1. Record Nr. UNINA9910349557203321 Design Cybernetics: Navigating the New / / edited by Thomas Fischer, Titolo Christiane M. Herr Pubbl/distr/stampa Cham:,: Springer International Publishing:,: Imprint: Springer,, 2019 **ISBN** 3-030-18557-5 Edizione [1st ed. 2019.] Descrizione fisica 1 online resource (317 pages) Collana Design Research Foundations, , 2366-4630 Disciplina 001.53 003.5 Soggetti Knowledge, Theory of Computer engineering Computer networks Industrial design Education Technology - Moral and ethical aspects **Epistemology** Computer Engineering and Networks Industrial Design **Ethics of Technology** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Includes index. Nota di contenuto Chapter 1. Introduction -- Chapter 2. The Origins of Design Cybernetics (Liss C. Werner) -- Chapter 3. Try again. Fail again. Fail better: The Cybernetics in Design and the Design in Cybernetics (Ranulph Glanville) -- Chapter 4. From "Failure is not an Option" to "Try Again. Fail Again. Fail Better (Thomas Fischer) -- Chapter 5. Practice-Based Research in Interaction Design (Delfina Fantini van Ditmar) --Chapter 6. Research by Design (Ted Krueger) -- Chapter 7.

Constructing Cybernetic Thinking, Designing and Educating (Christiane

M. Herr) -- Chapter 8. Improvisation and Constraint: Design Cybernetics in Performance Creation (Tom Scholte) -- Chapter 9. Design Cybernetics in Architecture (Ben Sweeting) -- Chapter 10. Polynesian Voyaging and Ecological Literacy as Models for Design Education (Michael Hohl) -- Chapter 11. The Cyber(netic) City (Timothy Jachna) -- Chapter 12. Daring to Construct: The Poetics of Designing Under Conditions of Uncertainty (Claudia Westermann) -- Chapter 13. Cybernetics and Society Redux: The Necessity of Design (Lawrence Richards).

## Sommario/riassunto

Design Cybernetics: Navigating the New Design cybernetics offers a way of looking at ourselves – curious, creative, and ethical humans – as self-organising systems that negotiate their own goals in open-ended explorations of the previously unknown. It is a theory of and for epistemic practices (learning, designing, researching) that is deeply committed to the autonomy of others and hence offers no prescriptive methodology. Design cybernetics describes design practice as inextricable from conversation – a way of enquiring, developing shared understanding and reaching the new that harnesses reliable control as well as error and serendipity. Recognising circular causality, observerdependency and non-determinability, design cybernetics extends beyond tenets of scientific research into the creative, ethical and aesthetic domain. From this perspective, design is not an ill-conceived subset of scientific research. Instead, scientific research emerges as a particularly restricted subset of the broader human activity of design. This volume offers a cross-section of design cybernetic theory and practice with contributions ranging across architecture, interior lighting studies, product design, embedded systems, design pedagogy, design theory, social transformation design, research epistemology, art and poetics, as well as theatre and acting. Addressing designers, design educators and researchers interested in a rigorous, practice-based epistemology, it establishes design cybernetics as a foundational perspective of design research. "This is a conceptually elegant, well structured, and comprehensive presentation of design cybernetics. It fills a gap in the literature of the field." Ken Friedman, Chair Professor, Tongji University "This book offers a valuable and timely introduction to second-order cybernetics as society grapples with complex issues like climate change and rising inequality." Joichi Ito, Director of the MIT Media Lab.