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td-net
Network for Transdisciplinary Research

A Tour d'Horizon of Literature Related to (Inter- and) Transdisciplinarity Published in 2011

Each year the td-net invites experts of (inter- and) transdisciplinary research to inform us about important recent publications in the area of (inter- and) transdisciplinarity (see list of contributors). This document is a bibliography of new literature published in 2011. The list also includes short annotations by the experts on why they recommend these books or essays to the scientific community.

We would like to thank the contributors for their inputs and are looking forward to another productive year for transdisciplinary research.

You can find more information about the bibliography at
<http://www.transdisciplinarity.ch/e/Bibliography/>

Overview & synthesis documents

Banse G, Fleischer L-G (eds) 2011. *Wissenschaft im Kontext. Inter- und Transdisziplinarität in Theorie und Praxis*. Berlin: trafo Wissenschaftsverlag.

“Der Sammelband enthält Beiträge zweier wissenschaftlicher Veranstaltungen in Berlin und Karlsruhe. Inter- und Transdisziplinarität wird im Kontext von Bildung, Forschung und Entwicklung thematisiert. Das Buch enthält theoretische Reflexionen und Beispiele aus der Forschungspraxis.” (mu)

Briceño M 2011. *Polycontextural Transdisciplinarity. A New Resource for Research in Complex Systems*. Saarbrücken: LAP LAMPERT Academic Publishing.

Cockell M, Billotte J, Darbellay F, Waldvogel F (eds) 2011. *Common Knowledge. The Challenge of Transdisciplinarity*. Lausanne: EPFL Press.

Darbellay F, Paulsen T (eds) 2011. *Au Miroir des disciplines - Réflexions sur les pratiques d'enseignement et de recherche inter- et transdisciplinaires | Im Spiegel der Disziplinen - Gedanken über inter- und transdisziplinäre Forschungs- und Lehrpraktiken*. Bern: Peter Lang Verlag.

Ertas A (ed) 2011. *Transdisciplinarity: Bridging Natural Science, Social Science, Humanities & Engineering*. USA: TheATLAS Publishing.

Falk-Krzesinski H J, Contractor N, Fiore S M, Hall K L, Kane C, Keyton J, Klein J T, Spring B, Stokols D, Trochim W 2011. *Mapping a research agenda for the science of team science*. Research Evaluation, V20, N2, pp 143-156.

“This article reports the findings from a concept mapping study of current and emerging research foci in the science of team science and suggests new directions for theory development and empirical investigation based on these findings.”(ds)

Fischer A R H, Tobi H, Ronteltap A 2011. *When natural met social: A review of collaboration between the natural and social sciences*. Interdisciplinary Science Reviews, V36, N4, pp 341-358.

Grebenshchikova E G 2011. *Transdisciplinary Paradigma: Science-Innovation-Society*. Moscow: URSS.

“This is the first book in Russian, which systematically analyzes the history of transdisciplinarity, the main theoretical approaches and opportunities transdisciplinarity in solving actual complex problems. Emphasis is placed on transdisciplinary strategies in education, health system and sustainable development. It also reveals the possibility of transdisciplinary methodology in the "risk society".” (eg)

Repko A 2011. *Interdisciplinary Research: Process and Theory. 2nd edition*. Thousand Oaks: Sage.

“The second edition is fully revised and now devotes at least one entire chapter to each step in the interdisciplinary research process. For each step, helpful strategies or guidelines are outlined and examples of their use from across the humanities, social sciences, and natural sciences are provided. It is useful both as a textbook and as a guide for more senior researchers.” (rs)

Welch IV J 2011. *The emergence of interdisciplinarity from epistemological thought*. Issues in Integrative Studies, V29.

“James Welch IV has undertaken the formidable task of showing how the idea of interdisciplinarity has arisen from, and is a response to, the key epistemological strategies of the Western philosophical canon. His goal is to situate interdisciplinarity in the History of Ideas and begin to lay the foundation for a philosophically grounded theory of interdisciplinarity that addresses complexity, integration, and disciplinary negotiation.” (rs)

Concepts of inter- and transdisciplinarity

Darbelay F 2011. *Vers une théorie de l'interdisciplinarité? Entre unité et diversité*. Nouvelles Perspectives en Sciences Sociales, V7, N1, pp 65-87.

Jasanoff S 2011. «Cosmopolitan knowledge: Climate science and global civic epistemology.». In Dryzek J S, Norgaard R B, Schlosberg D (eds). *The Oxford Handbook of Climate Change and Society*, pp 129-143. Oxford: Oxford University Press.

“In dem Beitrag entwickelt und begründet die Autorin das Konzept (und Ideal) eines neuen Wissenstypus, der insbesondere im Kontext der gesellschaftlichen Verhandlung moderner Risikokonflikte an Bedeutung gewinnen könnte (und sollte).” (mp)

Marcovich A, Shinn T 2011. *Where is disciplinarity going? Meeting on the borderland*. Social Science Information, V50, N3-4, pp 582-606.

Osbeck L M, Nersessian N J, Malone K R, Newstetter W C 2011. *Science as Psychology: Sense-making and Identity in Science Practice*. New York: Cambridge University Press.

“This book makes sense of the research laboratory as a multidisciplinary team interacting with each other, with theory, and with artifacts, thus dismantling the rational core of scientific practice. It illustrates how social, personal, and cognitive processes are interwoven in scientific thinking. It analyses the research and learning process in two biomedical engineering laboratories to provide an integrated account of the “acting person as scientist.” “ (gd)

Ryan J C 2011. *Cultural botany: Toward a model of transdisciplinary, embodied, and poetic research into plants*. Nature and Culture, V6, N2, pp 123-148.

“The article builds on a notion of transdisciplinarity as enquiry-driven research to highlighting everyday human bodily engagements with the flora.” (mg)

Post-normal science

Turnpenny J, Jones M, Lorenzoni I (eds) 2011. *Post-normal science Special Issue*. Science, Technology & Human Values, V36, N3.

“Controversial decisions in land management and urban development, risk assessment of emerging technologies such as agri-biotechnology or mobile communication technology and activist environmental science challenge traditional expert systems. Such challenges, associated with potentially high risks, fundamental uncertainties and adverse interests, have already been outlined by Silvio Funtowicz and Jerry Ravetz about twenty years ago. This collection of papers relates current situations to the earlier epistemological outlines and procedural recommendations.” (kk)

Perspectives from the arts and design

Dombois F, Bauer U M, Schwab M, Mareis C (eds) 2011. *Intellectual Birdhouse. Artistic Practice as Research*. Cologne: Verlag der Buchhandlung Walther König.

Huber J, Meltzer B, Munder H, von Oppeln T (eds) 2011. *It's Not a Garden Table. Design und Kunst im erweiterten Feld*. Zürich: jrp Ringier.

Mareis C 2011. *Design als Wissenskultur. Interferenzen zwischen Design- und Wissensdiskursen seit 1960*. Bielefeld: transcript.

Mäkelä M, Nimkulrat N, Dash D P, Nsenga F-X 2011. *On reflecting and making in artistic research practice* Special Issue. Journal of Research Practice, V7, N1.

"Following the integration of artistic disciplines within the university, artists have been challenged to review their practice in academic terms. This has become a vigorous epicentre of debates concerning the nature of research in the artistic disciplines. The special issue offers an overview of the current stage in the development of artistic research, demonstrating how the creative practice of artists can contribute to scientific and professional work in different fields." (dd)

de Zeeuw G 2011. *Improving non-observational experiences: Channelling and ordering*. Journal of Research Practice, V7, N2, article M2.

"This article offers certain key ideas towards integrating insights from a variety of applied disciplines. Developing robust processes for sustainable improvements in practical domains has not been easy. This challenge is addressed differently in different areas, such as social policy, economics, therapy, management, architecture, and design, leading to a number of useful responses. A common characteristic of such responses is the inclusion of "non-observational experiences" in the research process." (dd)

Problem orientation

Schmidt J C 2011. *What is a problem? On problem-oriented interdisciplinarity*. Poiesis & Praxis: International Journal of Technology Assessment and Ethics of Science, V7, N4, pp 249-274.

Integration

Hunecke M 2011. *Wissensintegration in der transdisziplinären Nachhaltigkeitsforschung. Eine Fallstudie zur Anpassung an zunehmende Starkniederschläge in urbanen Räumen – Knowledge integration in transdisciplinary sustainability research. A case study on adaptation to increasing torrential rains in urban areas*. GAIA - Ecological Perspectives for Science and Society, V20, N2, pp 104-111.

Inter- and transdisciplinary research methods

Atkins J P, Gregory A J, Burdon D, Elliott M 2011. *Managing the marine environment: Is the DPSIR framework holistic enough?* Systems Research and Behavioral Science, V28, N5, pp 497-508.

"The Drivers–Pressures–State Changes–Impacts–Responses (DPSIR) framework is used to assess and manage the impact of policy changes and associated problems; however, a change is evident in the recent applications of the approach: an expert-driven, evidence-focussed mode of use is giving way to the use of the framework as a heuristic device to facilitate engagement, communication and understanding between different stakeholders." (dd)

Leavy P 2011. *Essentials of Transdisciplinary Research: Using Problem-Centered Methodologies*. Walnut Creek, California: Left Coast Press.

Lyall C, Bruce A, Tait J, Meagher L 2011. *Interdisciplinary Research Journeys: Practical Strategies for Capturing Creativity*. London: Bloomsbury Academic.

"A very practice-oriented book that gives insights in transdisciplinary methodology. It clearly points out the challenges td-research has to deal with within academia and the authors give tips how researchers could arrange themselves in this environment." (mu)

Ukowitz M, Goldmann H 2011. *Wissenskulturen live - Szenen einer interdisziplinären Kooperation*. Ein Videobeitrag. Klagenfurt: Alpen-Adria-Universität Klagenfurt (<http://video.uni-klu.ac.at/2011/zid/veranstaltungen/SomalT.wmv>)

"Gelingende interdisziplinäre Zusammenarbeit ist eine wichtige Voraussetzung für erfolgreiche transdisziplinäre Projekte. Der Video-Beitrag gibt Einblick in die Dynamiken interdisziplinärer Kooperation von technik- und sozialwissenschaftlichen ForscherInnen." (mu)

Evaluation of inter- and transdisciplinary research

Donovan C (ed) 2011. *Special issue on the state of the art in assessing research impact* Special Issue. Research Evaluation, V20, N3.

Pohl C, Perrig-Chiello P, Butz B, Hadorn G H, Joye D, Lawrence R, Nentwich M, Paulsen T, Rossini M, Truffer B, Walter D W-, Wiesmann U, Zinsstag J 2011. Questions to evaluate inter- and transdisciplinary research proposals. Working paper, td-net for Transdisciplinary Research, Bern.

"The working paper discusses the question of how to evaluate inter- and transdisciplinary research proposals. It suggests that elaborated concepts of and approaches to synthesis and integration are signs of high quality." (cp)

Pohl C 2011. *What is progress in transdisciplinary research?* Futures, V43, N6, pp 618-626.

"The paper elaborates a transdisciplinary research process as an encounter of different thought-collectives and their individual thought-styles, based on the theory of Ludwik Fleck. It discusses what the different thought-collectives involved would see as progress or success of a transdisciplinary project." (cp)

Institutions for transdisciplinary research

McDougall K L, Khuroo A A, Loope L L, Parks C G, Pauchard A, Reshi Z A, Rushworth I, Kueffer C 2011. *Plant invasions in mountains: Global lessons for better management*. Mountain Research and Development, V31, N4, pp 380-387. (open access)

"The article is written by experts involved in invasive species management in seven mountain regions distributed around the world. It illustrates how local expertise can be aggregated to address a global problem and highlights that local implementations of a global strategy must be tailored to different social and ecological contexts. Networking local transdisciplinary case studies globally may be increasingly needed to approach many multi-scale problems." (ck)

McGregor S L T, Volckmann R 2011. *Transversity: Transdisciplinary Approaches in Higher Education*. Integral Publishers.

Education for inter- and transdisciplinary research

Brundiers K, Wiek A 2011. *Educating students in real-world sustainability research: Vision and implementation*. Innovative Higher Education, V36, N2, pp 107-124.

Cosens B, Fiedler F, Boll J, Higgins L, Johnson G, Kennedy B, Strand E, Wilson P & Laflin M 2011. *Interdisciplinary methods in water resources*. Issues in Integrative Studies, V29.

"The paper is co-authored by several professors from quite different disciplines who have cooperated over four years in developing a graduate-level course at the University of Idaho on interdisciplinary methods as part of their program on water resource issues. The course problem is how to promote a sustainable water future and is designed to prepare students for team-based interdisciplinary research." (rs)

Dreyfuss S 2011. *Something essential about interdisciplinary thinking*. Issues in Integrative Studies, V29.

"Simeon Dreyfuss discusses the importance for interdisciplinary analysis of "holding in relationship different ways of knowing." The paper illustrates this point by discussing how he uses a particular poem in interdisciplinary teaching, how students respond to it, and the useful lessons that emerge from that conversation." (rs)

Gardner S K 2011. *A jack of all trades and a master of some of them: successful students in interdisciplinary PhD programs*. Issues in Integrative Studies, V29.

"Susan K. Gardner reports the results of a series of interviews with students enrolled in an interdisciplinary PhD program and with their faculty supervisors." (rs)

Manthei J & Isler J 2011. *Co-teaching social research methods in a joint sociology/anthropology department*. Issues in Integrative Studies, V29.

"Jennifer Manthei and Jonathan Isler explore the challenges of teaching a methods course that spans anthropology and sociology. They thus confront one of the key interdisciplinary challenges: how best to conceive (and communicate to students) the relative advantages and disadvantages of different methods."

Misra S, Stokols D, Hall K L, Feng A 2011. «Transdisciplinary Training in Health Research: Distinctive Features and Future Directions». In Kirst M, Schaefer-McDaniel N, Hwang S, O'campo P (eds). *Converging Disciplines: A Transdisciplinary Research Approach to Urban Health Problems*, pp 133-147. New York: Springer.

"This chapter examines the distinguishing features of transdisciplinary approaches to undergraduate, graduate, and post-graduate training in the health sciences." (ds)

Participation

Dreyer M, Renn O 2011. *Participatory approaches to modelling for improved learning and decision-making in natural resource governance: An editorial*. Environmental Policy and Governance, V21, N6, pp 379-385.

Felt U, Fochler M, Strassnig M 2011. «Experimente partizipativer ELSA-Forschung. Eine methodenpolitische Reflexion». In Grießler E, Rohrachner H (eds). *Genomforschung - Politik - Gesellschaft. Perspektiven auf ethische, rechtliche und soziale Aspekte der Genomforschung*, pp 33-67. Wiesbaden: VS Verlag für Sozialwissenschaften.

“Reflects on the politics of the method of participatory ELSA-research and analyses how different methodical settings allow for different representations of science and society. The paper discusses how settings open up different possibilities to think and talk about a given topic, how citizens and scientists ‚inhabiting‘ these settings accept or rearrange given structures, and how participants relate the discussed experiments to broader dynamics of the governance of techno-scientific developments in the framework of a given techno-political culture.” (mom)

Jungmeier M, Paul-Horn I, Zoller D, Borsdorf F, Grasenick K, Lange S, Reutz-Hornsteiner B 2011. *Biosphere reserves as a long-term intervention in a region - strategies, processes, topics and principles of different participative planning and management regimes of biosphere reserves*. eco.mont - Journal on Protected Mountain Areas Research, V3, N1, pp 29-36.

Robinson J, Burch S, Talwar S, O'Shea M, Walsh M 2011. *Envisioning sustainability: Recent progress in the use of participatory backcasting approaches for sustainability research*. Technological Forecasting and Social Change, V78, N5, pp 756-768.

Talwar S, Wiek A, Robinson J 2011. *User engagement in sustainability research*. Science and Public Policy, V38, N5, pp 379-390.

Science-policy interface

Böcher M, Krott M 2011. «Institutionalisierung multi- und transdisziplinärer Umweltwissenschaften durch Ressortforschungseinrichtungen». In Fischer K, Laitko H, Parthey H (eds). *Interdisziplinarität und Institutionalisierung der Wissenschaft*, pp 59-80. Berlin: Wissenschaftlicher Verlag Berlin.

“In dem Beitrag entwerfen die Autoren ein Modell wissenschaftsbasierter Politikberatung, das sie dann auf den Fall umweltpolitischer Ressortforschung anwenden. Der Beitrag liefert eine innovativ-provokative Sichtweise - insbesondere in Bezug auf den "Mainstream" des td-Diskurses -, weil die Autoren eine sehr strategisch, Interessenbezogene Perspektive einnehmen.” (mp)

Petersen A C, Cath A, Hage M, Kunseler E, van der Sluijs J P 2011. *Post-normal science in practice at the Netherlands Environmental Assessment Agency*. Science, Technology & Human Values, V36, N3, pp 362-388.

“Der Beitrag beschreibt, wie das niederländische Pendant eines Umweltbundesamtes den Wandel von einer technokratischen Politikberatungseinrichtung zu einem an Prinzipien von Partizipation und Reflexivität orientierten Akteur vollzogen bzw. in Angriff genommen hat.” (mp)

Knowledge exchange

Clavier C, Sénéchal Y, Vibert S, Potvin L 2011. *A theory-based model of translation practices in public health participatory research*. *Sociology of Health & Illness*, V34, N5, pp 791-805.

Meyer M 2011. *Researchers on display: Moving the laboratory into the museum*. *Museum Management and Curatorship*, V26, N3, pp 261-272.

“Looks at an intriguing development that is taking place in several European science museums: the move of university research laboratories into the space accessible to visitors. Seen as a means to encourage the public understanding of research such laboratories-in-the-museum have been set up in museums in Munich, Berlin, Milan and Gothenburg. The paper examines the changes that the laboratory undergoes through this relocation: a transformation of its social and material architecture and a change in, and multiplication of, the roles of researchers.” (mom)

Leeuwis C, Aarts N 2011. *Rethinking communication in innovation processes: Creating space for change in complex systems*. *The Journal of Agricultural Education and Extension*, V17, N1, pp 21-36.

“Der Artikel gibt eine gute Einsicht in die Entwicklung des Verständnisses von Prozessen der Wissens-Integration und Innovation in der international führenden Gruppe im Bereich „rural extension“, welche von Röling aufgebaut wurde.” (ak)

Social learning

Fischer-Kowalski M, Xenidis L, Singh S J, Pallua I 2011. *Transforming the Greek island of Samothraki into a UNESCO Biosphere Reserve. An experience in transdisciplinarity*. *GAIA - Ecological Perspectives for Science and Society*, V20, N3, pp 181-190.

Nguyen N C, Bosch O J H, Maani K E 2011. *Creating 'learning laboratories' for sustainable development in biospheres: A systems thinking approach*. *Systems Research and Behavioral Science*, V28, N1, pp 51-62.

“This paper discusses the application of causal loop modelling in establishing 'learning laboratories' for sustainable development. The model built through this approach can serve as a platform for learning and research collaboration. The role and importance of systems thinking methodology and applications to deal with ever-increasing complexities of sustainable development are discussed.” (dd)

Sendzimir J, Reij C P, Magnuszewski P 2011. *Rebuilding resilience in the Sahel: Regreening in the Maradi and Zinder regions of Niger*. *Ecology and Society*, V16, N3:1. <http://dx.doi.org/10.5751/ES-04198-160301>

Squires H, Renn O 2011. *Can participatory modelling support social learning in marine fisheries? Reflections from the Invest in Fish South West project*. *Environmental Policy and Governance*, V21, N6, pp 403-416.

Complexity

Schmidt J C 2011. «Challenged by instability and complexity. On the methodological discussion of mathematical models in nonlinear sciences and complexity theory». In Hooker C (ed). *Philosophy of Complex Systems*, pp 223-254. Amsterdam: Elsevier North Holland.

Systems analysis approaches

Wolf P, Meissner J O, Nolan T, Lemon M, John R, Baralou E, Seemann S (eds) 2011. *Methods for qualitative management research in the context of social systems thinking Special Issue*. Historical Social Research, V36, N1.

"In this special issue the term "social systems" is derived chiefly from the theoretical starting point propounded by Niklas Luhmann (1995). All articles present a discussion of the issues, questions and challenges related to the application of in the broader sense systemic research designs using qualitative methods in management studies, both in reference to theoretical approaches, as well as to the research practice. Authors demonstrate how management science can benefit from viewing organizations through a "systemic lens." Furthermore, attention is drawn to the limitations and constraints of using systems theory for the study of phenomena in organizations as social systems." (pw)

Transdisciplinarity in the making: Case examples of TD research

Klein J 2011. «Research integration: A comparative knowledge base». In Repko A F, Newell W H, Szostak R (eds). *Case Studies in Interdisciplinary Research*, pp 283-298. Thousand Oaks: SAGE Publications.

"Synthesizes lessons about the nature and dynamics of integration in the literatures on IDR and TDR, while identifying four principles that emerge from a comparative approach. An English-language adaptation of the German-language "Integration in der inter- und transdisziplinären Forschung" (in Bergmann M, Schramm E (eds) 2008. *Transdisziplinäre Forschung: Integrative Forschungsprozesse verstehen und bewerten*, pp 93-116..Frankfurt, New York: Campus Verlag). Also draws on "Taking Stock of Integration at the Century Mark," an address at the td-net international conference 2009 "Integration in Inter- and Transdisciplinary Research," Berne, Switzerland." (jk)

Regeer B J, Mager S 2011. *Licence to Grow. Innovating Sustainable Development by Connecting Values. An Insight in the Connected Value Development Approach for Wicked Problems*. Amsterdam: VU University Press.

"I recommend this publication because it proposes a multi-stakeholder approach that brings together people from the worlds of business, policy, science and societal organisations to address some of today's most urgent challenges. It provides practical guidelines, many examples and a set of concrete tools. It also provides a background to the current pleas for new approaches from the perspectives of business (e.g. co-creation), policy (e.g. deliberative governance), science (e.g. transdisciplinary research) and societal organisations (e.g. collaborative practices) that appear remarkably similar." (br)

Repko A F, Newell W H, Szostak R (eds) 2011. *Case Studies in Interdisciplinary Research*. Thousand Oaks: SAGE Publications.

"The book provides several detailed case studies in the application of the interdisciplinary research process (as outlined in Repko's book) across various fields. Introductory and concluding chapters place these case studies in the context of the wider literature on interdisciplinary and transdisciplinary research, and suggest paths for future research." (rs)

Risk research

Lamprecht H, Lang D J, Binder C R, Scholz R W 2011. *The trade-off between phosphorus recycling and health protection during the BSE crisis in Switzerland. A "disposal dilemma"*. GAIA - Ecological Perspectives for Science and Society, V20, N2, pp 112-121.

Pechan P, Renn O, Watt A, Pongratz I (eds) 2011. *Safe or Not Safe. Deciding What Risks to Accept in Our Environment and Food*. Heidelberg and New York: Springer.

Renn O, Klinke A, van Asselt M 2011. *Coping with complexity, uncertainty and ambiguity in risk governance: A synthesis*. AMBIO: A Journal of the Human Environment, V40, N2, pp 231-246.

Technology assessment

Bogner A 2011. *Die Ethisierung von Technikkonflikten. Studien zum Geltungswandel des Dissenses* Weilerwist: Velbrueck Wissenschaft.

Kastenhofer K 2011. *Risk assessment of emerging technologies and post-normal science*. Science, Technology & Human Values, V36, N3, pp 307-333.

"Risk assessment of emerging technologies such as agri-biotechnology or mobile communication technology challenges traditional expert systems. Such challenges, associated with potentially high risks, fundamental uncertainties and adverse interests, have already been outlined by Silvio Funtowicz and Jerry Ravetz twenty years earlier. This paper relates the current situation to these earlier epistemological outlines and procedural recommendations." (kk)

Kehrt C, Schüßler P, Weitze M-D (eds) 2011. *Neue Technologien in der Gesellschaft. Akteure, Erwartungen, Kontroversen und Konjunktoren*. Bielefeld: transcript.

"This collection of essays on emerging technologies - from energy technologies to ubiquitous computing, nanotechnology and synthetic biology - contributes to current discussions about the conceptualisation and governance of the new technosciences. The renowned authors stem from various disciplinary contexts and present valuable insights into the current state of the art of analysing and debating ongoing technoscientific developments." (kk)

PACITA „volta: Science, Technology and Society in Europe“ <http://volta.pacitaproject.eu/>

"Volta ist die Zeitschrift zum EU-Projekt PACITA. PACITA ist ein Europäisches Projekt welches das interdisziplinäre Konzept der Technologiefolgen-Abschätzung in Europa verstärken will." (sb)

Zülsdorf T B, Coenen C, Fiedeler U, Ferrari A, Milburn C, Wienroth M (eds) 2011. *Quantum Engagements. Social Reflections of Nanoscience and Emerging Technologies*. Heidelberg: AKA.

"This reader results from the annual international conference of the S.NET-society in Darmstadt in 2010. Characterising, analysing and discussing the governance of nanotechnology with a view to new conceptual, analytical and procedural approaches represent the focus of this compilation of essays." (kk)

Technoscience

Kastenhofer K, Schwarz A (eds) 2011. *Probing technoscience. Special Issue*. Poiesis & Praxis: International Journal of Technology Assessment and Ethics of Science, V8, N2-3. "This special issue focuses on the concept of technoscience and discusses its conceptual clarity, empirical applicability, analytical validity and societal relevance." (kk)

Schmidt J C 2011. *Toward an epistemology of nano-technosciences. Probing technoscience from a historical perspective: On today's surprising prevalence and relevance of Francis Bacon*. Poiesis & Praxis: International Journal of Technology Assessment and Ethics of Science, V8, N2, pp 103-124.

Urban studies

Després C, Vachon G V, Fortin A E 2011. «Implementing transdisciplinarity: Architecture and urban planning at work». In Doucet I, Janssens N (eds). *Transdisciplinary Knowledge Production in Architecture and Urbanism. Towards Hybrid Modes of Inquiry*, pp 33-49. Dordrecht, Heidelberg, London, New York: Springer.

Doucet I, Janssens N (eds) 2011. *Transdisciplinary Knowledge Production in Architecture and Urbanism. Towards Hybrid Modes of Inquiry*. New York: Springer.

Kirst M, Schaefer-McDaniel N, Hwang S, O'Campo P (eds) 2011. *Converging Disciplines. A Transdisciplinary Research Approach to Urban Health Problems*. New York: Springer.

Landscape research

Enengel B, Muhar A, Penker M, Freyer B, Drlik S, Ritter F 2011. *Co-production of knowledge in transdisciplinary doctoral theses on landscape development. An analysis of actor roles and knowledge types in different research phases*. Landscape and Urban Planning, V105, N1/2, pp 106-117.

Stokols D 2011. *Transdisciplinary action research in landscape architecture and planning: prospects and challenges*. Landscape Journal, V30, N1, pp 1-5.

"This is the introductory article for a special issue of the Landscape Journal focusing on applications of transdisciplinary action research principles to the analysis and management of local and global ecosystems." (ds)

Ecology

Chapin III F S, Pickett S T A, Power M E, Jackson R B, Carter D M, Duke C 2011. *Earth stewardship: A strategy for social-ecological transformation to reverse planetary degradation*. Journal of Environmental Studies and Sciences, V1, N1, pp 44-53.

“The article formulates a framework for socioecological research that is meant to be the fundament of strategic activities and research agenda setting of the Ecological Society of America (ESA) in the area of sustainable development. It succeeds ESA's "Sustainable Biosphere Initiative" of the early 1990s.” (ck)

Davis M A, Chew M K, Hobbs R J, Lugo A E, Ewel J J, Vermeij G J, Brown J H, Rosenzweig M L, Gardener M R, Carroll S P, Thompson K, Pickett S T A, Stromberg J C, Tredici P D, Suding K N, Ehrenfeld J G, Philip Grime J, Mascaro J, Briggs J C 2011. *Don't judge species on their origins*. Nature, V474, N7350, pp 153-154.

“In invasive species research and management, the year 2011 was characterised by a sudden outbreak of vigorous debates about appropriate framings of this complex environmental problem, and this publication stands exemplarily for the debate. The debate illustrates the need for transdisciplinary approaches in situations where science, policy, and values are closely entangled; and how things may go wrong without transdisciplinarity.” (ck)

Jetzkowitz J, Schneider J 2011. *How to concretize research on the coupling of ecosystems to human activities? From socioeconomic indicators to styles of living and acting*. Nature and Culture, V6, N3, pp 218-243.

“Although the article does not focus on transdisciplinarity in the first place, its unique approach to studying the interface between society and nature with reference to changes in plant biodiversity in settlements using the sociological concept of style, the methodological implications for the study of transdisciplinarity in social-ecological systems appear of utmost importance.” (mg)

Sustainability science

Kastenhofer K, Bechtold U, Wilfing H 2011. *Sustaining sustainability science: The role of established inter-disciplines*. Ecological Economics, V70, N4, pp 835-843.

“Research papers covering ecological economics, technology assessment and social studies of science are compared along specified characteristics of transdisciplinary sustainability science (such as interdisciplinarity, participatory methods and problem orientation / policy advice). Based upon this empirical comparison the contribution of each of the three fields to sustainability science and its societal roles are discussed.” (kk)

Sustainability and culture

Hübner R 2011. «Sustainable culture - A contrast to an efficiency society». In Banse G, Nelson G L, Parodi O (eds). *Sustainable Development – The Cultural Perspective. Concepts – Aspects – Examples*, pp 205-221. Berlin: edition sigma.

Hübner R 2011. «Material goods and individuation processes. The ethics of consumerism between mankind's potential for transcendence and the forces of culture». In Parodi O, Ayestaran I, Banse G (eds). *Sustainable Development – Relationships to Culture, Knowledge and Ethics*, pp 121-141. Karlsruhe: KIT Scientific Publishing.

Kagan S 2011. *Art and Sustainability. Connecting Patterns for a Culture of Complexity*. Bielefeld: Transcript Verlag.

Lerchster R E 2011. *Von Lebenswerken und blutenden Herzen. Die Übergabe in Familienunternehmen der Tourismusbranche. Ein Interventionsforschungsprojekt*. Heidelberg: Carl-Auer Verlag.

“Ausgehend von einer inter- und transdisziplinären Begleitstudie greift die Autorin Themen auf, die seitens der Praxis tabuisiert werden und auch in der wissenschaftlichen Diskussion wenig Beachtung finden. So geht sie u. a. der Frage nach, inwieweit gesellschaftspolitische Veränderungen Einfluss auf gegenwärtige Konzepte der Nachfolge haben und welche Nachhal(l)tigkeit Traditionen zugesprochen wird.” (mu)

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