-Ispra | Integrated assessment concepts & methods | Lead |
| 1998 | 2001 | EPSRC | Regional interactive Sustainability Atlas | Lead |
| 1998 | 2000 | SNW / NCBS / Biffaward | Regional resource flow audit | Lead |
| 1997 | 2000 | European Commission 4 th Framework | Integrated Visions for a Sustainable Europe | UK lead |

| | | | | |
|------|------|---|---|------|
| 1997 | 1999 | ESRC (Global Environmental Change Fellowship) | Integrated assessment & economic evaluation | P.I. |
|------|------|---|---|------|

Teaching, training, tools & techniques

Doctoral supervision & examination

| Dates | Location | Student | Topic | Role |
|---------|--------------|------------------------|---|----------------------------|
| 2018- | UoM | Charles Kwaku Oppong | Urbanization of Peri-Urban Landscape: Sustaining Households Livelihoods in Peri-Urban Communities | 1 st supervisor |
| 2016- | UoM | Dimas Visnu Adrianto | Rethinking sustainable city-regions in developing countries: urban sprawl and the emergence of planning and policy | 1 st supervisor |
| 2008-15 | UoM | Michal Miedzinski (PT) | Public policy for long-term societal challenges? The reframing of policy narratives and the ' <i>Roadmap to a Resource Efficient Europe</i> ' | 1 st supervisor |
| 2011-16 | UoM | Elnaz Ghafoori | Urban micro-publics as a social regeneration strategy: exploring the socio-cultural dimensions of retail marketplaces | 1 st supervisor |
| 2008-10 | UoM | Kai Zhou | Public participation in GIS: | 2 nd supervisor |
| 2004-6 | UoM | Joanne Tippett | Ecological design & public participation | 2 nd supervisor |
| 2016 | UoM | Andrew Snow | | Internal examiner |
| 2016 | Paris Saclay | Bastien Tran | | External examiner |
| 2013 | UCL | Tom Cohen | | External examiner |
| 2006 | ETH Zurich | Alexander Walter | | External examiner |
| 2004 | UoM | Jemma Williams | | Internal examiner |
| 2003 | Univ Salford | Xiaonang Zhang | | External examiner |
| 2001 | Univ Surrey | Steve Lucas | | External examiner |
| 2014- | U. Liverpool | Peter Fawcett | | Advisor |
| 2013- | UoM | William Lamb | | Advisor |
| 2011-2 | Univ Hull | Tony Hodgson | | Advisor |
| 2011-2 | MMU | Cristina Rodriguez | | Advisor |
| 2006-8 | UoM | Manoj Kumar Roy | | Advisor |

Under graduate / post-graduate teaching

In 2005-7 I completed a new module in Urban Design for the first semester of the post-graduate Masters in Planning. This was challenging to organize, as it involved students

from no less than 8 different course combinations, full and part time. It was also running in the newly formed School of Environment and Development. The course brought together experiences from various teaching roles over the last 15 years:

- Problem-based learning approach in studio format, using peer evaluation techniques.
- Close coordination with visiting lecturers to provide every student with individual tutorials.
- Focus on visualization and mapping techniques, IT and other practical studio skills.

Other teaching

I have been involved with occasional teaching at undergraduate & masters level, both complete course units and one-off contributions, including:

- planning for regional sustainability: (new course unit)
- environmental science & management:
- urban design module (new course unit)
- urban regeneration project (new course unit, involving active resident participation)
- Analytic & professional skills: (revised course)
- urban policy & practice:
- research methods:

The techniques mentioned above have been developed and used in these courses, including problem-centred learning, interactive class forums, studio group exercises, problem mapping techniques etc.

Extra-mural teaching

Various teaching and training assignments have been carried out 1998-2013, in the UK and abroad, with full details in the summary below.

The teaching roles in university situations have each contributed to the teaching and curriculum agenda as detailed below. The professional training roles have overlapped with the many keynote presentations and seminar leads around the UK and EU. Since the publication of the keynote book *City-Region 2020* in 2000, the demand for seminars and training from the UK and overseas now exceeds available time. Significant teaching / training experiences have included:

- UN Industrial Development Organization, Technology Foresight training
- Manchester Institute of Innovation Research, International Foresight Training Courses

- Urban Institute Ireland, Dublin, seminar series
- Manchester Business School overseas programme:
- Northwest Regional Development Agency (NWDA), sustainability training
- IDPM environmental management programme:
- PREST foresight training programme, 2001-03
- DFID overseas training projects:
- Cheshire County Council / NWRA senior management programme:
- Forum for the Future regional futures programme:
- Manchester Metropolitan, Dept of Applied Community Studies.
- Chalmers University of Technology, Goteborg: Graduate Course in Urban Development, 1996 – 1999
- Hull Business School, Systems Research Unit
- MA in Third World Studies, 1993-96, Institute of Advanced Architectural Studies, York

The professional training approach has followed the principles of ‘integrated planning for sustainable development’ as in City-Region 2020. The application of this has emerged as a pedagogic method which is loosely titled ‘*interactive agenda-centred mutual learning*’. This is a further development of the widespread ‘problem-based learning’ approach, dealing with situations typical of the sustainable urban development agenda, where problems and opportunities often overlap. The seeds of this were sown in my early 1973 paper ‘*Practical Deschooling*’, and then followed up in my organization of a UCL student conference ‘Urban Futures’ in 1975. The approach includes the following elements:

- Baselines / futures: thinking strategically about the definition of problems, organizational tasks, dynamics and trends, and how these may evolve into the future.
- Linkages: the bigger picture in time, space, and cause/effect, for the problems falling between sectors and organizations, and the goals and targets which emerge.
- Opportunities – techniques for thinking ‘beyond the box’, to find new solutions for the bigger picture, in a continuous process of organizational learning and personal development.

Innovative work & curriculum development

The ‘Knowledge Capital Inter-professional Studio’ was a prototype programme run jointly between the School of Planning & Landscape and the Manchester School of Architecture, in 2002-2003, with the help of Curriculum Innovation funding. The studio project work focused on the urban sector which links the 4 HEIs of Manchester and Salford. The agenda concerned knowledge-based and creative industries as a key to urban regeneration, and this was also part of a real-time policy and development initiative – the *Manchester Knowledge Capital* project. The project also aimed at producing a ‘template’ for use in similar inter-professional course developments in the future and in other

disciplines. Overall, the project demonstrated four distinct types of innovation, each concerned with collaborative learning:

- *Inter-professional theme*: The project demonstrated how the roles and contributions from different professions could be brought together in a creative studio setting, with an emphasis on visualization and mapping.
- *Stakeholder interaction theme*: There was a constructive linkage with a high level policy initiative, including for direct feedback from policy makers at Pro-Vice Chancellor level.
- *Agenda-based learning theme*: This approach extended the well known ‘problem-based’ learning to a more exploratory and multi-disciplinary focus on complex problems and potentials in the urban system.
- *Evaluation theme*: there was a process of reflective analysis in several stages, as below. The results were seen in enhanced contributions from the majority of students.

Also, I had previously developed for the department in 1999 a prototype structure for a 3 year BSc in Urban Regeneration & Development. In the event this proposal was overtaken by the changes resulting from the RTPI professional accreditation process.

Statement on teaching

As a professional researcher, the teaching and training activities above are seen as an extension of the knowledge development process, rather than as a competition. In particular the ‘*interactive agenda-centred mutual learning*’ approach above has shown itself as a learning experience for myself, as much as the students. The focus on visualization, multi-level problem scoping, futures studies, systems analysis, actor / network / organizational mapping, and creative opportunity design, is a direct implementation of the principles of sustainable urban development, as set out in various books and papers.

The same approach has also inspired recent academic initiatives, such as the organization of the international conference on ‘evaluation of sustainable regional development’ for the EU project REGIONET in 2003. This was structured around an intensive case study process which aimed to accelerate the group learning process beyond the normal process of an academic conference. It also underlies policy-oriented research such as the REWARD programme on modelling regional production and consumption, which also involves an organizational learning / professional training programme for regional policy-makers. In this light, my future strategy for teaching involves a further development of this approach of the ‘*interactive agenda-centred mutual learning*’. This would aim to include the following:

- Application to a range of undergraduate and postgraduate courses.
- Further development of agenda-oriented and student-centred teaching and learning techniques, particularly using ICT and participative techniques

- Fostering a portfolio of postgraduate and doctoral studies which contribute directly to the research programme on sustainable urban / regional development.
- Equipping other members of the research and academic team in relevant professional training techniques.

Consultancy & collaborations

Joe Ravetz Associates is a flexible and mobile consultancy resource, for small-medium projects, operating in tandem with the academic work of CURE. We offer a custom-made service to clients who are committed to moving forward the state of the art on sustainability in urban and economic development, social policy, and environment/climate issues. Details on <http://urban3.net/joe-ravetz-associates/>

Joe Ravetz is a Principal at SAMI Consulting, a premier resource on strategic futures, innovation management and organization change. Various projects over the years include major government contracts with DEFRA, BIS, Environment Agency, Natural England, EU Occupational Safety and Health Agency (details on www.samiconsulting.co.uk)

Other major collaborations / networks currently include:

- Manchester Institute for Innovation Research
<https://research.mbs.ac.uk/innovation/>
- International Creative Cities Laboratory (<http://www.creativecitylab.org/>)

Foresight & graphic facilitation

Joe Ravetz is an experienced futurist & graphic facilitator, with experience in visualization processes in deliberation and visioning.

He previously worked with the Institute for Alternative Futures using interactive techniques for a series of high level scenario workshops for the UK Government's Economic and Social Research Council (ESRC). Recent samples of graphic facilitation output can be found on:

- <http://www.altfutures.org/vulnerability2030>
- <http://www.rockefellerfoundation.org/blog/foresight-smart-globalization>
- <https://osha.europa.eu/en/topics/green-jobs>

Related projects and freestanding materials can be found on (temporary site)
<http://urban3.net/visual-thinking/>

Informatics & interactive urban intelligence

Joe Ravetz is keen on the potential of ICT for enabling of ‘urban intelligence’, and has developed two software prototypes since 2011.

One is the ‘*Synergy Forum*’, which enables structured dialogue for social collaboration and learning on the synergistic model (<http://www.synergy-demo.hedtek.com/>). This is designed for discussions on complex problems, using futures and foresight methods, where collaboration is the best way forward. The Synergy Forum creates a round table meeting in virtual space: not to replace the human factor, but to extend it for more effective results. We can map the patterns of agreement, analyse key words, vote on common questions, and find new collaborators and synergies in a larger Forum.

Another is the ‘*Local Forum*’ which enables multi-lateral dialogue between stakeholders with local interests: <http://sed-gis1.humanities.manchester.ac.uk/tus/>. This ‘proof of concept’ prototype brings together community discussion forums with google maps platform, and standard geo-spatial data, all based on the Tellus social/spatial technology. With this, local communities can better organize neighbourhood initiatives, plans, projects or networks: policy-makers and service providers can consult on local needs and wishes, using spatial overlays in combination with locally based dialogue (spatial data is currently based on Greater Manchester, to be extended to the whole UK).

Joe Ravetz was in the development team for the i-Know EU-funded platform for horizon scanning and Grand Challenge thinking, (<http://community.iknowfutures.eu>): and continues collaboration through www.futuresdiamond.com. Earlier, he was also a member of the team which produced the award-winning REAP software <http://www.sei-international.org/reap>. Previously he was PI for the EPSRC funded ‘Regional Interactive Sustainability Atlas’, 1999-2002. This provided (in DVD format) a combination of multi-layer GIS, an interactive scenario model adapted from the Vancouver-based Metroquest (<http://metroquest.com/>): and a ‘time-machine’ scenario visualization tool for 2050. A follow-on project ‘Eco-region NW’ is online (but without interactive functions): http://hosting.creativeconcern.com/ecoregion/index_summary_role.php

Overall this development track follows the use of ‘informatics’ (IT plus knowledge management) to enable inter-connected thinking. It’s clear that informatics has huge potential as a catalyst for social learning and ‘urban intelligence’.