

PINO TROGU

Associate Professor of Information Design
 School of Design
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EDUCATION

Rhode Island School of Design 1983–85 Master of Fine Arts, graphic design
 Istituto Superiore Industrie Artistiche, Urbino, Italy 1979–1983 Bachelor of Fine Arts, graphic design
 Istituto Statale d’Arte, Oristano, Italy 1973–1979 Diploma, industrial design

AWARDS

Fulbright Scholar, Rhode Island School of Design 1983–85

Associate Professor – Fall 2016 to present
Assistant Professor – Fall 2007 to Spring 2016

COURSES TAUGHT AT SF STATE SINCE 2007

Courses taught from Fall 2007 to Spring 2020																							
Course #	Course Name	F07	S09	F09	S10	F10	S11	F11	S12	F12	S13	F13	S14	F14	S15	F15	S16	F16	S17	F18	S19	F19	S20
DES 523	Information Design 1: Data Visualization			•		•		•		••		••		•		••		••		•	•	•	•
DES 220	Introduction to Drawing for Designers																			•	•	•	••
DES 226	Modern Letterpress Printing																•	•	•				
DES 320	Drafting & Sketching for Design		•	•	••	•	••	•	••	•	••		••		•	•	•		•				
DES 420	Rapid Visualization			•		•		•							••								
DES 524	Information Design 2: Exhibits		•		•		•		•														
DES 425	Graphic Design 2: Typography	•																					
DES 300	Design Process <small>(All formerly DAI)</small>	••	•																				

Items in **bold** since September 30, 2015

PROFESSIONAL ACHIEVEMENT AND GROWTH

RESEARCH AND PUBLICATIONS

PEER-REVIEWED PUBLICATIONS

Trogu, Pino. [Giorgio Scarpa’s Model of a Sea Urchin Inspires New Instrumentation](#) | 2019 *Leonardo* 52.2 (MIT Press), pp. 146–151. **Featured article.** “Leonardo is the leading international peer-reviewed journal on the use of contemporary science and technology in the arts and music and, increasingly, the application and influence of the arts and humanities on science and technology.” In print.

Trogu, Pino. [Counting But Losing Count: the Legacy of Otto Neurath’s Isotype Charts](#) | 2018 *Visible Language*, 52.2 University of Cincinnati, pp. 83–109. **Featured article.** “Visible Language is the oldest peer-reviewed design journal ... first published in 1967 [on the basis that] research and scholarly information [are] essential to the development of communication design and in particular to the development of typography in its support of reading and writing.” In print.

Trogu, Pino. [The Landscape of the Physical Book: Space and Memory in the Printed Page](#) | 2018 *TXT – The Book Issue*, Academic Press Leiden & Amsterdam University Press, pp. 90–99. The advantages of physical books versus digital books as an aid to memory. In print.

Trogu, Pino. [“The Image of the Book: Cognition and the Printed Page”](#) 2015 *Design Issues*, 31.3 MIT Press, pp. 28–40. “The first American academic journal to examine design history, theory, and criticism, *Design Issues* provokes inquiry into the cultural and intellectual issues surrounding design.” In print.

Trogu, Pino. [Working Memory and Background Knowledge: Cognitive Science in the Design Classroom](#) *FORMakademisk*, 8.1, Oslo, Norway, pp. 1–17 (Featured article). | 2015 In print.

Trogu, Pino. [The Four-Second Window: How the Time Constraint of Working Memory and Other Psychological Principles Determine the Success of a Graphic Design](#), *International Journal of Humanities and Social Science*, 3.9, pp. 19–33. | 2013 In print.

INVITED PUBLICATIONS

Trogu, Pino, [The Shop at 300 Broadway](#) | 2020
Book chapter in: [Only On Saturday: The Typographic Prints of Jack Stauffacher](#)
 San Francisco: Letterform Archive. In press.

EDITOR-REVIEWED PUBLICATIONS

Trogu, Pino, [Jack Stauffacher, a typographer and printer who mixed classicism and the avant-garde](#). A profile of this important Bay Area designer and printer. Published, shortly after he died at the age of 97, in [DomusWeb](#), the Magazine for Architecture, Design and Art Lovers. | 2017.

Trogu, Pino, [Jack Stauffacher tipografo stampatore, tra classicismi e avanguardia](#) | 2019
 An Italian translation of the J.S. profile published in DomusWeb in 2017. Reprinted as a book chapter in [Graphic Novel](#), by Mauro Panzeri. Milano: Ledizioni LediPublishing. In print.

PEER-REVIEWED PROCEEDINGS AND PRESENTATIONS

Bocca, Lorenzo & Pino Trogu, [Giorgio Scarpa’s Transformable Objects: Geometry as Art, Science, and Play, 31st National Symposium: Meetings with Mathematics](#) | 2017 Full paper presentation to teachers of mathematics on teaching geometry through transformable shapes. Presented as part of “cultural evenings” open to all attendees (keynote, 350 attended). (Co-authors contributed equally; in Italian – English abstract) Mathematics, Education & School: Between Research and Everyday Practice, Castel San Pietro Terme, Italy. Original title: Gli oggetti trasformabili di Giorgio Scarpa: Geometria come Arte, Scienza e Gioco.

Trogu, Pino, [Bioinspired Design: Aristotle’s Lantern and Models of Rotational Geometry by Giorgio Scarpa](#) 2015 *DMD EU 2015 — Design of Medical Devices Conference, Europe Edition*, Vienna, Sept. 8–9. Rapid prototyping for the efficient design and validation of medical devices. Extended abstract in conference proceedings.

Trogu, Pino, F. Lodato & C. di Bartolo, [Rotational Geometry and the Creation of Bionic Models: The Pioneering Work of Giorgio Scarpa](#) | 2014 *Living Machines, 3rd International Conference on Biomimetic and Biohybrid Systems*, Milan, Italy. Workshop: *Bionics and Design, Pure and Applied Research*. Workshop was noted in the proceedings published by Springer.

Trogu, Pino, [The Double Constraints of Convention and Cognition in Successful Graphic Design](#) | 2014 CID12013 – 6th Information Design International Conference, Recife, Brazil, September 2013. Full paper presentation, Brazilian Society of Information Design, Blucher Design Proceedings, 2.1. São Paulo: Blucher.

Trogu, Pino, [The Image of the Book: The interplay of the fixed sequence of pages \(the visual-spatial\) with the printed text \(the aural-verbal\) in the context of recent cognitive psychology research on working memory.](#) | 2013 *Resurrecting the Book Conference*, November 15–17. Library of Birmingham, England.

Trogu, Pino, [Rotational Geometry as a Teaching Tool: Applying the Work of Giorgio Scarpa](#) | 2013
DRS // Cumulus – 2nd International Conference for Design Education Researchers, Oslo, Norway, 2013, Full paper presentation at DRS // CUMULUS Oslo, Design Research Society.

Trogu, Pino, “Rotational Geometry as a Teaching Tool: Applying the Work of Giorgio Scarpa” | 2012
Sixth International Conference on Design Principles and Practices, UCLA, Los Angeles.

PEER-REVIEWED WORKSHOP PRESENTATIONS

Bocca, Lorenzo & Pino Trogu, [Giorgio Scarpa’s Transformable Objects](#) | 2017
31st National Symposium: Meetings with Mathematics. Workshop for teachers of mathematics on teaching geometry through transformable shapes. (Co-authors contributed equally.) Two workshops of 45 minutes each; 25 participants each. Mathematics, Education & School: Between Research and Everyday Practice, Castel San Pietro Terme, (Bologna) Italy.

INVITED PRESENTATIONS

Trogu, Pino, [Leonardo Book Club. Live webinar discussion with Pino Trogu, author](#) | 2019
“**Giorgio Scarpa’s Model of a Sea Urchin Inspires New Instrumentation** *Leonardo*, 52.2 MIT Press. (Featured article) April 24, 2019. Video: 58:29. The interview covers in detail the print article as well as Scarpa’s other work.

Trogu, Pino, [Giorgio Scarpa’s Transformable Objects: Geometry as Art, Science, and Play](#) | 2018
ReMAR2018, 4th IEEE/IFToMM International Conference on Reconfigurable Mechanisms & Robots, 20–22 June 2018, Delft University of Technology, The Netherlands.

Trogu, Pino & Filip Jelínek, [Origami Design and Engineering](#) | 2016
SMIT 28th Conference of the International Society for Medical Innovation and Technology
Co-chair of technical session and workshop, October 2016, Delft University of Technology (TU Delft), The Netherlands. Session and workshop (Trogu, principal author) on bio-inspired origami models that show certain kinematic principles and parallels to existing and future medical devices.

Trogu, Pino, [Little Men, Little Boxes: Limitations of Otto Neurath’s International Picture Language as a Tool for Statistical Visualization](#) | 2015 The 7th International Conference on Information Design, Brasilia, Brazil, 2015. A critique of Otto Neurath’s Isotype system of statistical graphics, which employs small, repeated pictorial symbols of people or things to represent quantities.

[Michele Provinciali: The Imprinting of a Master](#) | 2012
Conference: Michele Provinciali: a World Imagined Through Artifacts. Contributed a video and text on Italian designer Michele Provinciali, who was art director of design magazines and collaborated with the Castiglioni brothers, among others. He was also a recipient of the Compasso d’Oro, the highest design award in Italy. Pesaro, Italy.

[Jack Stauffacher: The Master of Types](#) | 2012
San Francisco Design Week, June 2012. Sponsored by Swissnex San Francisco, featuring the master printer from the Bay Area, in a conversation about his experimental work. Jack Stauffacher was the 2004 American Institute of Graphic Arts (AIGA) medal recipient. His work is in the San Francisco Museum of Modern Art and the Los Angeles County Museum of Art.

CREATIVE WORKS

COMPETITIONS

“Academia is an Iceberg” | 2011

Juried competition – *Data in Sight San Francisco*, June 2011. First prize in the category “best fusion of multiple data sets.” Sponsored by Swissnex, the Netherlands Office for Science and Technology, and Creative Commons. The interactive double bar chart depicted a sample of 500 Mendeley biology authors, and showed that few authors (the tip of the iceberg) had an account on LinkedIn. Other team members: Giorgio Caviglia, Milan Polytechnic, visiting scholar at Stanford University; William Gunn, biologists and researcher at Mendeley. View interactive chart: online.sfsu.edu/trogu/datainsight/

GRANTS & AWARDS

SF State – Sabbatical year | 2017–2018

Visiting scholar, Delft University of Technology (TU Delft), The Netherlands.

Conducted research on bio-inspired design and transformable origami structures (metamaterials); hosted by the bio-mechanical engineering department (BITE Group, minimally invasive surgical instrumentation). Advised and mentored graduate students and gave public lectures and workshops. (Full academic year at 1/2 pay.)

SF State – Development of Research and Creativity Award (DRC) | 2018–2019

Received \$13,917 from SFSU’s Research and Scholarly Activity Fund, to research and design new metamaterials. Also called architected or architected materials, meta-materials employ novel macro- or microscopic geometries with unusual physical properties. Some of their applications include medical devices and aerospace engineering. P. Trogu, P.I., S. Linn, collaborator. Ongoing research.

CURRICULAR INNOVATIONS

Drawing, sketching, and instructional technology | 2009–2020

Since 2009, I expanded the traditional drawing and visualization techniques to include rotational geometry, where three-dimensional models are derived from two-dimensional shapes. The Drafting & Sketching for Design course (DES 320), and more recently the Introduction to Drawing for Designers course (DES 220) are supported by more than 60 online videos. One of the core units in the drawing class, the cube section, has been the basis for journal articles and conference presentations on the subject of rotational geometry: bit.ly/2d2caqa

Letterpress Printing | 2016–2019

Restored the letterpress class after a 15-year hiatus. The class, open to all students, satisfies the arts segment for general education (GE) at SFSU. The class teaches the centuries-old method of letterpress: setting metal type by hand, dating to Gutenberg’s invention of printing in 1455 in Germany.

Information design and data visualization | 2010–2020

Hired in the School of Design to develop an information design and data visualization curriculum. The information design class has been a laboratory for testing various principles of psychology of perception and cognition (working memory). These observations have been recorded in [journal articles](#) and [conference presentations](#).

CONTRIBUTIONS TO CAMPUS AND COMMUNITY

CAMPUS

LCA COLLEGE WORKSHOPS

[Data? Ta-da! Tips for Better Data Visualization Workshop](#) | 2019

Data Science Workshop sponsored by the LCA College Undergraduate Research Experience (CURE) Committee and Extraordinary Ideas Program, promoting undergraduate research, a high impact practice. The two-hour workshop attracted students from Anthropology, English, International Relations, and History, and others. Half-hour introduction followed by practical exercises, including using R software.

UNIVERSITY COMMITTEES

[SF State Academic Senate](#) | 2013–2016

Elected to the Academic Senate in Spring 2013 to 3-year term. In the Faculty Affairs Committee (FAC), I contributed to several policies later passed by the Senate, including revisions to the SFSU Emeritus Policy and the SFSU Temporary Faculty Range Elevation Policy, and a revised, cleaned-up RTP policy to help facilitate the transition to Electronic WPAFs. In Fall 2015 I was elected chair of the FAC committee and became a member of the Executive Committee (EXCOMM), helping to direct and focus general policies of the Academic Senate as well as specific policies related to faculty affairs at SF State. **In Spring 2016, as chair of FAC, I evaluated and drafted a major revision of the university’s RTP policy.** Upon its passage in May 2016, it was called “a paragon of clarity” by a senior Academic Senate member.

UNIVERSITY LECTURES, WORKSHOPS, AND OUTREACH

[Design of New Metamaterials. SF State Research And Scholarly Activity Symposium](#) | 2019

Public lecture: A progress report on research on metamaterials (advanced materials) funded by a SF State DRC grant. Faculty Commons (Library 286) October 25.

[Frank V. de Bellis Collection Keepsake – Leonardo da Vinci Society of San Francisco](#) | 2016

Composed and printed musical program keepsake “Una Riunione di Amici: Music of the Italian Baroque Masters” in collaboration with Leonardo da Vinci Society of San Francisco. The keepsake was composed by the students of the Modern Letterpress class and was printed by the instructor Pino Trogu on a Challenge 15MP Proofing Press. 150 copies printed November 2016 at [Stanza 153 Press](#), San Francisco State University.

Math and geometry workshop, SF State Math Summer camp | 2015

Math Circle Math Camp. Conducted a workshop for 30 elementary school students, on the connections between math, geometry and art. Used materials from my Drafting & Sketching class. Hands-on participation of the students, using paper, clay, steel wire, and other clay modeling tools. June 18, 2015.

iLearn online teaching system | 2015

Consulted with San Francisco State Academic Technology, conducting periodic testing and feedback on the iLearn platform.

CSU-sponsored QOLT participant (hybrid class) | 2013

(Quality Online Learning and Teaching showcase). With my DAI 320 Drafting and Sketching class, one of thirty-five SF State faculty members participating in the program in Spring 2013, showing how “...hybrid classes that use the iLearn technology can enhance classroom learning.”

iLearn test pilot class – Next iLearn | 2012

My DAI 523 Information Design was one of only eight participating classes in Fall 2012, campus-wide at San Francisco State, to use the pilot test “nextiLearn”, which was released in Spring 2013. The class tested the system, providing feedback and suggesting improvements prior to campus-wide deployment.

Annual School of Design (formerly Design and Industry) student exhibition | 2009–2012

Coordination of the Annual Student Design Exhibition, designed and produced by the 524 Exhibit Design class. 5,000-square-foot exhibit showcasing the work of more than 300 DAI students. The class ideates, designs, and produces the show.

COMMUNITY

VISITING SCHOLAR (TU DELFT, NL)

Guest faculty: Me411095: Bio-Inspired Design course. Delft University of Technology | 2017 (TU Delft) the Netherlands. Contributed lectures, workshops, and advised and mentored graduate bio-mechanical engineering students. Advisor on final project: scientific paper on **A Bio-Inspired Bounce-Controlled Traffic Sign for Car Trouble**, based on observation of [vertical jumping motion of loquat seed](#).

Bioclamping: Aristotle’s Lantern Giorgio Scarpa’s Model of the Masticatory Apparatus of the Sea Urchin. October 20 | 2017 Public lecture: Me411095: Bio-Inspired Design Delft University Of Technology,

Bio-inspired models of rotational geometry | 2017 Public seminar: Demonstrations of origami-like transformable chains of prismatic, pyramidal, and other convex/concave modules. December 2

PUBLIC INSTRUCTIONAL VIDEOS (YOUTUBE)

YouTube Channel (as of 10/10/2020): 139 videos; 2.2K subscribers; 540K views; 32.5K watch hours. (Since 2007) <https://www.youtube.com/user/pinotrogu> | 2020

Drawing, Drafting, and Sketching Playlist. 45 instructional videos | 2020
https://www.youtube.com/watch?v=mG6T7BHs9YE&list=PLM4DV2Cfpgjtk6B2dFxLUTG3Ct_BbQsI9

Information Design: Data Visualization Playlist. 17 instructional videos | 2020
https://www.youtube.com/watch?v=4wkC4gq3kKA&list=PLM4DV2Cfpgjv2lw6DOX-efCyG_ZvQgxSL

Rapid Visualization (Industrial Design Sketching). 17 instructional videos | 2020
https://www.youtube.com/watch?v=_w3eKMKrVwY&list=PLM4DV2CfpgjtpyvgEUWJ4j8wgVet7bdi6

SERVICE TO CITIZEN GROUPS

BLM Civic Center – Participatory Public Art Installation | 2020

Exhibit design and fabrication advisor to art, architecture, and engineering group from San Francisco Public Works on the design of a BLM public art intervention space at Civic Center Plaza, San Francisco.

[Patient No More: People with Disabilities Securing Civil Rights](#) | 2013–2015

Paul K. Longmore Institute on Disability, San Francisco State University. Art director and coordinator for a major exhibit on disability. The exhibit focused on an overlooked moment in U.S. history when people with disabilities occupied a government building in San Francisco to demand their rights. Known as the “Section 504 Sit-In,” the protest profoundly changed the lives of people with and without disabilities, and paved the way for the Americans with Disabilities Act (ADA) in 1990. I coordinated the planning and design of the exhibit, organized tasks between researcher, curators, exhibit designers, and SF State student interns.

SERVICE TO PUBLIC SCHOOLS

[FIRST Technical mentor](#), Lowell High School, San Francisco | 2013

Volunteered one day a week in Spring 2013 with the CardinalBotics 4159 team, as a technical mentor to the students participating in the 2013 *FIRST* Robotics Competition. [FIRST](#) (For Inspiration and Recognition of Science and Technology) is an international high school robotics competition.

PROFESSIONAL WORK PRIOR TO SF STATE

San José State University | 2006–07

School of Art and Design. Introduction to graphic design class: I taught basic progression from drawing to color and typography with final production of a poster. In a digital applications methodology class, students researched the topic of [digital-analog](#), the genealogy of design objects, and the typography of poetry. Other classes taught included Graphic Design 2 and Typography 1.

GrafCo, San Francisco. Owner | 1995–2005

GrafCo provided graphic design, exhibition, and web design to private and public enterprises in the Bay Area and out of state, including: traveling exhibit for the Mineral Resources Program of the United States Geological Survey (USGS); *Neighbors & Neighborhoods*, an exhibit for the San Francisco Mayor's Office of Housing; Logo and collateral materials for the [Core Knowledge foundation](#), a non-profit devoted to education and curriculum reform; Logo and identity for landscape architecture firms and local community groups: Arcadia Garden Architecture, Pioneer Park at Coit Tower, Friends of the Urban Forest; recycling exhibit for the [South San Francisco Recycling Center](#). In community outreach, GrafCo was involved in art workshops for local elementary school children, working with photography, painting, and light projections.

West Office Exhibition Design, San Francisco | 1994–95

Exhibit design and graphics for the California Museum of Science and Industry, Los Angeles. Developed concept, logo, and graphic systems for [science exhibits on chemistry, electricity, and special effects](#). Exhibit graphics for the Washington State History Museum, Tacoma, Washington. Managed design team in the production of a graphics program that included hundreds of graphic components.

The Burdick Group, San Francisco | 1992–93

Exhibit graphics for [Evoluon, Philips Electronics competence center](#) in Eindhoven, The Netherlands. Managed the graphic production for various areas of the exhibit, including the production of diagrams, storylines and technical illustrations.

Academy of Arts, Architecture and Design, Prague, Czech Republic | 1991

Wrote, filmed and produced [ARKI](#), a 3-minute, 35mm color film about computer modeling and simulation. In the story, a child's quest to design the perfect coat is finally realized with the help of lego-like electronic modules. The film is considered by some to be the earliest example of wearable computing.

GrafCo3, Milan, Italy | 1988

With Mauro Panzeri; book and [publication design for Alessi](#) and other Italian manufacturers. Book design for Edizioni Ambiente, a publisher specialized in environmental issues. Book design for the publisher Sonda Edizioni; designed first catalog and exhibit booth at international book fair in Turin. Storyboards for exhibit *One Hundred Years of Industry* at the Milan Triennale.

Robert Gersin Associates, New York | 1986–87

Corporate identity for the Sears corporation, managing the creation of a series of identity manuals on product graphics and printed materials. Production of a new graphics standards manual for the [General Accounting Office \(GAO\)](#). In cooperation with the Government Printing Office, the manual enabled the agency to reduce paper waste and implement a consistent graphic system. Tasks included the evaluation of hundreds of government publications and the design of new formats for books, brochures, and official reports.