Design Research Society
DRS Digital Library

Design Research Quarterly (2006 - 2009)

DRS Archive

4-2009

Design Research Quarterly Volume 4 Issue 2

Peter Storkerson

Follow this and additional works at: https://dl.designresearchsociety.org/design-research-quarterly Part of the Architecture Commons, and the Art and Design Commons

DesignResearchQuarterly

V. 4:2 April 2009 Design Research Society ISSN 1752-8445 www.designresearchsociety.org



Events & Listings, April 2009

CURRENT RESEARCH IN DESIGN TABLES OF CONTENTS FROM LEADING DESIGN JOURNALS

Architectural Design, 79:3 May.–Jun. 2009 Special Issue: Energies

ISSN: 0003-8504 WEB LINK

Twelve easy pieces for the piano (6–11) Sean Lally

 Nikola Tesla, spectrum of materiality, material energies, thermal variation, air velocity, light spectra and electricity

Contingent behaviours (12-17)

Michelle Addington

[highlighting] the vicissitudes in attitudes that have existed over time to interior and exterior conditions by flagging up the 19th-century pursuit of ventilation and the permeable outside wall, which was pursued in the quest for public sanitation and a misguided belief in the toxic interior

99.7 per cent pure (18–23) Mason White

The HEPA air filter is only capable of processing 99.7 per cent of airborne particles, leaving 0.3 per cent unaccounted for.

'Never mind all that environmental rubbish, get on with your architecture' (24–29) Penelope Dean

a revised environmental agenda that is driven by ideas and concepts rather than subservient technologies

Meteorological architecture (30–41**)** Philippe Rahm

a new meteorological architecture, in which the invisible takes precedence over the visible, and the atmospheric, conduction of heat, perspiration and shifting weather and climate conditions are foregrounded

Domestic micro-environments (42–47) Mathieu Lehanneur

[readdressing] our understanding of domestic spaces through the environmental systems that control and condition them

Breeding the future (48–53) Zbigniew Oksiuta

a future of architecture that is biological, as demonstrated by...bioforms that investigate the cultivation of new types of organisms and living biological products outside the confines of natural evolution

When cold air sleeps (54–63) Sean Lally

What...if we stopped regarding the outside as something to be tempered or mediated?

TABLE OF CONTENTS:

LISTINGS:

- 1 Current Research in design
- 12 Upcoming Events Worldwide Artemis Yagou

DRQ-DRS

- 2 Publication information
- 13 DRQ subscription DRS Membership information
- 14 Listing of current SIGs

DESIGN RESEARCH QUARTERLY PUBLICATION INFORMATION

Editor:

Dr. Peter Storkerson University of Illinois Urbana-Champaign

Associate Editors:

Dr. Vesna Popovic Queensland University of Technology, Australia Dr. Kristina Niedderer

Hertfordshire University, UK

Dr. Artemis Yagou

AKTO Art and Design, Greece

Design Research Quarterly is is a peer reviewed journal, published in January, April, July and October by the Design Research Society.

Design Research Quarterly and its contents are published under the Creative Commons Attribution Noncommercial NoDerivs 3.0 License. < http://creativecommons.org/licenses/by-nc-nd/3.0/ >

You are free to Share—to copy, distribute and transmit the journal or journal articles. Under the following conditions:

1 Attribution

 You must attribute work in the manner specified by the author or licensor (but not in any way that suggests that they endorse you or your use of the work).

2 Noncommercial

You may not use any part of this journal or work in it for commercial purposes.

3 No Derivative Works

 You may not alter, transform, or build upon any part of this journal or work in it.

Design Research Quarterly is archived on-line: www.drsq.org.

We solicit your contributions: papers and articles on design research. For information regarding submissions, contact Peter Storkerson, peter@drsq.org

Editorial Advisory Board: Prof. Ken Friedman, Chair Norwegian School of Management, Norway and Danmarks Designskole, Denmark Dr. Antti Ainamo Helsinki School of Economics, Finland **Prof. Tevfik Balcioglu** Izmir University of Economics, Turkey **Prof. Lin-Lin Chen** National Taiwan University of Science and Technology, Taiwan **Prof. Nigel Cross Open University**, UK **Prof. Clive Dilnot** Parsons The New School for Design, USA Dr. Troels Degn Johansson Denmark's Design School, Denmark Prof. Pekka Korvenmaa University of Art and Design, University of Art and Design, Finland Prof. Kun-Pyo Lee Korea Advanced Institute of Science and Technology, Korea Dr. Joao Lutz UniverCidade, Brazil **Prof. Sanjoy Mazumdar** University of California at Irvine, USA Prof. Donald Norman Nielsen Norman Group and Northwestern University, USA **Prof. Sharon Poggenpohl** Hong Kong Polytechnic University, China Prof. M.P. Ranjan National Institute of Design, India Dr. Elizabeth B.-N. Sanders MakeTools, USA Prof. Marian Sauthoff University of Pretoria, South Africa **Dr. Chris Smith** London Metropolitan University, UK Prof. Toshiharu Taura Kobe University, Japan **Prof. Necdet Teymur** Emeritus, Middle East Technical University, Turkey

Overlooked the day before: the work of Pierre Huyghe (64–69)

Sean Lally

two projects...that use the materials and strategies of stage design...and introduce them into everyday contexts

Energy histories (70-75)

David Gissen

how...history might be reinvented;... through visualisations and conceptual reconstructions of a previously gas-guzzling age or through an atmospheric and climatic archive that replaces the primacy of the photographic archive

Energy forms (76-83)

Cristina Díaz Moreno + Efrén Garcia Grinda

a new system for architecture that is founded on a spatial understanding of thermodynamic exchange and environmental systems and effects

The instinctive sense of space and boundary (84–87)

Petra Blaisse

the significance of the invisible...and how the future of design will be opening the way to the sheer biology of things

Potential futures (88-97)

Sean Lally

questioning the notion of the boundary and investigating the realm of materiality associated with energy

Kings Place: Hall One (100–105) Howard Watson

how...to create a true mixture of amenities while responding to the area's cultural needs and eclipsing its reputation for being less than salubrious

Weisz + Yoes (WXY architecture + urban design) (106–113)

Jayne Merkel

Few small avant-garde practices have an impact on visitors to New York like that of WXY, as the firm is sometimes called.

The Royal Institution (114–119) David Littlefield

how Sir Terry Farrell's rethinking of the Royal Institution in Mayfair has led to a rationalisation and redesign that has transformed the premises from a tatty Georgian labyrinth into an airy series of modern spaces

Articulating environmental grounds (120–123)

Anne Save de Beaurecueil, Franklin Lee

working towards their goal of fusing architecture, landscape and contemporary art through an engagement with articulated ground organisations

Architecture of disbelief: is architectural speciation a good thing? (124–125)

Neil Spiller

Can visionary architects have their cake and eat it, luxuriating in pecuniary success while also continuing to assert their avant-gardism?

Bioluminescence and nanoluminescence (126–127)

Ken Yeang

finding an alternative energy source for lighting buildings' interiors and our external spaces one of the greatest challenges of the 21st century

McLean's Nuggets (128–129) Will McLean

AD+ Userscape

An unconventional low-cost museum (130–133)

Valentina Croci

how a diminutive museum dedicated to the feminine arts in Salerno, southern Italy, provides an intimate experience for visitors

Tower Houses of Sana'a (134–135) Eric Firley

The Urban Housing Handbook...investigates 30 major housing types from around the world, describes one of the most intriguing examples, situated in the Yemen on the Arabian Peninsula.

Architectural Design, 79:2 Mar.–Apr. 2009 Special Issue: Closing the gap issn: 0003–8504 web link

Optimisation stories: the impact of building information modelling on contemporary design practice (6–13) Richard Garber

 Greg Lynn FORM, Garofalo Architects and McInturf Architects, Presbyterian Church of New York, Queens, New York, 1999

Best pedestrian route – GRO ARCHITECTS (14–17)

Richard Garber, Nicole Robertson

 a slanted and skewed temporary walkway, Jersey barriers, Alliance for Downtown New York (ADNY), Lower Manhattan Cultural Council (LMCC)

BURST*008, Museum of Modern Art – Douglas Gauthier and Jeremy Edmiston (18-21)

Douglas Gauthier

 a prefabricated housing system, generative technologies to expand the range of architectural forms

Continued p. 4 🔶

The future of information modelling and the end of theory: less is limited, more is different (22-27)

Cynthia Ottchen

Insights into the future of building information modelling (BIM)....We have to surpass mere data collection and technical optimisation and open up new ways of thinking with the creative use of soft data.

New academic building for the Cooper Union for the Advancement of Science and Art - Morphosis (28-31)

Martin Doscher

 stacked vertical piazza contained within a semi- transparent envelope, sky bridges, skip-stop elevator system, retail space and exhibition gallery, 200-seat auditorium, steel-and-glass skin, design married with the production method

The \$300,000/year architect (32-37) **Urs Gauchet**

► the architect's place in a complex future where there is an increasing demand for buildings but a demise in available materials and conventional energy sources

Al Hamra Firdous Tower - Skidmore,

Owings & Merrill (38–41)

Gary Haney

► Kuwait City, solar heat loads, algorithmic design process, subtractive, doughnutlike form, complex, double-curved, sheer concrete flare walls, rainscreen walls,

Unified frontiers: reaching out with BIM (42 - 47)

- **Coren Sharples**
- Building information modelling (BIM) has become integral to the fluid promotion of communication between contractors, consultants and clients on a project.

C2 building, Fashion Institute of Technology - SHoP Architects (48-51) **SHoP Architects**

Flexibility, communication and leading edge-technology, multilayered glass and metal facade, vertical Student Life Hall, steel trusses, highly flexible three-storey space, LEED-certified project, solar curtain-wall system, Fresnel lenses, site and climate analysis, daylighting analysis, thermal analysis.

Automated assessment of early concept designs (52-57)

Chuck Eastman

US courthouses in such a way that preliminary designs by architects could be assessed and checked against specific criteria

Cellophane House – Kieran Timberlake (58-61)

Stephen Kieran, James Timberlake

 a matrix for holding materials together, materials retain their integrity and can be extracted, exchanged, reused or recycled, T-groove, friction connections, translucent floors, linear-line voltage LED modules, NextGen SmartWrapTM, transparent PET, thin-film photovoltaic cells, 3M solar heat, UV blocking film, Schüco E2 glazing

Yale Sculpture Building and Gallery -Kieran Timberlake (62-65)

Stephen Kieran, James Timberlake

► LEED Platinum rating, four- storey glass studio building, Louis Kahn's existing Yale University Art Gallery, reclaimed wood, sculptural steel stair, Landscaped terraces, green roof, triple-glazed low-E glass, exterior sunshades.

Building for the third century (B₃C), Massachusetts General Hospital – NBBJ (66 - 69)

Craig Brimley, Jorge Gomez

 Massachusetts General Hospital, building information modelling (BIM), quicker construction review, thermal dynamic models

Collaborative intelligence = respect (70-75) Keith Kaseman

ŀ how building information modelling (BIM) enabled the realisation of the Pentagon Memorial in Arlington, Virginia

Her secret is patience and she changes

– Janet Echelman (76–79)

- Janet Echelman
- wind choreography, evolutionary biology, Harvard University, one-cell-thick life forms, Precambrian era, Buro Happold Consulting Engineers, Phoenix Civic Space, Arizona Desert wind, Eduardo Souto de Moura, Speranza Architects, voluminous net sculpture, dynamic relaxation, Custom knot types, virtually tested with modelling software, three-dimensional, multilayered net, AFA Associates, Peter Heppel Associates, 36 individual mesh sections, GORE Tenara® architectural fibre

Information modelling as a paradigm shift (80 - 83)

Dennis Shelden

✤ the more fundamental, subtle and profound decisions on the road to BIM [Building Information Modeling]

Strata Tower – Asymptote (84–87) Hani Rashid, Lise Anne Couture

 40-storey luxury residential building, Al Raha Beach, Parametric constraints, design team split into two groups, BIM technologies, Gehry Technologies, parametric plan layouts, Curtain-wall, Front Inc, environmentally responsive louvre system.

Alberti's paradigm (88–93)

Richard Garber

the work of Filippo Brunelleschi, who did the seemingly impossible in early 15th– century Florence by spanning the massive opening of the dome of Santa Maria del Fiore, the city's cathedral, through an adept use of physical models

Recycled toy furniture – Greg Lynn FORM (94–95)

Greg Lynn

The Duck Table, The Eggplant Table and Whale Table, Recycled Toy Furniture installation, 2008 Venice Biennale, Golden Lion, Best Installation Project, Reverse Modeling, Inc, white light scanner, sixaxis rotational moulding robot arm, hot welding system from Machineous, hightech scavenging, recycled plastics, Panelite, plastic brick, building-scale masonry construction system.

An enthusiastic sceptic (100–105) Nat Oppenheimer

Could the quest for integration be leading towards oversimplification rather than customisation and differentiation?

Toni Stabile Student Center, Columbia University Graduate School of Journalism – Marble Fairbanks (106–109)

Scott Marble, Karen Fairbanks

partial renovation, McKim Mead & White Journalism School building, design and fabrication of performance –driven surfaces, perforated 16–gauge steel panels, acoustic insulation, buffer zones, digital scripting process, pixilation scripting process, sunscreen that hangs below a glass roof, corrugation pattern.

Carlos Zapata and Antonio Citterio's Cooper Square Hotel, New York (114–117) Jayne Merkel

 Unlike most glamorous new high-rise apartment buildings in downtown Manhattan, this thin, tilted white glass tower provides homes away from home for chic out-of-towners.

Pierre Thibault (118–123)

Brian Carter

how Thibault sets out to develop projects in some of the most remote, expansive and sparsely settled areas of the [Quebec] region, responding afresh to the landscape and its indigenous culture

Herbert Art Gallery and Museum, Coventry (124–129)

David Littlefield

The new extension to the Herbert Art Gallery provides a new refinement and logic to the previously eclectic museum and its environs.

Computational spring systems: open design processes for complex structural systems (130-133)

Sean Ahlquist, Moritz Fleischmann

work with computational spring algorithms that has enabled iterative investigations of tension active systems and structures

Complex systems architecture (134–135) Neil Spiller

The potential of a single notation as a seed for a truly ecological architecture provides an essential catalyst, triggering a multifaceted musing that takes in diagrams.

McLean's Nuggets (136–137**)** Will McLean

[asking] whether the future could lie in nanoenergy and the proliferation of numerous personal nanogenerators – attached to buildings, individuals or under bridges

Replacing a beloved building with a hybrid: Paresky Student Center, Williams College (142–143)

Jamie Horwitz

 how Polshek Partnership's design for a new student centre at Williams College... has successfully integrated environmentally sensitive practices into the choreography of life

Services as customer-intensive systems (3-13) Claudio Pinhanez

Designer nostalgia in Hong Kong (14–28) D. J. Huppatz

Science's "New Garb": aesthetic and cultural implications of redesign in a Cold War context (29–45) Michael J. Golec

Notes on design and science in the HCI Community (46–61) Christoph Bartneck Immediate and remote design of complex environments (62–74) Turkka Keinonen

The School of Applied Arts, University of Chile, **1928–1968** (75–93) Eduardo Castillo Espinoza

Design in history (94–105) Victor Margolin

 The Design Journal 12:1

 Mar. 2009

 ISSN: 1756–3062

 Web Link

Fights and fires are the flowers of Edo (9-24) JennieTate

 design and urban planning, built environment, disaster, Tokyo

After taste – the power and prejudice of product appearance (25–39)

Stuart Walker

 taste, convention, creativity, sustainability, design

Six challenges facing user-oriented industrial design (41-67)

Steve Gill

 industrial design; product design; design management; design issues; information appliance; computer embedded product; innovation

Identifying strategic directions for design development of general hospital equipment for Thailand (69–93)

Busayawan Ariyatum, Ray Holland, Pasu Sirisalee, Danu Prommin

 public healthcare; general hospital equipment design; requirement capture process Designing an innovative pill dispenser: an undergraduate level case study of inclusive design (95-115)

HuaDong, Natalie Vanns

 inclusive design, pill dispenser, design education

Book Review Made in newcastle: visual culture. Hilary Fawcett (ed.) (117–119) Denton, Howard

DESIGN PHILOSOPHY PAPERS 2009/1 INEFFICIENT SUSTAINABILITY: PAPERS FROM NEW SCHOOL SUSTAINABILITY DESIGN PHILOSOPHY SYMPOSIUM, NOVEMBER 2008 ISSN 1448-7136 WEB LINK

Gift, design and gleaning Allan Stoekl

Unnatural capital: Bataille beyond design Jamer Hunt

Sustainability: inefficiency or insufficiency? Tony Fry

Sustainability is not a humanism – Allan Stoekl's Bataille's Peak reviewed Cameron Tonkinwise

WEB LINK

Design: one, but in different forms

(187–223)

- Willemien Visser
- Defending an augmented cognitively oriented generic-design hypothesis: there are both significant similarities between the design activities implemented in different situations and crucial differences between these and other cognitive activities.

Shaping things: intended consumer response and the other determinants of product form (224–254) Nathan Crilly, James Moultrie, P. John

Clarkson

[a framework representing] designers as holding distinct intentions for how product visual form should be interpreted by consumers

Global perspectives on structured research training in doctorates of design – what do we value? (255–271)

Gavin Melles

- This study examined the significance of research training in doctorates of design... and attitudes to such training...among faculty and students.
- Teaching to understand the urban sensorium in the digital age: lessons from the studio (272–286)

Rafael E. Pizarro

- a cinematic technique-based method for teaching urban design studios to improve students' appreciation of the connection between the human cognitive-sensorial system...and the environmental qualities of public spaces
- The development and testing of a product personality scale (287–302)

Ruth Mugge, Pascalle C.M. Govers, Jan P.L. Schoormans

a 20-item scale that can be used to validly and reliably assess product personality based on product appearance during the design process

Estimating design effort for the compressor design department: a case study at Pratt & Whitney Canada (303-319)

Adil Salam, Nadia Bhuiyan, Gerard Jan Gouw, Syed Asif Raza

[a case study using] a parametric modeling approach for the purpose of design effort estimation of an integrated blade-rotor low-pressure compressor (IBR LPC) fan.

Design Studies, 30:2 Mar. 2009 ISSN: 0142-694X WEB LINK

The mechanisms of value transfer in design meetings (119–137)

Christopher A. Le Dantec, Ellen Yi-Luen Do

By analysing the verbal content and nonverbal communication between the architect and client....we develop a theory of value transfer and describe the social mechanism that facilitates this transfer during design negotiation.

Affect-in-cognition through the language of appraisals (138–153)

Andy Dong, Maaike Kleinsmann, Rianne Valkenburg

the influence of the valence of affective judgments on design thinking

Ethical imagination and design (154–168) Peter Lloyd

how the fields of ethics and design interrelate, especially in the area of creative imagination

Analogical reasoning and mental simulation in design: two strategies linked to uncertainty resolution (169–186) Linden J. Ball, Bo T. Christensen

an understanding of the nature and function of analogising and mental simulation in design through an analysis of the transcripts of two engineering design meetings

INFORMATION DESIGN	JOURNAL,
17:1, 2009	
ISSN: 0142-5471	WEB LINK

Integrated information systems: a professional field for information designers Aaron Marcus

The idX mission: Information Design Exchange Frank Cronk, Jill Dacey

Using eye tracking technology to examine the effectiveness of design elements on news websites Sauman Chu, Paul Nora, Laura Ruel

An interview with Clay Spinuzzi Saul Carliner

Cross-cultural experiences: modelling observations – developing an international conference on information design Andreas Schneider

Signs and politics Pierre Germain

Computer- vs. paper-based tasks: are they equivalent? Jim Curran

Towards an account of intuitiveness Jim Curran

Skittish skits and scanty silhouettes: the tribulations of gender in modern signage Aaron Marcus

Otto Neurath's Isotype and the rhetoric of neutrality Aaron Marcus

Keynote address by Meredith Davis Jill Dacey **Design research and academic disciplines** Jorge Frascara

Inklings: from mind to page in research Jorge Frascara

Book Reviews

Information Design Workbook: Graphic approaches, solutions, and inspiration plus 30 case studies. Kim Baer. Gordon Akwera

The language of the global polis. Otto Neurath Robin Kinross

Lovely language. Ed Annink and Max Bruinsma. Robin Kinross

Letters tell: Listen before you start to design. Jun Shinohara. Keiichi Koyama

The language of new media design: theory and practice. Radan Martinec & Theo van Leeuwen. Kelley K. Gottschang

Multimodality and genre: A foundation for the systematic analysis of multimodal documents. John A. Bateman. Patricia Wright

Signage Design Manual. Edo Smitshuijzen. Regina Henze

Continued p. $8 \rightarrow$

THE INTERNATIONAL JOURNAL OF ART & Design Education ISSN: 1476–8062 Web link

WEB LINK

Community participatory ecological art and education (4-13)

Young Imm Kang Song

phenomenological case study on ecological artist Lynne Hull...investigating the connections between ecological art, nature, and education

The Importance of Conceptual and Concrete Modelling in Architectural Design Education (14–24)

Aysu Akalin, Ihsan Sezal

This article argues for a 'studio-based learning' approach in terms of the impact of design tools, especially sketching and concrete modelling, on the creativity or problem-solving capabilities of a student.

Boys' lack of interest in fine arts in a coeducational setting: a review of sex-related cognitive traits studies (25-36) Alain Savoie

Explores concepts of sex-related cognitive traits to help in designing sex-adapted approaches to individual learning in art education.

Assessment focus in studio: what is most prominent in architecture, art and design? (37-51)

Barbara de la Harpe, J. Fiona Peterson, Noel Frankham, Robert Zehner, Douglas Neale, Elizabeth Musgrave, Ruth McDermott

a view of assessment is emerging that recognises the process and the person, beyond a view that positions the product or art/design arte-fact above all else

ARTEMIS: reinvigorating history and theory in art and design education (52–60) Jeff Janet, Melissa Miles

whether virtual environments like ARTEMIS can generate new life in art and design history, augment the teaching and learning mix in art and design higher education, and foster new modes of active engagement amongst students.

The City of Richgate: a/r/tographic cartography as public pedagogy (61–70) Rita L. Irwin, Barbara Bickel, Valerie Triggs, Stephanie Springgay, Ruth Beer, Kit Grauer,

Gu Xiong, Pauline Sameshima

[examining] immigrant experiences and narratives through a community-engaged process that employed a/r/tography as a methodology

Design theory and design practice within Sloyd education (71-81) Barbro Sjöberg

an account of the kind of design knowledge the students are working on during the process, and how iterativeness and multi-layered procedures, which are characteristic for the design process of a single student, is built up

Predicting performance in art college: how useful are the entry portfolio and other variables in explaining variance in first year marks? (82–106)

Donal O'Donoghue

if and to what extent a set of pre-enrolment variables and background characteristics predict first year performance in art college

Open disclosures: learning, creativity and the passage of mental (III) health (107–116) Olivia Sagan

an ongoing research project at the University of the Arts, London, which investigates the learning and creativity of a group of students with mental health difficulties

INTERNATIONAL JOURNAL OF DESIGN 3:1, Apr. 2009 Special Issue on Cultural Aspects of Interaction Design ISSN: 1991–3761 WEB LINK

Influence of stakeholders on industrial design materials and manufacturing selection

Owain Francis Pedgley

a four-way stakeholder description of materials and manufacturing selection in industrial design, spanning: users, clients, manufacturers/vendors and designers/ design team members

Facilitating dynamics of focus group interviews in east Asia: evidence and tools by cross-cultural study

Jung-Joo Lee , Kun-Pyo Lee

Since many user research methods popularly used in design have been developed in Europe and North America, one may question how these methods work in completely different cultures....results of a comparative experiment in the Netherlands and South Korea.

Place-specific computing: a place-centric perspective for digital designs **Jorn Messeter**

✤ place-specific computing is suggested as a genre of interaction design that addresses the shaping of interactions among people, place-specific resources and global sociotechnical networks, mediated by digital technology, and influenced by the structuring conditions of place

Collaborative 3D workspace and interaction techniques for synchronous distributed product design reviews

Tek-Jin Nam , Kyung Sakong

✤ a collaborative **3D** workspace that makes use of newly developed interaction techniques for synchronous distributed product design reviews

Design Case Studies

the market.

Navigating the innovation matrix: an approach to design-led innovation Paul Gardien, Steven Kyffin

Finding the best way through the non-linear matrix of options is a key factor in moving imaginative ideas effectively to

Creating economic value by design John Heskett

✤ the influence of major economic theories in shaping views of what constitutes value as created by designAbstract

INTERNATIONAL JOURNAL OF				
TECHNOLOGY AND DESIGN EDUCATION				
19:2 JUN. 2009				
ISSN: 0957-7572	WEB LINK			

Conceptualisation of technology education within the paradigm of sustainable development (109–132)

Margarita Pavlova

A conceptualisation of sustainable development based on a combination of weak anthropocentrism and value based approaches within particular social, environmental and economic contexts provides the basis for establishing education for sustainable development (ESD) through technology education.

Toward sustainable practices in technology education (133-147)

Leo Elshof

The urgent transformation to technology education for sustainability citizenship must begin with a critical examination of existing practices and assumptions which underpin unsustainability.

Education for sustainable development: current discourses and practices and their relevance to technology education (149 - 165)

Walter Leal Filho, Evangelos Manolas, Paul Pace

✤ the state of affairs in relation to education for sustainable development and...its links and appropriateness to technology education.... examples of initiatives and existing practices around the world

The social agenda of education for sustainable development within design & technology: the case of the Sustainable Design Award (167-186)

James Pitt and Fred Lubben

✤ the effectiveness of the Sustainable Design Award, an intervention in post-16 technology education in three countries to encourage students and teachers to strengthen design for sustainability in their work

Problem-solving in technology education as an approach to education for sustainable development (187-197)

Howard Middleton

✤ The design, problem-solving approach that is common to technology education classrooms provides many affordances to students engaging meaningfully with ideas of sustainability and of developing strong understandings of its scope and significance.

Educating for environmental sustainability and educating for creativity: actively compatible or missed opportunities? (199–219)

Kay Stables

✤ the importance of both creativity and environmental sustainability for developing individual learners and society as a whole.

ASIT—a problem solving strategy for education and eco-friendly sustainable design (221-235)

Steve Turner

Thinking] strategy can be an effective methodology to be taught and used in the Technology Education classroom to solve problems in the 'eco' or sustainable design context.

Continued p. 10 \rightarrow

INTERNATIONAL JOURNAL OF TECHNOLOGY AND DESIGN EDUCATION 19:1 Mar. 2009 ISSN: 0957–7572 WEB LINK

Collaborative learning in technology education: D&T unit on puppetry in different Indian socio-cultural contexts (1-14)

Swati Mehrotra, Ritesh Khunyakari, Chitra Natarajan, Sugra Chunawala

 the trials of a Design and Technology (D&T) unit carried out in three different Indian contexts with a focus on collaborative learning

Episodes to scripts to rules: concrete-abstractions in kindergarten children's explanations of a robot's behavior (15-36) David Mioduser, Sharona T. Levy and Vadim Talis

young children's abstraction of the rules underlying a robot's emergent behavior.... the progression through which rules are constructed

Technology and Design, at Key Stage 3, within the Northern Ireland curriculum: teachers' perceptions (37–54) Kenneth Gibson

the perceptions of teachers of Technology and Design...in post-primary schools throughout Northern Ireland to the introduction and implementation of the subject [technology and design]

Assessing creative thinking in designbased learning (55-65)

Yaron Doppelt

the use of design-based learning (DBL) to support the documentation of an authentic project pupils are creating as a graduation project at high school level

The attitudes of interior design students towards sustainability (67–77) Caimen Leigh Ruff, Margot A. Olson

a four-part survey: demographics, ecology, sustainability, and comments

On-line critiques in collaborative design studio (79-99)

- Aysu Sagun, Halime Demirkan
- [in alysis of] the Design Collaboration Model (DCM),...developed to provide a medium for the on-line collaboration of the design courses

Review:

Philosophy and Design: From Engineering to Architecture. Pieter Vermaas, Peter Kroes, Andrew Light, Steven A. Moore (eds). Marc de Vries

JOURNAL OF DESIGN HISTORY 22:1 March 2009 ISSN: 0952–4649 WEB LINK

Toying with Design Reform: Henry Cole and Instructive Play for Children (3–26) Ezra Shales

 design reform movement, design history, crafts technology, consumer products, domestic life, material culture of childhood

The Social Rise of the Orkney Chair (27–45) Annette Carruthers

 Arts and Crafts Movement, furniture, International Exhibitions, the Netherlands, Scotland, vernacular revival

Consumption of Modern Furniture as a Strategy of Distinction in Turkey (47–67) Meltem Ö. Gürel

 domestic material culture, furniture, identity, Istanbul Hilton Hotel, modern design, taste

Turning Architecture Inside Out: Revolving Doors and Other Threshold Devices (69-77)

Laurent Stalder

 architecture, design theory, human body, modernity, technology, threshold

Reviews

Craft, **pace and Interior Design 1855–2005**. Sandra Alfody & Janice Helland. (79–80) Matthew Partington

Representations of British Motoring. David Jeremiah. (80–82) Linda King

Thinking through Craft. Glenn Adamson. (82–84) Andrea Peach

The Wedding Present: Domestic Life beyond Consumption. Louise Purbrick. (84-86) Shirley T. Wajda

The Dress of the People, Everyday Fashion in Eighteenth Century England. John Styles. (86–87) Christiana Payne

 JOURNAL OF ENGINEERING DESIGN

 20:2, 2009

 ISSN: 0954-4828
 WEB LINK

Mapping the strategic objectives between new product development and product design in Taiwan's information industry (105–124) Yen Hsu

 the strategic groups [that] developed from the new product development strategies of various firms in the Taiwanese information industry

An innovative design method for compliant mechanisms combining structural optimisations and designer creativity (125–154)

Masakazu Kobayashi, Shinji Nishiwaki, Kazuhiro Izui, Masataka Yoshimura

This paper proposes an innovative, integrated design method for the design of practical and sophisticated compliant mechanisms.

The risk in early design method (155–173) Katie Grantham Lough, Robert Stone, Irem Y.

Tumer

 a mathematical mapping from product function to risk assessments that can be used in the conceptual design phase

A gene-engineering-based design method for the innovation of manufactured products (175-193)

Ke–Zhang Chen, Xin–An Feng

This paper applies gene-engineering techniques to develop such an innovative design method, which is different from the conventional design methods and innovates products via artificial differentiation of virtual chromosomes of manufactured products.

A design recovery framework for mechanical components (195-215)

- R. Jill Urbanic, Waguih ElMaraghy
- a design recovery framework, which provides a multi-level roadmap to capture the functional and physical information at different levels of resolution

JOURNAL OF ENGINEERING DESIGN VOLUME 20 ISSUE 1 2009 ISSN: 0954–4828 WEB LINK

Engineering design: perspectives, challenges, and recent advances (7–19)

Shaofeng Liu, Iain M. Boyle

a review of papers published in the Journal of Engineering Design from 2007 to 2008 A concurrent function deployment-based and concurrent engineering-based product development method for original design manufacturing companies (21-55) Ying-Chin Ho, Chih-Hsin Lin

With this method, ODM companies can engage in and effectively complete ODM projects, and, most importantly, meet customer's requirements.

Development of a systematic classification and taxonomy of collaborative design activities (57-81)

Karen J. Ostergaard, Joshua D. Summers

This taxonomy is an initial step towards the creation of new agent-based collaborative support tools structured upon a fundamental understanding of the collaborative process with a theoretical foundation.

Automated synthesis of electromechanical design configurations from empirical analysis of function to form mapping (83-104)

Tolga Kurtoglu, M. I. Campbell

a methodology...that extracts design knowledge from an expanding online library of engineering artefacts in the form of grammar rules....a computational process that builds new design configurations by borrowing concepts from how common functions are solved in related designs

JOURNAL OF URBAN DESIGN, VOLUME 14:1 2009 ISSN: 1357–4809 WEBLINK

Civic Concinnity (131–145) Mark C. Childs

Architects' Places, Users' Places: Place Meanings at the New Central Bus Station, Tel Aviv (147–161) Liron Amdur, Marina Epstein–Pliouchtch An Exploration of the Effect of Housing Unit Density on Aspects of Residential Landscape Sustainability in England (163–187) Carl Smith, Andy Clayden; Nigel Dunnett

Legibility and Aesthetics in Urban Design (189–202) Nigel Taylor

Urban Design as a Frame for Site Readings of Heritage Landscapes: A Case Study of Champaner–Pavagadh, Gujarat, India (203–221) Amita Sinha, Yuthika Sharma

Book Reviews

True Urbanism: Living In and Near the Center. Mark L. Hinshaw. (223–224) Mark Childs

Design and Landscape for People—New Approaches to Renewal. Clare Cumberlidge & Lucy Musgrave. (225–227) Bob Jarvis

Rethinking Urban Parks: Public Space and Cultural Diversity. Seitha Low, Dana Taplin, Suzanne Scheld. (227–229) Talja Blokland

Publics and the City. Kurt Iveson. (230–231) Mahyar Arefi

Designing Australia's Cities: Culture, Commerce and the City Beautiful, 1900– 1930. Robert Freestone (232–235) Arnis Siksna

UPCOMING EVENTS DESIGN CONFERENCES WORLDWIDE

Artemis Yagou

2009		3-5 Sep.	Hatfield, UK	12-16 Oct.	
11-14 May	Liverpool, UK		Writing Design: Design History	Istanbul, T	urkey
	EURAM 2009: Renaissance		Society Annual Conference		Revitalising Built
	and Renewal in		http://sitem.herts.ac.uk/		Environments: Requalifying
	Management Studies		artdes_research/tvad/		Old Places for New Uses
	http://www.euram2009.org/r/		writingdesign.html		http://www.
	Renaissance-and-Renewal-				culturespace2009.org
	in-Management-studies	7-9 Sep.	London, UK		
	Ŭ		Improving Student Learning	13-16 Oct.	Compiegne, France
18-20 Jun.	Paris		for the 21st Century Learner		DPPI 2009: Designing
•	DD4D – Data Designed		http://www.brookes.ac.uk/		Pleasurable Products
	for Decisions		services/ocsld/isl/isl2009/		and Interfaces
	VisionPlus : joint IIID,		callforpapers.html		http://www.utc.fr/dppio9/
	OECD conference	9 -10 Sep.	Wolverhampton, UK		
	http://www.iiid.net	5 1	Retailing and Distribution	19-22 Oct.	Seoul, South Korea
			History: A Conference to	-	IASDR 2009: Rigor and
19 Jun.	London, UK		Mark 10 Years of CHORD		Relevance in Design
	EKSIG2009: Experiential		http://home.wlv.		http://www.iasdr2009.org/
	Knowledge and New		ac.uk/~in6086/2009conf.html		
	Methodologies			26-27 Oct.	Taipei, Taiwan
	http://www.	10-11 Sep.	Brighton, UK		DeSForM 2009
	experientialknowledge.org.uk/	10 11 0 cp.	Creating a Better World: The		http://www.desform.org
	orbourgerer 2000 80001		11th International Conference		
19 Jun.	London, UK		on Engineering and Product	12-13 Nov.	Lugano, Switzerland
	In Pursuit of Luxury Conference		Design Education		Multiple Ways to
	http://www.		http://www.epdeo9.org/		Design Research
	inpursuitofluxury.com/				Swiss Design Network
	mpulsuiconaxaiyicomy	17-18 Sep.	Plymouth, UK		Symposium 2009:
10-13 Jul.	Orlando (FL), USA	.,	Making futures: The		www.multiplewayso9.ch
io ij juii	WMSCI 2009: 13th World Multi-		Crafts in the Context of		in the manufacture of the second second
	Conference on Systemics,		Global Sustainability and	24-25 Nov	Helsinki, Finland
	Cybernetics and Informatics		Environmental Issues	24 25 1000	The Art of Research: Processes,
	http://www.ICTconfer.		http://makingfutures.pcad.ac.uk		Results and Contributions
	org/wmsci)		http://maxingratures.pead.ac.ak		http://www.taik.fi/
	org/ winself	1-3 Oct.	Lisbon, Portugal		designresearch/AOR2009
30 Aug 1 Sep.		1-5 001.	IADE Anniversary Conference		designitescaren/ronzoog
50 Aug 1	Oslo, Norway		http://www.iade.pt	2010	
	Nordic Design Research		http://www.lade.pt	2-4 Mar.	Paris, France
	Conference, NORDES'09:	17-18 Sep.	Plymouth, UK	24 111011	KEER2010: International
	Engaging Artefacts	1/-10 Sep.	Making futures: The		Conference on Kansei
	http://www.nordes.org		Crafts in the Context of		Engineering and
	http://www.nordes.org		Global Sustainability and		Emotion Research
2-4 Sep.	London, UK		Environmental Issues		http://www.keer2010.eu
2-4 3 ep.	Designs on eLearning 2009		http://makingfutures.pcad.ac.uk		11.1p.// w w w.kcci2010.cu
	http://www.designsonelearning.				
	net/index.htm				

Membership Design Research Society Design Research Quarterly

The Design Research Society is the multi-disciplinary learned society for the design research community worldwide.

We have an international design research network in around 40 countries comprising members who maintain contact through our publications and activities.

Our members are from diverse backgrounds, not only from the traditional areas of design, ranging from expressive arts to engineering, but also from subjects like psychology and computer science.

We:

- Recognize design as a creative act common to many disciplines
- Understand research and its relationship with education and practice
- Advance the theory and practice of design
- Encourage the development of scholarship and knowledge in design
- Contribute to the development of doctoral education and research training
- Share knowledge across the boundaries of design disciplines
- ► Facilitate networks to exchange and communicate ideas, experience and research findings among members
- Disseminate research findings
- Promote awareness of design research
- Organise and sponsor conferences, and publish proceedings
- Encourage communications between members internationally
- Respond to consultative documents
- Collaborate with other bodies
- ► Lobby on behalf of members' research interests
- ▶ Recognise excellence in design research through awards
- Sponsor e-mail discussion groups and a monthly e-mailed newsletter
- Publish DRQ to members.

JOIN

THE DESIGN RESEARCH SOCIETY ONLINE: www.designresearchsociety.org

FREE SUBSCRIPTION:

Design Research News

Professional and educational service of the Design Research Society

Design Research News comes once a month with all the news on the world of design research carefully assembled, well written, and free of charge.

Design Research News provides information on design and design research to 7,000 subscribers around the world: an international audience of experts in design research, design practice, and design education. **Information on:**

conferences

- publishing opportunities
- → funding
- competitions
- → articles
- → exhibitions
- → books

All areas of design:

- industrial design
- graphic design
- product design
- design history
- philosophy of design
- design theory
- ▶ art
- engineering
- anthropology
- architecture
- systems design
- design management
- ► CAD
- ergonomics
- psychology
- computer science
- information design
- informatics
- design for development
- ▶ and many other subjects.

DESIGN RESEARCH NEWS ONLINE: http://www.jiscmail.ac.uk/lists/ design-research.html

DesignResearch Society Special Interest Group Experiential Knowledge



eksig

Friday, 19 June 2009 London Metropolitan University, London, UK 16 Goulston St. London E1 7TP

Keynote Speaker: Prof Angie Titchen, Fontys University of Applied Science, NL

Web site: http://www.experientialknowledge.org/

Key dates:	
05 Jan.	Notification of accepted abstracts
01 April	Submission of full papers
от Мау	Notification of acceptance of papers
19 June	Submission of revised apers

All papers selected for presentation at the conference will be published in the conference proceedings, an abstract booklet and a CD, the preferred format of the DRS. The conference has also agreed on a collaboration with the Journal of Research Practice, and selected papers will be published in the journal.

The conference will be convened by the DRS Special Interest Group on Experiential Knowledge (EKSIG), and hosted by London Metropolitan University.

CURRENT SPECIAL INTEREST GROUPS OF THE DRS:

DRS Special Interest Groups:

Experiential Knowledge (EKSIG)

EKSIG is concerned with understanding the nature and role of knowledge in research and practice in order to clarify fundamental principles and practices of using practice in research.

Design for Health and WellBeing

The SIG will focus on bringing together designers, design researchers, health professionals and others responsible for the delivery of health care services and products and 'less traditional' well being therapies.

Emotion, Experience and Interaction

This SiG aims to bring individuals together from a range of disciplines and commercial areas with an interest in the ways that humans experience artefacts to help the design discipline to integrate and reconcile the variety of theoretical and methodological approaches to the subject.

Design Pedagogy

The SIG aims to bring together design researchers, teachers and practitioners, and others responsible for the delivery of design education, to clarify and develop the role of design research in providing the theoretical underpinning for design education.

Information: http://www.designresearchsociety.org click on 'special interest groups'