

Professor William Seaman, Ph.D.

Computational Media, Arts and Cultures; Media Researcher and Artist; Co-director Emergence Lab

Professor, Department of Art, Art History & Visual Studies; and Music; Duke University

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- 1999 Ph.D. — CAiiA, Centre for Advanced Inquiry in the Interactive Arts, University of Wales, Newport, Wales; Dissertation Title: Recombinant Poetics: Emergent Meaning as Examined and Explored Within a Specific Generative Virtual Environment
- 1985 Master of Science, Visual Studies
Massachusetts Institute of Technology, Cambridge, Massachusetts

Biosketch:

Dr. Seaman is a media artist and a media researcher. He is pioneer in the field of interactive media. In particular, his PhD (1999) explored emergent meaning production in a specific generative virtual environment. This research focused on new forms of highly complex interactive computation and related articulated visualization. He began collaborating from the mid 1980s with media computer scientists / programmers, articulating new experimental forms of interactive media production. He has collaborated on a number of Art/Science publications and projects. In 2021 Seaman was awarded a lifetime achievement award from ACM SIGGRAPH for his pioneering work in “Recombinant Poetics / Recombinant Informatics / Neosentience.”

TEACHING

- 2008-Present Professor (Tenured), Art, Art History, & Visual Studies, Duke University
- 2002-08 Professor, Founding Chair, Digital+Media Department and Graduate Program Director, RISD, Providence, R.I.,
- 1999-02 Professor (Tenured), Department of Design I Media Arts, UCLA, L.A., Cal.
- 1996–99 Associate Professor (Tenured) and Director of Graduate Program, Imaging and Digital Arts, University of Maryland, Baltimore County Baltimore, Maryland
- 1992–95 Senior Lecturer (Tenured) and 4D Area Head 93/94, Media Art
College of Fine Arts, University of New South Wales, Sydney, Australia
- 1991 Senior Lecturer, Advanced Video
The College of Fine Arts, University of New South Wales, Sydney, Australia
- 1987 Lecturer, Film and Video - Massachusetts Institute of Technology Cambridge, Massachusetts
- 1986–87 Lecturer, Visible Language and Sound—Visible Language Workshop. MIT Cambridge, MA

MAJOR WORKS

- 2023 Invited Keynote – ICADE - With the theme of “The Emerging Roles”, the 2023 Tsinghua International Conference on Art & Design Education. The conference aims to chart the shifting contours of art and design education in the AI era. Beijing, China
Published the book with World Scientific – Chaos, Information and The Future of Physics / The Seaman Rössler Dialogues, with Information Annotations by Burgin and Seaman
Presented a major Print Retrospective – Selections from the Archive, Rubenstein Art Center, produced the Catalog with a graphic designer; with free download for students + a physical vesion from Lulu.
Published a Paper with Mark Burgin (first Author) in Cybernetics and Human Knowing Journal Vol. 30 (2023) no. 1-2 pp. 101-131 – In a Search for Deeper Meaning: Navigating a Circle of Sense and Nonsense and In Turn Articulating Logical Varieties as Knowledge Illuminators.
Composing Systems for Advancing Advancing, paper written related to Seaman’s presentation for the Glanville Memorial Lecture, Invited talk for ISSS in 2022 - Forthcoming in Enacting Cybernetics Journal (has been submitted and vetted)
Formed a new Research Team for Neosentience research. Emergence Lab
Centerbook by Elizabeth Goldring and Ellen Sebring, Respondant, Book Launch – Held at the Goethe Institute, Boston

MAJOR WORKS

- MIT – ACT, Art Technology and Culture, Roundtable, Research Salon – Invited participant – Emergent Futures, Beyond The Centerbook
- Music– Released the Following Albums (See Bandcamp site for detail - <https://billseaman.bandcamp.com>):
- The Long Sky, Michael Grigoni and Bill Seaman, Longform Editions
- The Clear Distance, Bill Seaman with Stephen Vitiello, Room 40, CD
- The World Was Turning Before, Bill Seaman, Stephen Spera, and Tim Diagram, Laaps – Vinyl and CD
- Invited to be included on the award-winning album – Tribute To Ryuichi Sakamoto “Micro Ambient Music”, International, Digital Version release 2023, Physical release will be 2024
- 2022 The Engine of Many Senses, in the Group Show - Computational Poetics, Beall Center curated by Higgins/Familian, Irvine, CA
- Book - From the Architecture of Ideas: The Life and Work of Ranulph Glanville – Cybernetician, Edited by Seaman, Imprint Academic, UK
- Encyclopedia Chapter, Interactive Art, Bloomsbury (forthcoming)
- Chapter - The Insight Engine 2.0: the Body and Biomimetic Systems as Intelligent Environments, Professor Bill Seaman, PhD, with Quran Karriem, Dev Seth, Hojung Ashley Kwon, and John Herr. in Intelligent Environments, 2nd Edition - Advanced Systems for a Healthy Planet, . Peter Droege, Editor, Elsevier Press, forthcoming
- Overview: Neosentience, Biomimetics, and Insight Engine 2.0 Presented at the Conference on Theoretical and Foundational Problems in Information Studies
- Neosentience: Research Areas and Insight Engine 2.0 Foci, Presented at the Conference on Theoretical and Foundational Problems in Information Studies
- 2021 B3 Show - in conjunction with Frankfurt Book Fair, Silo Solos 2, Sentient R_Map (Room I Region I Relations, Unfolding), Video, Music, Text, Seaman
- ADA - Archive of Digital Arts, Featured Artist, Seaman Archive and Interview, Danube University Krems, Austria
- Special Session Organizer for Theoretical and Foundational Problems (TFP) in Information Studies, conference: Neosentience, Biomimetics and the Insight Engine 2.0
- COMMISSIONS
- 2018 The Oper& with John Supko, Experimental Generative Opera, Mary Duke Biddle Foundation & the Office of the Vice Provost for the Arts, Duke
- 2010 Exchange Fields (Digital Remake), Collaboration with Regina Van Berkel, ISEA, Dortmund, Germany
- 2008 The Architecture of Association, (Collaboration with Daniel Howe), MIS Museum, Sao Paulo. Brazil
- 2001 Inversion Tanz Performance Köln, Collaboration with Regina van Berkel, Premiered 2001, Collogne, Germany
- 2000 Exchange Fields Vision Ruhr, Collaboration with Regina Van Berkel, Premiered 2000, Dortmund, Germany
- 2000 Red Dice / Dés Chiffrés National Gallery of Canada, Premiered 2000 Ottawa, Canada
- 1995–96 Sleeper’s Guts Frankfurt Ballet, Video and Set Design, William Forsythe, Frankfurt, Germany
- 2005 The ThoughtbodyEnvironment 1, Boston Cyberarts, Cambridge, MA
- 2004 Exchange Fields - List Gallery, Brown University, Providence, RI

- 2022 Overview: Neosentience, Biomimetics, and Insight Engine 2.0. Proceedings 2022, 81, 89.
<https://doi.org/10.3390/proceedings2022081089>
 Neosentience: Research Areas and Insight Engine 2.0 Foci. Proceedings 2022, 81, 14.
<https://doi.org/10.3390/proceedings2022081014>
 From The Architecture of Ideas — The Life and Work of Ranulph Glanville, Cybernetician, Imprint Academic, UK (book)
 Interactive Art, Encyclopaedia Chapter (forthcoming)
- 2020 Neosentience, long paper for Sentience - ISEA Online Proceedings 2020,
 Design Cybernetics, Book Review for Cybernetics and Human Knowing
 Machinic Vision in the Neosentient is Potentially Associated With via Multimodal Sensing, in Ways of Machine Seeing, a special edition of AI & Society journal by Springer
 At the Interface - Multimodal Sensing and Intelligent Learning Systems -The Dynamic Transformation of the Cityscape, and Its Ongoing Study— In Digital Cities, Between History and Archaeology, Edited by Maurizio Forte and Helena Murteira, Oxford University Press
- 2018 Towards a Dynamic Heterarchical Ecology of Conversations in the Journal Cybernetics and Human Knowing. Vol. 25 (2018), no. 1, pp. 91–108
 Roy Ascott – Early Interactive Work and some Cybernetic Relationalities - Cybernetics and Human Knowing. Vol. 25 (2018), nos. 2-3,
- 2014 A Many-perspective Approach to Knowledge Production, ASC Conference Proceeding
 From Neosentience to Recombinant Informatics, A Research Overview, in Computer Science, Technology, and Application
- 2013 Computational Creativity - A Multi-perspective Approach, Keynote - RE-new Festival - Copenhagen
 Inventions and Recombinant Poetry, Bill Seaman and O. E. Rössler, in Ecologies of Invention, SU Press, Sydney Australia
- 2012 Neosentience - The Abstraction of Abstraction, EMSCR Proceedings, European Meetings on Cybernetics and Systems Research (forthcoming) organized by the Austrian Society for Cybernetic Studies in cooperation with the International Federation for Systems Research
 The Engine of Engines - Toward a Computational Ecology, in Integral Biomathics, Tracing the Road to Reality, Plamen L. Simeonov, Leslie S. Smith, Andrée C. Ehresmann (Eds.)
- 2011 Neosentience I The Benevolence Engine, with Otto Rössler, Intellect Press (book)
- 2010 Recombinant Poetics, VDM Press, isbn-10 3639236513, isbn-13 978-3639236514
 (Re)Thinking — the body, generative tools and computational articulation, Technoetic Arts: A Journal Of Speculative Research, Volume 7, Issue 3
- 2009 OULIPO I vs I Recombinant Poetics (excerpt) Art & Electronic Media,
 edited by Ed Shanken, Phaidon Press (See also Leonardo Below)
 Combinatoric Micro-strategies for Emergent Transdisciplinary Education, in Rethinking the Contemporary Art School: The Artist, The Academy, The Ph.D. (NSCAD) 2008
 Neosentience – A New Branch of Scientific and Poetic Inquiry Related to Artificial Intelligence, Bill Seaman and Otto Rossler, Technotic Arts Volume 6, Issue 1, March 2008
 Unpacking Simultaneity for Differing Observer Perspectives and Qualities of Environment in “Simultaneity” edited by S. Vrobel, O.E. Rossler, T. Marks-Tarlow, World Scientific
 A Generative Emergent Approach to Graduate Education, in M. Alexenberg, Educating Artists for the Future, Learning at the Intersections of Art, Science, Technology, and Culture
- 2007 Recombinant Poetics in Media Poetry, an International Anthology, edited by Eduardo Kac, Intellect
 Recombinant Poetics and Related Database Aesthetics, in Database Aesthetics, edited by Victoria Vesna, University of Minnesota Press
 Pattern Flows I Hybrid Accretive Processes Informing Identity Construction, Convergence Magazine

ARTIST TALKS / WORKSHOPS / PANELS

- 2021 Panel organizer, ISEA, + artist presentation
- 2020 Invited Talk, Seaman Works – Processes, Methodologies, and Interactions Dept of Digital Arts at the University of Applied Arts, Vienna ,
B3 - Invited Panel, AI, Frankfurt, Germany
ISEA, Panel on AI/Neosentience, International Symposium on Electronic Arts, Montreal 2018
- 2018 Artist Talk, Suspended Sentence, UMASS Dartmouth Gallery, Dartmouth Mass
- 2017 Invited von Foerster Lecture, von foerster Society, Towards A Dynamic Heterarchical Ecology of Conversations, University of Vienna, Vienna, Austria
Artist Talk, University of Montreal
Artist 3 day Workshop, Universitat für Angewandte Kunst Wein, Vienna Austria
Artist Talk, Universitat für Angewandte Kunst Wein, Vienna Austria
- 2015 Color and The Brain Symposium, Duke Institute for Brains Sciences, Session Moderator Durham, North Carolina
Interrupt (conference) Invited Feature Presentation, Brown University, Providence RI
World Photonics Forum, Session Chair, Fitzpatrick Institute for Photonics, Duke
Emergence: Re-Cognizing Complexity, Insight Engine, SAT, Montreal, Canada
- 2014 NIAS workshop on the New Cultural Commons, invited presentaiton, Wiessnaar, Netherlands
Shanghai Theatre Academy, Experimental Workshop, Shanghai, China
- 2013 Multi-perspective Approach to Knowledge Production - American Society for Cybernetics - conference Acting - Learning - Understanding Bolton, UK
- 2012 Artsit Talk, Abrechnung für Dienstleistungen/Aufwandsentschädigungen, Bremen, Germany
Interaction Design Workshop, Jacobs University, Bremen, Germany

PROFESSIONAL ACTIVITIES

- 2020-22 Book Review Editor for Cybernetics and Human Knowing, Journal
Graduate Program Director, Computational Media, Arts and Cultures (CMAC), Duke University
- 2019 Talk for Invited Panel on the work of Christian Marclay, Franklin Humanities Institute / Duke University
- 2018 Roy Ascott – Early Interactive Work and some Cybernetic Relationalities - Cybernetics and Human Knowing. Vol. 25 (2018), nos. 2-3, pp. xx-xx
Towards a Dynamic Heterarchical Ecology of Conversations (invited talk by von Foerster Society, Vienna) was published in the Journal Cybernetics and Human Knowing. Vol. 25 (2018), no. 1, pp. 91–108
- 2015-23 Co-director, The Emergence Lab, Media Arts + Sciences, Duke University
- 2016 At the Interface — Multimodal Sensing and Intelligent Learning Systems —The Dynamic Transformation of the Cityscape, and Its Ongoing Study, Digital Cities in Between History and Archaeology, Edited by Maurizio Forte and Helen Muteira
Advisory Board Member of the Handbook of Anticipation, Edited by Roberto Poli
- 2015 Cyberworlds Invited Talk - Neosentient Architecture Generator, IEEE affiliated
Emergent Relationally System - in Remote Sensing - Current Methods and Applications edited by Maurizio Forte and Stefano Campana

GRANTS

2013 Bass Connections, Duke University

2012 Duke Institute for Brain Sciences, Duke University

2009 Council for the Arts, Major Collaboration Grant, Duke University
Wexner Museum - Video Artist Residency

2005 Video Production Grant - Avid / Boston Cyberarts
Large Format Photographic Signs - Castle Graphics / Boston Cyberarts

2003 Rockefeller Grant Nominee
Wexner Museum - Video Artist Residency
Artslink Travel Grant

2002 Langlois Foundation, Poly-sensing Environment, with Dr. Ingrid Verbauwhede, UCLA, Electrical Engineering, Mark Hanson, Bell Labs

2001 Chancellor's Fund for Academic Border Crossing, UCLA, with Dr. Ingrid Verbauwhede, Electrical Engineering, L.A., C.A.

AWARDS

2021 The distinguished Artist Award for Lifetime Achievement in Digital Art for my work exploring "Neosentience, Recombinant Poetics, and Recombinant Informatics." ACM/SIGGRAPH

2003 Leonardo Award for Excellence, for "OULIPO I vs I Recombinant Poetics", Leonardo Digital Salon, 34:5 Edited by Christiane Paul

2002 Fulbright Distinguished American Scholar, Wellington, New Zealand

2001 Intel Research Gift, L.A., C.A.

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1999 Intel Research Gift, L.A., C.A.

1998 Industrial Forum Award Hannover, Germany

1996 Bonn Videonale Prize Bonn, Germany

1995 International German Video Art Prize Baden Baden, Germany
Interactive Art, Prix Ars Electronica Linz, Austria
First Prize, Berlin Film and Video Festival, Multimedia Berlin, Germany

1993 Siemens' Stipendium, ZKM Karlsruhe Karlsruhe, Germany

1992 Best International Video Cadiz, Spain
Interactive Art, Prix Ars Electronica Linz, Austria

1989 Fellowship, Massachusetts State Council Artist Boston, Massachusetts
Zone Video Festival Prize Springfield, Massachusetts

1987 Fellowship, National Endowment for the Arts Washington, D.C.
Cannon Europa Prize, World Wide Video Festival Den Haag, Holland

1986 Awards in the Visual Arts, Rockefeller Foundation Winston-Salem, N. Carolina
Finalist, Artist Foundation Boston, Massachusetts

1985 Monte Verite Invitational Prize Locarno, Switzerland
First Prize, 2nd International Biennial Ljubljana, Yugoslavia
Best Sound, Geneva International Video Festival Geneva, Switzerland