

PERSONAL INFORMATION

*Born in Germany, 1972*  
*citizenship* German, HK permanent and China resident  
*family* married, two children  
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SUMMARY

Design educator and researcher / epistemologist / cybernetician studying creativity and machine logic through practice, education and critical reflection.

ACADEMIC EXPERIENCE

*Xi'an Jiaotong-Liverpool University*      *2011–present*      Professor, XJTLU — China  
Founding member of, and Professor at the Department of Architecture. Associate Professor (2011-2018), Acting Head of Department of Architecture (2011-2013), Founding Director of XJTLU's Design Research Institute (2013-2015). Director of Research, Director of Design Research Centre, Architecture Graduate Studies Officer, Architecture New Masters Programmes Coordinator. Open-ended employment contract.

*The Hong Kong Polytechnic University*      *2018–present*      Visiting Associate Professor,  
*1999–2010*      Assistant Professor, SD POLYU — Hong Kong  
Research Associate (1999-2001), Lecturer (2001–2008), Assistant Professor and Industrial and Product Design Discipline Leader (2008-2010), Visiting Associate Professor (ongoing) at the School of Design. Research and teaching in Industrial and Product Design, Environmental Design and Interactive Systems Design. Curriculum planning and teaching at undergraduate, Masters and PhD level.

*Humboldt University*      *2016–2017*      HUMBOLDT UNIVERSITY BERLIN — Germany  
Visiting Researcher at the Institute of Musicology and Media Studies at Humboldt University Berlin. Research and undergraduate teaching in media cybernetics.

*National Cheng Kung University*      *2010–2011*      Visiting Associate Professor, NCKU — Taiwan  
Visiting Associate Professor at College of Planning and Design. Research as well as teaching and curriculum development at Masters and PhD level.

*Shenzhen University*      *Sep–Oct 2008*      Visiting Professor, SZU — China  
Visiting Professor at The College of Architecture and Urban Planning. Delivered creative innovation workshop and related lectures/discussions.

*Deakin University*      *Apr–Sep 1999*      DEAKIN UNIVERSITY — Australia  
Visiting Scholar. Metadata specification for Construction Primer online learning database, educational software prototyping.

## EDUCATION

- PhD in Architecture and Design*                      2002–2008                      RMIT University, Australia  
Spatial Information Architecture Laboratory  
Thesis: *Designing (tools (for designing (tools (for ...))))*  
Advisors: Prof. Mark BURRY, Prof. John FRAZER & Prof. Ranulph GLANVILLE
- PhD in Education*                                      1997-2001                      University of Kassel, Germany  
Department of Education (FB1)  
Thesis: *Eine Mustersprache für das Design von Autorensystemen*  
Advisors: Prof. Wilhelm SANKE & Prof. Hans DEHLINGER
- Master of Education equivalent*                      1992-1996                      University of Kassel, Germany  
Department of Education (FB1)  
Thesis: *Hypertext: Strukturen und Didaktisches Potenzial*  
Leading to the degree “Erstes Staatsexamen für das Lehramt an Gymnasien”  
Advisor: Prof. Wilhelm SANKE

## MEMBERSHIPS

- ASC*                                      American Society for Cybernetics – Vice President (Electronic Publishing)
- DRS*                                      Design Research Society – Fellow
- CAADRIA*                                      Computer-Aided Architectural Design Research in Asia – Member
- ASA*                                      Architectural Science Association – Member
- IEEE*                                      The Institute of Electrical and Electronics Engineers – Member
- ISSS*                                      International Society for the Systems Sciences – Member
- HKDA*                                      Hong Kong Designers Association – Member

## RESEARCH AND PROJECT GRANTS

- 01 Sep 2018 – 31 Aug 2021                      XJTLU Research Development Fund / PhD Scholarship, “Toolmaking in Parametric Façade Design”, primary supervisor, RMB366,000.
- 01 Jul 2018 – 30 Jun 2021                      XJTLU Research Development Fund / PhD Scholarship, project code RDF-17-01-57 “Architectural Devices as Catalysts for Urban Transformation”, primary supervisor, RMB366,000.
- 20 Jun 2016 – 26 Aug 2016                      XJTLU Summer Undergraduate Research Fellowship (SURF) project “Challenges to the Adoption of BIM in Chinese Architecture, Engineering and Construction”, co-investigator, RMB11,500.
- 13 Jun 2015 – 28 Aug 2015                      XJTLU Summer Undergraduate Research Fellowship (SURF) project “Online Parametric Customisation of 3D Printed Buildings”, co-investigator, RMB9,500.
- 01 Jan 2014 – 31 Oct 2014                      Design Research Institute special budget for “Design Research: Shared Territories” Exhibition, together with Marian Macken and Anuradha Chatterjee, RMB55,000.
- 01 May 2015 – 31 Mar 2017                      XJTLU Research Development Fund, project code RDF-14-02-41 “Perceptions of Creative Direction-Giving in Design Teams”, primary investigator, RMB89,000.

16 Jun 2014 – 31 Aug 2014	XJTLU Summer Undergraduate Research Fellowship (SURF) project “Weaving Code”, primary investigator, RMB9,000.
31 May 2012 – 31 May 2013	XJTLU Research Development Fund, project code RDF-11-02-12 “Perceptions of Leading and of Being Led in Design Conversations”, primary investigator, RMB27,000.
15 Sep 2007 – 14 Mar 2009	HK PolyU School of Design RGC Internal Competitive Research Grant, project code A-PH34 “Design Education Knowledge as Community Property: Design of a Sharing Resource”, primary investigator, HK\$95,240.
31 Jul 2006 – 31 Jul 2007	PolyU PhD scholarship (staff development programme) in support of PhD studies at RMIT, Australia, HK\$100,000.
3 May 2005 – 27 Feb 2009	HK PolyU Internal Competitive Research Grant, project code G-YC48 “Applying Haptic Programming in Product Design”, primary investigator, HK\$178,500.
1 Nov 2004 – 31 Mar 2006	HK PolyU Faculty of Communication, Dean’s Reserve, project code 1-ZV12 “Ergonomics and Usability in Keyboard Design”, co-investigator, HK\$53,500.
1 Aug 2002 – 31 Jul 2005	HK RGC General Research Fund, project code B-Q628 “Designing and Applying Second Generation Machine-Readable Models”, primary investigator, HK\$433,404.
1 Nov 2001 – 30 Apr 2002	HK PolyU School of Design Departmental General Research Fund, project code G-T448 “Investigation of Strategies to Explain Gaudí’s Double Helix Columns Using Machine-Readable Models”, primary investigator, HK\$58,910.
15 Apr 2000 – 10 Sep 2004	HK PolyU Internal Competitive Research Grant, project code G-YC48 “The Graphical User Interface in Virtual Reality - A Study on Immersive Navigation Systems”, co-investigator, HK\$85,000.
1 Mar 2000 – 31 Dec 2004	HK PolyU School of Design RGC Internal Competitive Research Grant, project code A-PB84 “Distributed and Autonomous Intelligent Agents in Physical and Virtual Environments”, primary investigator, HK\$180,000.
31 Jan 2000 – 31 Jan 2002	HK PolyU Earmarked Provision for Special Purposes, “DMAN: Digital Media Access network”, project leader, HK\$7,000,000 plus annual service and maintenance budgets.
Apr 2000	Graduiertenförderung des Landes Hessen, University of Kassel (Germany), EUR1,000.
01 Apr 1999 – 30 Sep 1999	Deakin University (Australia), Visiting Scholar Allowance, AUD3,000.

## SERVICE

<i>Exec Board Membership</i>	Executive board member of the American Society for Cybernetics since 2009, currently in the role of Vice President for Electronic Publishing (Secretary between 2009 and 2014).
<i>Conference Organisation</i>	Conference co-organiser of the annual conferences of the American Society for Cybernetics in 2010, 2011, 2012, 2013, 2014, 2016 and 2017, as well as of the annual conferences of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA) in 2010 and in 2017.

<i>Editing</i>	First editor of the <i>Proceedings of the 17th International Conference on Computer Aided Architectural Design Research in Asia</i> in 2012, of Volume 5, Issue 4 and Volume 10, Issue 4 of the <i>International Journal of Architectural Computing</i> , as well as of Volume 31, Issue 1 of <i>Cybernetics and Human Knowing</i> .
<i>Editorial Board Membership</i>	Editorial board member of the <i>International Journal of Architectural Computing</i> since 2012.
<i>Postgraduate Consortium Coordination</i>	Postgraduate Consortium Co-Chair of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA) 2008-2012. Invited panelist 2014.
<i>University Administration</i>	Industrial and Product Design Discipline Leader at the School of Design at The Hong Kong Polytechnic University 2008-2010, Acting Head of the XJTLU Department of Architecture 2011-2013, Director of the XJTLU Design Research Institute since 2013. Chairmanship and membership in various university and departmental committees and work groups. Developed and/or revised 10+ design-related curricula at undergraduate and postgraduate levels. Leadership and participation in various academic outreach, recruitment and promotion activities.

## AWARDS

<i>Nov 2017</i>	Certificate of Achievement from the international journal <i>Architectural Science Review</i> recognising Thomas FISCHER, 2014: Scientific Research into Designing, While Doing Justice to Designing, <i>Architectural Science Review</i> , Volume 57, Issue 4, pp. 240–248 as one of the journal’s most-cited articles of the past 10 years.
<i>Dec 2015</i>	Outstanding Research Paper Award at the 8th Suzhou Academic Conference on Social Science (苏州市哲学社会科学界第八届学术大会征文) of the Suzhou Association of Philosophy and Social Science(苏州市哲学社科联合会): Third Prize for paper titled 参与，而非保护 — 传统工艺的计算学方法 ( <i>Participation, not Conservation. A Computing Approach to Traditional Craft</i> ).
<i>Apr 2015</i>	Recipient of the 2014-2015 Inspiring XJTLU Person of the Year Award together with Christiane M. Herr, by students’ popular vote.
<i>Oct 2013</i>	Winner of the 2013-2014 Annual XJTLU Teaching Prize for Innovative Teaching Practices as leader of a team conducting an exercise on Architectural Typograms.
<i>Jul 2013</i>	Best Paper Award of the journal <i>Kybernetes</i> for the paper <i>Enigmatic Mechanisms in Defense of the Capability to Have New Ideas</i> .
<i>Dec 2011</i>	Named Long-Term Leading Talent in Jinji Lake Double Hundred Talents award programme (5-year reward).
<i>Aug 2011</i>	Warren McCulloch Award of the American Society for Cybernetics.
<i>Oct 2008</i>	Named Fellow of the Design Research Society.
<i>2007</i>	Outstanding Professional Services and Innovation Award by The Hong Kong Polytechnic University and Institute for Enterprise together with my PhD student Wing C. Lau.
<i>2006</i>	Outstanding Professional Services and Innovation Award by The Hong Kong Polytechnic University and Institute for Enterprise.

- Nov 2005* Faculty Team Award. Faculty of Communication, The Hong Kong Polytechnic University. With other contributors for the book *Hong Kong – Better by Design*.
- Apr 2002* Best Presentation Award. 2002 conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA) at the Multimedia University, Malaysia.
- Apr 2002* Best Paper Award. 2002 conference of the Association for Computer-Aided Architectural Design Research in Asia (CAADRIA) at the Multimedia University, Malaysia.

## STUDENTS' AWARDS

- IDEERS 2015* I co-supervised 3rd-year students Li Shaokang, Qian Shiyu, Yang Shihao and Zhang Xu as well as their support team Shao Fuwei, Li Jiayu, Du Hanxi and Shen Xiaoya designing *Stronger Together*. It won the the First Prize in Structural (Engineering) Design, the Most Preferable (public choice) Award, and a nomination (top six out of 42 competing teams) for Most Creative Architectural (Art) Design, as well as an Earthquake Safety Certificate in the undergraduate category of the IDEERS2015 Earthquake Engineering Research Competition.
- Flying Cloud 2014* My 2nd-year BEng Industrial Design students Hu Xiaoyi, Gao Tongwei, He Lei, and Mao Xinyi designed *Hello China*, which won the 2014 □□□ (“Flying Cloud”) Innovation and Entrepreneurship competition organised by the Suzhou Industrial Park Science and Technology Development Association and the Suzhou Industrial Park Cloud Computing Industry Association. The award included RMB300,000 for the commercial development of the project.
- XJTLU 2014* My 2nd year undergraduate students Enbo Hu, Yifeng Zou, Jiajie Xiao, Min Wu, Yuexuan Wu, Zihang Dan won an Honorable Mention at XJTLU Sixth Innovative Entrepreneurship Competition for their project *Gadget Radar*.
- IDEERS 2014* I co-supervised 3rd-year students Liao Longtai, You Jie, Xie Minghuan and Wang Weiping designing *Smooth Tower*, which won the the First Prize in Most Creative Structural (Engineering) Design, the First Prize in Most Creative Architectural (Art) Design, an Earthquake Safety Certificate and a runner-up position for the Most Preferable (public choice) Award in the undergraduate category of the IDEERS2014 Earthquake Engineering Research Competition.
- IDEERS 2013* I co-supervised 3rd-year students Li Jiehan, Li Yirong, Gu Mengxue and Cai Xinting designing *Woven Tower*, which won the the First Prize in Most Creative Structural (Engineering) Design, the Second Prize in Most Creative Architectural (Art) Design, and the Most Preferable (public choice) Award in the undergraduate category of the IDEERS2013 Earthquake Engineering Research Competition, and Zhu Haoruo, Wang Siyao, Nan Fang and Xiong Henan who won an Earthquake Safety Certificate with *Interwoven Tower* in the same competition and category.
- IDEERS 2010* I supervised students Andi Barlianto, Ayusta Panjaya, Ricky Priambodo and Yeddid Yonatan E.D. designing *Nano Tower*, which won the Most Creative Structural Design Engineering Award in the postgraduate category of the IDEERS2010 Earthquake Engineering Research Competition.
- SDAA, COW/2009* My final-year BA(Hons) in Industrial and product Design student Cheung Wai Chun Kevin won the 2009 SDAA outstanding graduate award as well as the COW/2009 International Design Festival’s 2nd prize (Product Design) for his project *Shellody*.

<i>IDHK</i>	My final-year BA(Hons) in Industrial and product Design student Mak Wing Shan Angel won a 2007 scholarship from the Industrial Designers Society of Hong Kong for her project <i>ButtonFree</i> .
<i>Sony Design Award</i>	My 2nd-year BA(Hons) in Industrial and Product Design student Law Ka Yee Winnie won an a placement in the Sony Student Design Workshop in 2006 in Shanghai, where she has won the Sony Design Award for Best Family Unification Product. Her project titled <i>Family Photo Sharing Set</i> was exhibited on the 2006 Shanghai Design Biennial.
<i>Red Dot Award, DesignSmart</i>	My final-year BA(Hons) in Industrial and product Design student Tsang Ka Ki Monica won the Red Dot Award 2006 for high design quality as well as the DesignSmart Young Design Talent Award 2007 with her tableware design <i>Plate Tectonics</i> .

#### PATENTS AND PRODUCT LICENCE AGREEMENTS

<i>Jun 2008</i>	License agreement with Technical (HK) Manufacturing Ltd. via PolyU Technology & Consultancy Company Ltd. <i>Rotoroast</i> together with student Mak Wing Shan.
<i>Oct 2007</i>	License agreement with Well Group Enterprise Ltd. via PolyU Technology & Consultancy Company Ltd. <i>Truckloads of Knowledge</i> together with student Chan Wing Chi.
<i>May 2006</i>	Hong Kong patent, 16 May 2006, validity 8 years) <i>Device for Interpreting Manual Symbol Input using Manual Display Element Interaction</i> together with PhD student Wing C. Lau. Patent number HK1084827.
<i>Mar 2006</i>	Hong Kong patent, 16 March 2006, validity 8 years) <i>Digital Timing Device and Method for Setting or Adjusting the Timing Device</i> together with PhD student Wing C. Lau. Patent number HK1083431.

#### EDITING AND CURATING

<i>Springer</i>	<i>Jan 2018</i> Springer: Design Research Foundations Design Cybernetics. Navigating the New (~350pp.) Editors: Thomas FISCHER and Christiane M. HERR, forthcoming
<i>C&amp;HK</i>	<i>Mar 2016</i> Cybernetics & Human Knowing 50th Anniversary Retrospective of the ASC (special issue) Volume 23, Issue 1 Editors: Christiane M. HERR, Thomas FISCHER and Ranulph GLANVILLE
<i>Shared Territories</i>	<i>Nov 2014</i> Shared Territories Peer-reviewed Design Research Exhibition at XJTLU in Suzhou, China Curators: Anuradha CHATTERJEE, Marian MACKEN and Thomas FISCHER
<i>IJAC</i>	<i>Oct 2013</i> International Journal of Architectural Computing Volume 10, Issue 4 Editors: Thomas FISCHER, Wendy FOK and Urvi SETH
<i>CAADRIA</i>	<i>Apr 2012</i> CAADRIA 2012 Proceedings Beyond Codes and Pixels. The Proceedings of the 17th International Conference on Computer Aided Architectural Design Research in Asia, Hindustan University, Chennai, India (712 pages) Editors: Thomas FISCHER, Kaustuv DE BISWAS, Jeremy J. HAM, Ryusuke NAKA and Weixin HUANG

#### BOOK

DeGruyter 2018 DeGruyter Studium  
Medientechnisches Wissen Band 2: Informatik, Programmieren, Kybernetik  
(≈300pp.)  
Authors: Stefan HÖLTGEN, Thomas FISCHER, Thorsten SCHÖLER and Johannes  
MAIBAUM, forthcoming

#### BOOK TRANSLATION

Ricardo B. URIBE, 1991: *Tractatus Paradoxico-Philosophicus. A Philosophical  
Approach to Education*, Red Edition. From Spanish/English to German.  
Translator: Thomas FISCHER

#### REFEREED JOURNAL PUBLICATIONS

- Kybernetes* Thomas FISCHER, 2018: Transcomputability, (Glanville's Corollary of) Ashby's  
Law of Requisite Variety, and Epistemic Processes, *Kybernetes*, open access  
publication pending
- JCDE* Christiane M. HERR and Thomas FISCHER, 2018: Building Information  
Modelling Adoption in the Context of the Chinese AEC Industries: An  
Extended BIM Adoption Model, *Journal of Computational Design and  
Engineering*, publication pending, DOI: 10.1016/j.jcde.2018.06.001.
- Kybernetes* Thomas FISCHER, 2017: A Cybernetic Perspective on Determinability and  
Design Research, *Kybernetes*, 46(9), 1588-1596, DOI:  
10.1108/k-10-2016-0269.
- Leonardo* Thomas FISCHER and Laurence D. RICHARDS, 2017: From Goal-Oriented to  
Constraint-Oriented Design: The Cybernetic Intersection of Design Theory and  
Systems Theory, *Leonardo Journal*, 50(1), 36-41, DOI:  
10.1162/LEON\_a\_00862.
- C & HK* Thomas FISCHER, 2016: In Ranulph's Terms, *Cybernetics and Human  
Knowing*, 21(1), 87-97.
- IEEE  
Tech. & Soc.* Thomas FISCHER, 2015: Wiener's Prefiguring of a Cybernetic Design Theory,  
*IEEE Technology and Society Magazine*, 34(3), 52-59, DOI:  
10.1109/MTS.2015.2461172.
- C & HK* Thomas FISCHER, 2015: Designing Together, *Cybernetics and Human  
Knowing*, 22(2/3), 131-144.
- Kybernetes* Thomas FISCHER, 2015: Blind Spots Obscuring Circular Causality in Design and  
Elsewhere, *Kybernetes*, 44(8/9), 1233-1239, DOI: 10.1108/K-11-2014-0267.

- Arch. Science Review* Thomas FISCHER, 2014: Scientific Research into Designing, While Doing Justice to Designing, *Architectural Science Review*, 57(4), 240–248, open access, DOI: 10.1080/00038628.2014.958128.
- FoAR* Thomas FISCHER, 2014: Circular Causality and Indeterminism in Machines for Design, *Frontiers of Architectural Research*, 3(4), 368–375, open access, DOI: 10.1016/j.foar.2014.06.003.
- Kybernetes* Thomas FISCHER, 2014: Effects of Variety Reduction and Amplification on Recursively Re-Entering Patterns, *Kybernetes*, 43(9/10), 1330–1337, DOI: 10.1108/K-09-2014-0185.
- Kybernetes* Thomas FISCHER, 2013: Enigmatic Mechanisms in Defense of the Capability to Have New Ideas, *Kybernetes*, 42(9/10), 1374–1386, DOI: 10.1108/K-10-2012-0070.
- JMSS* Christiane M. HERR and Thomas FISCHER, 2013: Systems for Showing and Repurposing: A Second-Order Cybernetic Reflection on some Cellular Automata Projects, *Journal of Mathematics and System Science*, 3(4), 201–216, open access, DOI:10.17265/2159-5291/2013.04.007.
- C & HK* Thomas FISCHER, 2013: The Roles of Listening and Non-Listening in the Formation of Organizational Hierarchies, *Cybernetics and Human Knowing*, 20(1/2), 63–72.
- ArS* Thomas FISCHER, 2012: Geometry Rationalization for Non-Standard Architecture, *Architecture Science*, 5, 25–47.
- AMM* Christiane M. HERR and Thomas FISCHER, 2012: Constructing Cardboard Chairs for Children as a Part of Applied Structural Design Education in Architecture, *Applied Mechanics and Materials*, 174–177, 1604–1610, DOI: 10.4028/www.scientific.net/AMM.174-177.1604.
- AMR* Christiane M. HERR, Thomas FISCHER, Steven S. MILLARD and André BROWN, 2012: Form and Formalism: On the Future Role of Structural Design in Architectural Education in China, *Advanced Materials Research*, 450–451, 257–262, DOI: 10.4028/www.scientific.net/AMR.450-451.257.
- Kybernetes* Thomas FISCHER, 2011: When is Analog? When is Digital? *Kybernetes*, 40(7/8), 1004–1014, DOI: 10.1108/03684921111160232.
- C & HK* Christiane M. HERR and Thomas FISCHER, 2010: Digital Drifting: Minimally Instructive Education for Tool-Based Creativity in Asia, *Cybernetics and Human Knowing*, 17(1/2), 37–57.
- AutCon* Thomas FISCHER, 2007: Rationalising Bubble Trusses for Batch Production, *Automation in Construction*, 16(1), 45–53, DOI: 10.1016/j.autcon.2005.10.004.
- IJAC* Thomas FISCHER, 2005: Teaching Programming for and with Microcontroller-Enhanced Physical Models, *International Journal of Architectural Computing*, 3(1), 57–74, DOI: 10.1260/1478077053739603.
- AutCon* Thomas FISCHER, Mark BURRY and John FRAZER 2005: Triangulation of Generative Form for Parametric Design and Rapid Prototyping, *Automation in Construction*, 14(2), 233–240, DOI: 10.1016/j.autcon.2004.07.004.



- WSEAS Trans. Inf. Sci. Appl.* Catherine HU and Thomas FISCHER, 2004: Cultural Perception and Technique as Constraints in Computational Design Evolution: A Case Study of Generative Chinese Typography, *World Scientific and Engineering Academy and Society Transactions on Information Science and Applications*, 1(1), 292–297.
- WSEAS Trans. Sys.* Thomas FISCHER, 2004: Notes on Modeling Evolutionary Directionality, *World Scientific and Engineering Academy and Society Transactions on Systems*, 2(3), 579–583.
- IJDC* Thomas FISCHER and Torben FISCHER, 2003: Toolmaking for Digital Morphogenesis, *International Journal of Design Computing*, 6.
- AutCon* Thomas FISCHER, Christiane M. HERR, Mark BURRY and John FRAZER, 2003: Tangible Interfaces to Explain Gaudí’s Use of Ruled-Surface Geometries, *Automation in Construction*, 12(5), 467–471, DOI: 10.1016/S0926-5805(03)00031-1.
- Jour. Guizhou Univ. Tech.* Philip WONG and Thomas FISCHER, 2002: Object-Oriented Clusters. A Proposal for a New Parallel Processing Paradigm, *Journal of Guizhou University of Technology*, 31(4), 27–32.

#### NON-REFEREED JOURNAL PUBLICATIONS

- GRKG* Thomas FISCHER, 2016: Norbert Wiener’s Antizipation einer Kybernetischen Designtheorie, *Grundlagenstudien aus Kybernetik und Geisteswissenschaften*, 57(4), 240–253.
- Patterns* Thomas FISCHER, 2008: Onion Rings You Cannot See and a Theremin I Cannot Play, *Patterns*, Fall 2008.
- Harvard Asia Pacific Review* Peter DEAN and Thomas FISCHER, 2008: Toy Safety or Toying with Safety? A Diplomacy of Pointing Fingers and Saving Face in the Name of the Consumer Protection, *Harvard Asia Pacific Review*, 9(2), 35–37.

#### BOOK CHAPTERS

- Design Cybernetics* Thomas FISCHER, 2018: From “Failure is Not an Option” to “Fail. Fail Again. Fail Better.”, in: Thomas FISCHER and Christiane M. HERR (eds.), *Design Cybernetics. Navigating the New*, Springer (Design Research Foundations), London, forthcoming.
- Medientechnisches Wissen* Thomas FISCHER, 2018: Kybernetik für Medienwissenschaftler, in: Stefan HÖLTGEN, Thomas FISCHER, Thorsten SCHÖLER and Johannes MAIBAUM (eds.), *Medientechnisches Wissen Band 2: Programmierung, Kybernetik, Informatik*, DeGruyter, Oldenburg, forthcoming.
- London and the 1960s* Thomas FISCHER, 2016: Defaceable System MK 4 and Brent Shopping Yr 3, in: Marianne ERTL, Werner KORN and Albert MÜLLER (eds.), *Ranulph Glanville. Art Architecture Cybernetics Design. London and the 1960s*, Edition Echorama, Vienna, pp. 63–70.
- Architecture of Ideas* Thomas FISCHER, 2016: Tracks Left by a Walk Walked, in: William SEAMAN (ed.), *From the Architecture of Ideas. The Life and Work of Ranulph Glanville - Cybernetician*, forthcoming.

- Change Ahead* Thomas FISCHER, 2015: Circular Regeneration, in: Carola VERSCHOOR (ed.), *Change Ahead: How Research and Design are Transforming Business Strategy*, BIS Publishers, Amsterdam, pp. 219–220.
- Critical Concepts in Architecture* Thomas FISCHER, 2015: The Interdependence of Linear and Circular Causality in CAAD Research: A Unified Model, in: Mark BURRY (ed.), *Digital Architecture. Critical Concepts in Architecture*, Routledge, London, to be released in August 2016.
- Trojan Horses* Thomas FISCHER, Christiane M. HERR and Timothy JACHNA, 2012: Pipe-Dreams of the Abstract and the Concrete (i.e. of the General and the Particular), in: Ranulph GLANVILLE (ed.), *Trojan Horses. A Rattle Bag from the “Cybernetics: Art, Design, Mathematics – A Meta-Disciplinary Conversation” post-conference workshop*, Edition Echorama series, Vienna, pp. 19–27.
- CAAD Talks* Thomas FISCHER and John FRAZER, 2005: Modeling Architecture as Logic States in Space and Time: History and Future of the Universal Constructor (in English and Chinese), in: Mao-lin CHIU (ed.), *Insights of Smart Environments. CAAD Talks 5*, Archidata, Taipei, pp. 87–104.
- Festschrift Hans Dehlinger* Thomas FISCHER, 2004: Und aus Welchem Fachbereich Kommen Sie?, in: Heike RAAP and Philip ZERWECK (eds.), *Die Verbesserung von Mitteleuropa steht nicht mehr auf meinem Plan. Eine Festschrift zur Verabschiedung von Hans Dehlinger*, Books on Demand, Norderstedt, pp. 92–100.
- Hong Hong Better by Design* Thomas FISCHER, 2004: Mass Customization and Generative Design, in: Tin Pui LEUNG (ed.), *Kong Kong: Better by Design*, The Hong Kong Polytechnic University, Hong Kong, pp. 119–130.
- Navigating Design* Thomas FISCHER and Catherine HU, 2003: Designing Interactivity, in: Alice Lo (ed.), *Navigating Design. A Voyage of Discovery*, The Hong Kong Polytechnic University with Hong Kong Arts Development Council, Hong Kong, pp. 446–455.
- Navigating Design* Thomas FISCHER, 2003: Listening to Design. Learning from the Music Industry, in: Alice Lo (ed.), *Navigating Design. A Voyage of Discovery*, The Hong Kong Polytechnic University with Hong Kong Arts Development Council, Hong Kong, pp. 370–387.

#### REFEREED CONFERENCE PUBLICATIONS

- RPC 2017* Thomas FISCHER, 2017: Cybernetic Reentry: Towards a Reflexive Pedagogy for Cybernetics, in: Vladimir E. LEPSKY (ed.): *Proceedings of the XI International Symposium Reflexive Processes and Control.*, Cogito-Center, Moscow, Russia, pp. 14–18.
- CAADRIA 2017* Christiane M. HERR and Thomas FISCHER, 2017: An Extended BIM Adoption Model, in: Patrick JANSSEN, Paul LOH, Aleksandra RAONIC, and Marc A. SCHNABEL (eds.): *Protocols, Flows and Glitches. Proceedings of the 22nd International Conference on Computer Aided Architectural Design Research in Asia*, XJTU, Suzhou, China, pp. 179–187.
- CAADRIA 2016* Thomas FISCHER and Christiane M. HERR, 2016: Parametric Customisation of a 3D Concrete Printed Pavilion, in: Sheng-Fen CHIEN, Seungyeon CHOO, Marc Aurel SCHNABEL, Walaiporn NAKAPAN, Mi Jeong KIM and Stanislav ROUDAVSKI (eds.): *Living Systems and Micro-Utopias: Towards Continuous Designing*.

*Proceedings of the 21st International Conference on Computer Aided Architectural Design Research in Asia*, The University of Melbourne, Melbourne, Australia, pp. 549–558.

- DADA 2015* Thomas FISCHER and Christiane HERR, 2017: Showcasing the New Choosing: A Parametric Jewellery Design and Fabrication Exhibit, in: Weiguo XU and Weixin HUANG (eds.): *Digital Architecture Design and Construction: Proceedings of the DADA 2015 Series of Digital Architecture International Conference*, Tsinghua University Press, Beijing, pp. 479–489.
- CAADRIA 2015* Thomas FISCHER, 2015: Participation, Not Conservation: A Computing Approach to Traditional Craft, in: Yasushi IKEDA, Christiane M. HERR, Dominik HOLZER, Sawako KAJIMA, Mi Jeong KIM and Marc A. SCHNABEL (eds.): *Emerging Experiences in Past, Present and Future of Digital Architecture. Proceedings of the 20th International Conference on Computer Aided Architectural Design Research in Asia*, Kyungpook National University, Daegu, Republic of Korea, pp. 499–508.
- Emerging Practices 2014* Thomas FISCHER and Marian MACKEN, 2014: Architectural Typograms in a Cross-Language Architectural Foundations Class, in: Jin MA, Yongqi LOU and Davide FASSI (eds.): *Emerging Practices: Inquiry into the Developing*, Tongji University Press, Shanghai, China, 130–140.
- 21st Century Wiener* Thomas FISCHER, 2014: Wiener's Prefiguring of a Cybernetic Design Theory, in: *Proceedings of the IEEE Conference on Norbert Wiener in the 21st Century*, Boston, USA, available online in IEEE Xplore Digital Library, DOI: 10.1109/NORBERT.2014.6893913.
- CAADRIA 2014* Christiane M. HERR and Thomas FISCHER, 2014: A Notation to Support Column and Beam Layout Design for Reinforced Concrete Construction in China, in: Ning GU, Shun WATANABE, Halil ERHAN, Matthias Hank HAEUSLER, Weixin Huang, Ricardo SOSA (eds.), *Proceedings of CAADRIA 2014: Rethinking Comprehensive Design: Speculative Counterculture*, Kyoto Institute of Technology, Kyoto, Japan, pp. 399–408.
- DesignEd Asia 2013* Thomas FISCHER and Laurence D. RICHARDS, 2013: From Constrained Design to Designed Constraints to Constraint Reversal, in: Timothy JACHNA, Yan Yan LAM and Sylvia TZVETANOVA YUNG (eds.), *Delimitation – Creating with Constraints: Proceedings of the DesignEd Asia Conference 2013*, The Hong Kong Polytechnic University School of Design and Hong Kong Design Institute, Hong Kong, pp. 303–310.
- ASA 2013 (keynote)* Thomas FISCHER, 2013: Design Research Between Different Research Traditions: A Case Study, in: Marc Aurel SCHNABEL (ed.), *Cutting Edge in Architectural Science: Proceedings of the 47th International Conference of the Architectural Science Association 2013*, The Architectural Science Association and The Chinese University of Hong Kong, Hong Kong, pp. 19–28.
- CAAD Futures 2013* Christiane M. HERR and Thomas FISCHER, 2013: Generative Column and Beam Layout for Reinforced Concrete Structures in China, in: Jianlong ZHANG and Chengyu SUN (eds.), *Proceedings of CAAD Futures 2013: Global Design and Local Materialization*, CCIS 369, Springer, Heidelberg, pp. 84–95, DOI: 10.1007/978-3-642-38974-0\_8.
- CAADRIA 2012* Thomas FISCHER, 2012: Design Enigma. A Typographical Metaphor for Epistemological Processes, Including Designing, in: Thomas FISCHER, Kaustuv DE BISWAS, Jeremy J. HAM, Ryusuke NAKA and Weixin HUANG (eds.): *CAADRIA 2012: Beyond codes and Pixels. Proceedings of the 17th International Conference on Computer Aided Architectural Design Research*

in Asia, Hindustan University, Chennai, India, pp. 679–688, DOI:  
10.1007/978-3-642-38974-0\_8.

- Re-Design Design Education (keynote)* Thomas FISCHER, 2012: 自然的概念与概念的本质- 设计教育的反思 (*The Concept of Nature and the Nature of Concepts – A Reflection on Design Education*), in: Xiangyang XIN (ed.): 范畴、方法和价值观 – 2012 设计教育再设计国际会议讲演录 (*2012 Re-Design Design Education: Scope, Method and Principles – International Conference I*), 江南大学设计学院 (School of Design, Jiangnan University University), Wuxi, China, pp. 266–276.
- ICID 2011* Thomas FISCHER and Ranulph GLANVILLE, 2011: Besides Designing to Interact: Interacting to Design, in: *Responsibility and Delight. Proceedings of the 2011 International Conference on Interaction Design*, School of Design, The Hong Kong Polytechnic University, Hong Kong.
- ICPD 2011* Hao-Po HSU and Thomas FISCHER, 2011: Retelling the Story of Design: Probing the Reliability of Interviews in Research About Design, in: *Proceedings of the 6th International Conference on Planning and Design: New Perspectives*, National Cheng Kung University, Tainan, Taiwan, pp. 44–52.
- CAADRRIA 2011* Thomas FISCHER, 2011: One-Behind-The-Many Metaphysics and the Myriad Things, in: Christiane M. HERR, Ning GU, Stanislav ROUDAVSKI, Marc A. SCHNABEL (eds.): *CAADRRIA 2011: Circuit Bending, Breaking and Mending: Proceedings of the 16th International Conference on Computer-Aided Architectural Design Research in Asia*, School of Architecture and Built Environment, The University of Newcastle, Australia, pp. 623–632.
- CAADRRIA 2010* Thomas FISCHER, 2010: The Interdependence of Linear and Circular Causality in CAAD Research: A Unified Model, in: Bharat DAVE, Andrew I-Kang LI, Ning GU and Hyoung-June PARK (eds.): *CAADRRIA 2010: New Frontiers, Proceedings of the 15th International Conference on Computer Aided Architectural Design Research in Asia*, Department of Architecture, The Chinese University of Hong Kong, Hong Kong, pp. 609–618.
- CAADRRIA 2009* Thomas FISCHER, 2009: Reassessing Rigour, Re-Cycling Research. Towards a Conversation on the Form of Enquiry, in: Teng-Wen CHANG, Eric CHAMPION, Sheng-Fen CHIEN and Shang-Chia CHIOU (eds.): *CAADRRIA 2009: Proceedings of the 14th International Conference on Computer-Aided Architectural Design Research in Asia*, Department of Digital Media Design, National Yunlin University of Science and Technology, Douliou, Taiwan, pp. 791–795.
- CAADRRIA 2008* Thomas FISCHER, 2008: Obstructed Magic. On the Myths of Observing Designing and of Sharing Design Observations, in: Walaiporn NAKAPAN, Ekkachai MAHAEK, Komson TEERAPARBWONG and Piyaboon NILKAEW (eds.): *CAADRRIA 2008: Proceedings of the 13th International Conference on Computer-Aided Architectural Design Research in Asia*, Pimniyom Press, Chiang Mai, Thailand, pp. 278–284.
- CAAD Futures 2007* Thomas FISCHER, 2007: Enablement or Restriction? On Supporting Others in Making (Sense of Things), in: Andy DONG, Andrew VANDE MOERE and John GERO (eds.): *Computer Aided Architectural Design Futures 2007. Proceedings of the 12th International Conference on CAAD Futures*, Springer, Dordrecht, pp. 585–598, DOI: 10.1007/978-1-4020-6528-6\_43.
- CAADRRIA 2007* Thomas FISCHER and Christiane M. HERR, 2007: The Designer as Toolbreaker? Probing Tool Use in Applied Generative Design, in: Yu GANG, Zhou QI and Dong WEI (eds.): *CAADRRIA 2007: Proceedings of The 12th International Conference on Computer-Aided Architectural Design Research in Asia*, Southeast University Press, Nanjing, China, pp. 367–375.

- ICD 2006* Thomas FISCHER and Wing C. LAU, 2006: Marble-Track Music Sequencers for Children, in: Aulikki HYRSKYKARI (ed.): *ICD 2006: Proceedings of the 5th International Conference for Interaction and Children*, University of Tampere, Tampere, Finland, pp.141–144.
- CUHC 2005* Christiane M. HERR, Thomas FISCHER Hao Feng WANG and Wei REN, 2005: Demand-Driven Generative Design of Sustainable Housing for China, in: Jin-Yeu TSOU et al. (eds.): *CUHC 2005: Proceedings of the 5th China Urban Housing Conference*, Vol. 2, China Architecture and Building Press, Hong Kong, pp. 703–710.
- CAAD Futures 2005* Thomas FISCHER, 2005: Generation of Apparently Irregular Truss Structures, in: Bob MARTENS and André BROWN (eds.): *Computer Aided Architectural Design Futures 2005. Proceedings of the 11th International Conference on CAAD Futures*, Springer Verlag, Dordrecht, pp. 219–238.
- eCAADe 2004* Thomas FISCHER, 2004: Microcontroller-Enhanced Physical Models for Architecture and Product Design, in: Bjarne RÜDIGER, Bruno TOURNAY and Henning ORBAK et al. (eds.): *Proceedings of the 22nd eCAADe Conference 2004*, Royal Danish Academy of Fine Arts, Copenhagen, Denmark, pp. 396–403.
- De Identitate 2004* Thomas FISCHER and Christiane M. HERR, 2004: Identity Crisis and High-Speed Urbanism. Form and Morphogenetic Process as Generators of Design Identity, in: Celestino SODDU (ed.): *Proceedings of the AsiaLink Seminar De Identitate* (pre-print), Rome, Italy, pp. 109–116.
- CSCC 2004* Catherine HU and Thomas FISCHER, 2004: Cultural Perception and Technique as Constraints in Computational Design Evolution: A Case Study of Generative Chinese Typography, in: Constantine MANIKOPOULOS et al. (eds.): *Proceedings of the 8th WSEAS International Conference on Computers* (part of the 8th CSCC Multiconference), Athens.
- CAADRRIA 2004* Christiane M. HERR and Thomas FISCHER, 2004: Using Hardware Cellular Automata to Simulate Use in Adaptive Architecture, in: Hyun Soo LEE and Jin Won CHOI (eds.): *CAADRRIA 2004. Proceedings of the 9th CAADRRIA Conference*, Yonsei University Press, Seoul, Korea, pp. 815–828.
- EC 2004* Thomas FISCHER, 2004: Notes on Modeling Evolutionary Directionality, in: Nikos E. MASTORAKIS and Alberto BORBONI (eds.): *Proceedings of the 5th WSEAS International Conference on Evolutionary Computation*, Udine, Italy.
- GA 2003* Thomas FISCHER, 2003: On the Art of Designing Science, in: Celestino SODDU (ed.): *Proceedings of the 6th Conference and Exhibition on Generative Art 2003*, Politecnico di Milano University, Milano, Italy, pp. 352–363.
- eCAADe 2003* Thomas FISCHER, Mark BURRY and John FRAZER 2003: Triangulation of Generative Form for Parametric Design and Rapid Prototyping, in: Wolfgang DOKONAL and Urs HIRSCHBERG (eds.): *Digital Design. Proceedings of the 21st International eCAADe Conference 2003*, Graz University of Technology, Graz, Austria, pp. 441–447.

- CG 2003 Thomas FISCHER, and Torben FISCHER 2003: Parametric Voxel Geometry Control for Digital Morphogenesis, in: *Proceedings of the 19th European Workshop on Computational Geometry 2003*, Institute of Computer Science I, University of Bonn, Germany, pp. 35–40.
- CAAD Futures 2003 Thomas FISCHER, Mark BURRY and John FRAZER 2003: How to Plant a Subway System, in: Mao-Lin CHIU, Jin-Yeu TSOU, Thomas KVAN, Mitsuo MOROZUMI and Tay-Sheng JENG (eds.): *Proceedings of the 10th International Conference on Computer Aided Architectural Design Futures*, Kluwer Academic Publishers, Dordrecht, pp. 403–412.
- GA 2002 Thomas FISCHER, 2002: Computation-Universal Voxel Automata as Material for Generative Design Education, in: Celestino SODDU (ed.): *Proceedings of the 5th Conference and Exhibition on Generative Art 2002*, Politecnico di Milano University, Milano, Italy, pp. 10.1-10.11.
- ANZAScA 2002 Thomas FISCHER, Philip WONG and Mark LUTHER 2002: Towards Real-Time Weather Data Visualisation, in: Mark LUTHER (ed.): *Architectural Education: From Pedagogy to Adragogy. Proceedings of the 36th Conference of the Australian and New Zealand Architectural Science Association*, School of Architecture and Building, Deakin University, Geelong, Australia, pp. 143–150.
- ANZAScA 2002 Robert AMOR, Jane BURRY, Thomas FISCHER and Robert WOODBURY 2002: Ontology Specification for Design Communication, in: Mark LUTHER (ed.): *Architectural Education: From Pedagogy to Adragogy. Proceedings of the 36th Conference of the Australian and New Zealand Architectural Science Association*, School of Architecture and Building, Deakin University, Geelong, Australia, pp. 27–34.
- ACADIA 2002 Thomas FISCHER, Torben FISCHER and Cristiano CECCATO, 2002: Distributed Agents for Morphologic and Behavioral Expression in Cellular Design Systems, in: George PROCTOR (ed.): *Thresholds. Proceedings of the 2002 Conference of the Association for Computer Aided Design in Architecture. Department of Architecture, College of Environmental Design, California State Polytechnic University, Pomona, USA*, pp. 113–123.
- eCAADe 2002 Cristiano CECCATO, Thomas FISCHER, Chun-Man LI and John FRAZER, 2002: A Large-Scale Computing Infrastructure for Design Computation, in: Krzysztof KOSZWESKI and Stefan WRONA (eds.): *eCAADe20. Proceedings of the 20th Conference on Education in Computer Aided Architectural Design in Europe*, Warsaw University of Technology, Warsaw, Poland, pp. 282–289.
- CAD & CG 2002 Philip WONG and Thomas FISCHER, 2002: Object-Oriented Clusters. A Proposal for a New Parallel Processing Paradigm, in: *CAD & CG. Proceedings of the 12th Conference on Computer Aided Design Research and Computer Graphics*, Guizhou University of Technology, Guiyang, China, pp. 131–136.
- CAADRIA 2002 Thomas FISCHER, Christiane M. HERR, Mark BURRY and John FRAZER, 2002: Tangible Interfaces to Explain Gaudí's Use of Ruled-Surface Geometries. Interactive Systems Design for Haptic, Non-Verbal Learning, in: Ahmad Rafi Mohamed ESHAQ, Chee Weng KHONG, Mai Neo, Ken TK NEO, Sharifah Nur Antasha Syed AHMAD (eds.): *CAADRIA2002. Proceedings of the 7th Conference on Computer Aided Architectural Design Research in Asia*, Prentice Hall, New York and London, pp. 131–138.
- GA 2001 Thomas FISCHER and Christiane M. HERR, 2002: Teaching Generative Design, in: Celestino SODDU (ed.): *Proceedings of the 4th Conference and Exhibition on Generative Art 2001*, Politecnico di Milano University, Milano, Italy.

- M&D 2001* Thomas FISCHER, Cristiano CECCATO and John FRAZER, 2001: Haptic Programming with Machine-Readable Models, in: Mark BURRY, Sambit DATTA, Anthony DAWSON and John ROLLO (eds.): *Proceedings of Mathematics and Design 2001. The 3rd International Conference*, Deakin University, Geelong, Australia, pp. 158–165.
- ACADIA 2000* Thomas FISCHER, Christiane M. Herr and Cristiano CECCATO, 2000: Towards Real Time Interaction Visualization in Networked Education in Design, in: Mark J. CLAYTON and Guillermo P. VASQUEZ DE VELASCO (eds.): *ACADIA 2000 Conference Proceedings*, Catholic University, Washington D.C., USA.
- SIGraDi 2000* Thomas FISCHER, Christiane M. Herr and Cristiano CECCATO, 2000: The Silk Road. An Interactive Online Encyclopedia as a Foundation for Networked Education in Design, in: Jose Ripper Kos (eds.): *SIGRADI 2000 Conference Proceedings*, Universidad Nacional de Mar del Plata, Rio de Janeiro, Brazil.
- CAADRIA 2000* Lorne FALK, Cristiano CECCATO, Catherine HU, Philip WONG and Thomas FISCHER, 2000: Towards a Networked Education in Design, in: Beng-Tiang TAN, Milton TAN and Yunn-Chii WONG (eds.): *CAADRIA2000. Proceedings of the 5th Conference on Computer Aided Architectural Design Research in Asia*, Centre for Advanced Studies in Architecture (CASA), Singapore, pp. 157–167.
- CAADRIA 2000* Thomas FISCHER, Mark BURRY and Robert WOODBURY, 2000: Object-Oriented Modelling in Computer-Aided Architectural and Educational CAD, in: Beng-Tiang TAN, Milton TAN and Yunn-Chii WONG (eds.): *CAADRIA2000. Proceedings of the 5th Conference on Computer Aided Architectural Design Research in Asia*, Centre for Advanced Studies in Architecture (CASA), Singapore, pp. 145–155.
- EUNIS 1999* Thomas FISCHER, 1999: Dynamic WWW Style Processing with SeSAME, in: Kirstel SARLIN (eds.): *EUNIS99. Information Technology Shaping European Universities (Conference Proceedings)*, Helsinki University of Technology, Espoo, Finland, pp. 67–72.

#### OTHER INFORMATION

- Languages* GERMAN · Native speaker  
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#### ACADEMIC REFEREES

Referee names and contact details are available upon request.

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