

## Curriculum Vita

### Klaus Krippendorff, Ph.D., Ph.D.h.c.

#### Contacts

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Web: <https://www.asc.upenn.edu/people/faculty/klaus-krippendorff-phd>

#### Education

Ph.D. in Communications, University of Illinois, Urbana, 1967.  
Dipl. Design, Ulm School of Design, Germany, 1961.  
Ingenieur (grad.), State Engineering School Hanover, Germany, 1954.

#### Awards and Appointments

2019 Elected member of the European Academy of Sciences (EUAC)  
2017 Innovation Award for Method from ICA's Mass communication Division  
2016 Award "For his career achievements in CYBERNETICS APPLIED TO COMMUNICATION", from Business Systems Lab.  
2016 Elected Fellow of the International Communicology Institute (ICI)  
2016 Elected to the International Academy for Systems and Cybernetics Sciences (IASCYS)  
2012 **Doctor of Philosophy *honoris causa*** from the Linnaeus University in Kalmar/Växjö, Sweden.  
2012 "Article of the Year" award by the Communication Theory and Methodology division of AEJMC for [http://repository.upenn.edu/asc\\_papers/278](http://repository.upenn.edu/asc_papers/278), published in *Communication Methods & Measure* 5, 2: 1-20, 2011.  
2012 Elected Fellow of the American Society for Cybernetics  
2011 Member of Honorary Board of the World Complexity Science Academy  
2011 Medal for contributions to understanding complex systems by the World Complexity Science Academy  
2010-now **Emeritus Professor of Communication**. The Annenberg School for Communication, University of Pennsylvania  
2008-2009 Distinguished Visiting Professor, University of Kalmar, Sweden.  
2004 Award of the Norbert Wiener / Hermann Schmidt Prize by the German Society for Cybernetics, German Society for Pedagogy and Information, at the University of Vienna  
2004 ICA Fellows Book Award for *Content Analysis; An Introduction to Its Methodology*  
2001 Award of the Norbert Wiener Medal in Cybernetics in gold by the American Society for Cybernetics  
2000-2003 **Gregory Bateson Professor for Cybernetics, Language, and Culture**, University of Pennsylvania  
1998 Named by graduate students as the teacher of the best doctoral course taken at the University of Pennsylvania

1998 (Fall) Visiting Professor, Musachino Art University, Tokyo, Japan. <http://www.ssdsj.net/eng/>

1998 Elected International Fellow of the Society for Science of Design Studies, Japan.

1994 (Spring) Visiting Professor, University of New Hampshire, Durham NH.

1993-2002 Member of the Graduate Group in Conflict Analysis and Peace Science

1993-94 Special Professor, University of the Arts, Philadelphia PA.

1992 1<sup>st</sup> Annual Jay Doblin Award for the best article published in *Design Management Journal*

1989-98 Member: National Advisory Board, Institute of Communication Research, Urbana/Champaign, IL

1988 Gordon Research Conference on Cybernetics, January 18-22, Oxnard, CA.

1986-87 Distinguished Visiting Professor, Ohio State University, Columbus, OH.

1985 Elected Fellow of the International Communication Association (ICA).

1984 Gordon Research Conference on Cybernetics, August 27-31, New Hampton, NH.

1982 Elected Fellow of the American Association for the Advancement of Science (AAAS).

1980-2010 **Professor of Communication**, The Annenberg School for Communication, University of Pennsylvania.

1979-80 Fellow, Netherlands Institute for Advanced Study in the Humanities and Social Sciences, Wassenaar.

1973 (Spring) Guest Professor, Interuniversitair Instituut Bedrijfskunde, Delft, Erasmus University Rotterdam, The Netherlands

1971 Award for "On Generating Data in Communication Research" as the most outstanding contribution to *The Journal of Communication* in 1970. [http://repository.upenn.edu/asc\\_papers/273](http://repository.upenn.edu/asc_papers/273)

1971 **Master of Arts *honoris causa*** from the University of Pennsylvania, Philadelphia.

1970-80 **Associate Professor**, The Annenberg School of Communications, University of Pennsylvania.

1970 (Summer) Guest Professor, Institut für Publizistik, Free University Berlin, Germany.

1967-86 Member of the Graduate Group of Social Systems Science at the University of Pennsylvania.

1966-70 **Assistant Professor**, The Annenberg School of Communications, University of Pennsylvania.

1965-66 Associate, The Annenberg School for Communication, University of Pennsylvania.

1964-65 Pre-doctoral Research Fellow, The Annenberg School of Communications, University of Pennsylvania.

1963-64 Research Assistant at the Institute for Communications Research, University of Illinois, Urbana.

1961-63 Ford International Fellow.

1961 Fulbright travel grant.

1961 Design award (for diploma work) by the Bundesverband der Deutschen Industrie.

1960-61 Research Assistant at the Institute for Visual Perception, Ulm School of Design, Germany.

## Professional Involvements

Memberships: American Association for the Advancement of Science (AAAS)  
 American Society for Cybernetics (ASC) (Fellow)  
 Deutsche Gesellschaft für Publizistik und Kommunikationswissenschaft (DGPK),  
 (honorary)  
 International Communication Association (ICA) (Life Member)  
 International Society for Systems Science (ISSS)  
 Institut für Kybernetik Berlin e.V.

Offices: Member of the Board of the Business Systems Laboratory. 2012-now  
 Member of the advisory Board of the World Complexity Science Academy. 2011-now  
 Member of the International Board of Economics & Business Knowledge. 2010-now  
 Trustee, American Society for Cybernetics (ASC), 1999-2008  
 President and Founder of the International Federation of Communication Associations, 1991-2008.  
 President, International Communication Association (ICA), 1984-85.  
 Board Member and Ombudsman, American Society for Cybernetics (ASC), 1980-83, 1991-94.  
 ASC Delegate to AAAS's Section T, Information, Computing and Communication, 1998-2000.  
 ICA Delegate to AAAS's Section T, Information, Computing and Communication, 1978-81.  
 Member at Large of ICA's Board of Directors, 1977-80.  
 Chair, Information Systems Division, Member of the Board of ICA, 1970-76.

Member of the editorial boards of:

*Arcos Design* – a Brazilian online journal 2009-now  
*Artifact; Journal of Digital Design*, 2003-now  
*Communication and Information Science*, 1986-2001;  
*Communication Methods and Measures*, 2006-now  
*Communication Monographs*, 1985-1989;  
*Communication Research Reports* 1985-2001;  
*Communication Research*, 1974-1993;  
*Communication Studies*, 2007-now  
*Communication Theory*, 1988-2004;  
*Communication Yearbook*, 1977-1980, 1984-1989;  
*Communication*, 1974-79;  
*Communications, The European Journal of Communication Research*, 1985-now;  
*Constructivist Foundations (an E-journal)*, 2004-now  
*Cybernetics & Human Knowing*, 1991-now.  
*Electronic Journal of Communication*, 2011-now  
*Human Communication Research*, 1977-80, 1985-89, 1998-2004.  
*Informatologia*, 1991-now;  
*Informatologia Yugoslavica*, 1985-91;  
*International Journal of Cultural Studies*, 1997-2008  
*International Journal of Markets and Business Systems*, 2014-now  
*Journal of Communication*, 1984-92; 2002-10  
*Kybernetes*, 2016-now  
*Markets and Business Systems*, 2015-now  
*Sprache und Form*, 2015-now  
*The Radical Designist*, 2016-now

Reviewer for: National Science Foundation (NSF)  
 Deutsche Forschungsgemeinschaft (DFG)  
 Netherlands Institute for Advanced Studies (NIAS)  
 Israel Science Foundation  
 Swiss National Science Foundation (SNF)  
 Austrian Science Fund (FWF)  
 The American Scandinavian Foundation

*Advances and Applications in Statistics*  
*American Journal of Political Science*  
*Behavioral Research Methods*  
*Communication Methods and Measures*  
*Communication Yearbook*  
*Constructivist Foundations*  
*Design Studies*  
*Field Methods*  
*International Journal of Communication*  
*International Journal of Social Science Studies*  
*Journal of the American Statistical Association*  
*Journal for Peace Research*  
*Journalism, Theory, Practice & Criticism*  
*Management Communication Quarterly*  
*Public Opinion Quarterly*  
*Psychological Methods*  
*Psychological Reports, Perceptual and Motor Skills*  
*Sociological Methodology*  
*The Information Society*  
*The Sociological Quarterly*  
*Quality and Quantity*  
 Etc.

- Activities:
- Organized the symposium “Discourses in Action” for the Scholars Program in Culture and Communication at Annenberg School for Communication, University of Pennsylvania, December 2, 2016.
  - Taught a two-day seminar on my *The Semantic Turn, a New Foundation for Design* at the University of Caldas, Manizales, Colombia. October 20-21, 2016.
  - Taught a two-day workshop on advanced content analysis for European scholars at the University of Palermo, Italy. August 29-30, 2016.
  - Presenter and organizer of a workshop on Human-Centered Design at the Universidad de Bogota Jorge Tadeo Lozano in Colombia, 2011-11-20
  - One of two scientific coordinators of the 1<sup>st</sup> International Conference on Qualitative Research Methods at the University of Enna “Kore” in Sicily, 2011.9.1-3
  - Organizer of two workshops on Computer Applications in Content Analysis at ICA conferences in Acapulco, Mexico, 2001, and Washington, DC, 2002.
  - Co-organizer of an international workshop on “Semantics in Design and the Linguistic Nature of Things,” München, Germany, February 18-20, 1998
  - Co-organizer of an NSF-sponsored Workshop on Design in the Age of Information. “design@1006.information.edu” Raleigh, NC: North Carolina State University, February 29 – March 3, 1996. [http://repository.upenn.edu/asc\\_papers/96](http://repository.upenn.edu/asc_papers/96)
  - Co-organizer of the International Conference on "Cybernetics in the Art of Learning" for the American Society for Cybernetics, Philadelphia, November 1993.
  - Co-organizer of a Workshop and First European Symposium on Product Semantics, Helsinki, Finland, May 1989.
  - Co-organizer of a one-week workshop on Product Semantics at Corporate Design, Philips,

Eindhoven. July 1985.

Co-organizer of a Workshop on Product Semantics for the Industrial Designers Society of America (IDSA) at the Cranbrook Academy of Art, August 1984.

Organizer of the International Communication Association (ICA) Conference on "Communication in Transition," ICA Conference, San Francisco, May 1984.

Organizer of the National Conference on "Communication and Control Processes in Society," Philadelphia, October-November 1974.

Co-Organizer of the National Conference on "Content Analysis," Philadelphia, November 1967.

Participant, presenter of papers, or organizer of symposia at meetings of the

Aalto University, School of Arts and Design in Helsinki

Alta Conference (Utah)

American Association for the Advancement of Science (AAAS)

American Society for Cybernetics (ASC): <http://www.youtube.com/watch?v=nK8O9ZxyIaE>

Annenberg School for Communications, University of Southern California:

<http://www.youtube.com/watch?v=5CU0NtFpIs>

Association for Education in Journalism and Mass Communication (AEJMC)

Cooper-Hewitt, National Design Museum, a Smithsonian Institution, New York

Conference on Writing across the Curriculum (WAC)

Congresso Brasileiro de Pesquisa & Desenvolvimento em Design.

Design Management Institute

Deutsche Gesellschaft für Publizistik und Kommunikationswissenschaft (DGPK)

Deutsche Gesellschaft für Semiotics

East-West Center, Honolulu, Hawaii

European Communication Association (ECA)

Gordon Research Conference

Industrial Designer Society of America (IDSA)

Interaction Design Association (IXDA): <http://vimeo.com/album/2488675/video/86240674>

International Association for Dialogue Analysis

International Association for Mass Communication Research (IAMCR)

International Congress for Cybernetics and Systems Research

International Communication Association (ICA)

International Society for the Systems Sciences (ISSS)

Issues in Nursing Research Conference

Konstfack, University College of Arts, Crafts and Design, Stockholm, Sweden:

<http://vimeo.com/43316950>

Linnaeus University, Kalmar, Sweden

Middle East Technical University in Ankara, Turkey

Netherlands Institute for Advanced Studies (NIAS)

Society for Science of Design Studies, Japan

Speech Communication Association/National Communication Association (NCA)

Temple Conference on Culture and Communication

Temple Conference on Discourse Analysis

Universidad de Bogota Jorge Tadeo Lozano

Universität der Künste, Berlin, Germany (UdK)

World Complexity Science Academy (WCSA):

<http://www.youtube.com/watch?v=EbqcYbjFK8U>

## Research Interests

- Critical cybernetics – emancipation from epistemological pathologies
- Qualitative methods and discursive constructions of reality – discourse and conversation analysis.
- Constructivist Epistemology and discursive (second-order) cybernetics.
- Critical analyses of scientific discourses
- Mathematical foundations of cybernetics, general systems, communication and information theories.
- Methodology of communication research; Analysis, critique and development of qualitative and quantitative techniques for empirical inquiry; Semantic analyses of ethnographic data.
- Content Analysis: Theory of content and practical content analyses; Critique of existing empirical techniques and development of new computational methods
- Disagreement and reliability analysis (Krippendorff's  $\alpha$ ).
- Critical Scholarship; Attempts to develop conceptions and methods of inquiry into social phenomena that reveal possibilities for change rather than describe what was; Liberating concepts, writing, and languaging especially in respect for Others.
- Design: Theory of product semantics; Human-centered and culture-sensitive design; Research for human-computer interface design: telephone, computer-supported cooperation and special applications; Design principles for the information age.

## Graduate Courses:

**Discursive Constructions of Realities** (formally Language and Social Constructions of Realities). An inquiry into the principles and processes by which realities come to be socially constructed, linguistically institutionalized, and discursively maintained. This seminar serves as an introduction to qualitative inquiry into the emerging epistemology of communication. It provides students with dialogical and discursive tools to inquire into the histories and cultural differences of various social phenomena. It favors a reflexive/ethnographic approach that involves entering one's cognition into the sociology one comes to construct in the cause of observation and action. It explores the artifacts that discourses create, including scientific theories, models, and ideologies. In such explorations, students learn to boldly challenge all kinds of taken-for-granted realities, asking why some of them tend to hide their constructedness, and if experienced as burdensome or oppressive, probing into possibilities of liberation from them. The seminar is committed to critical scholarship and emancipatory pursuits, which are allied with feminist writing, cultural studies, and reflexive social inquiries.

**Cybernetics, Systems and Media, earlier Models of Communication..** An introduction to cybernetics and systems theory, whose concepts are fuelling the present information-technological revolution. Students become acquainted with the formal building blocks for constructing models of communication and complex systems, whether these concern causal, cognitive, or social phenomena; with various theories of human interfaces with technology: cyborg, information, autopoietic, and coordination theories; and with second-order cybernetics, which offers a reflexive approach to understanding. The interdisciplinary scope of the course enables students to draw on knowledge from a diversity of empirical domains.

**Cybernetics and Society.** Models of communication and control are applied to various social phenomena

and contrasted with other conceptual frameworks in the social sciences. Among the conceptions that are developed are those of information networks; recursions a system as contrasted with the exertion of influence; feedback (recursion and teleology); autopoiesis, self-organization, self-observing systems and other forms of recursive networks of interaction; natural, social, and artificial intelligence; different manifestations of natural selection/ultra-stability in perception, cognition, self-repair, and immune systems; chaos theory.

**Information in Qualitative Data.** The course develops multi-variate methods for exploring a variety of qualitative data and simultaneously broadens concepts of information and communication in a variety of social settings. While qualitative data are common in social research, their systematic analysis has been largely neglected. Recent developments have facilitated the use of qualitative data as a source of insights. The use of information theory as a vehicle for exploration is particularly appealing to communication researchers in search of new theoretical perspectives.

**Semantics of Communication.** Most social inquiries rely on linguistic data: written documents, letters, interview transcripts, field notes or published reports. The sole reason for their being is the meanings they have for particular readers. This course considers various theories of meanings, how texts are used, by whom, and in which institutional settings; and it explores the methods of analysis that these theories inform. It introduces several qualitative research traditions, presents case studies, and reviews the concepts, logic, and analytical models needed for independent qualitative research. The course is ethnographic in its approach to data collection (interviews, observational accounts, written matter); analytical in the way it probes its data (with models drawn largely from cultural anthropology); qualitative in the empirical methods it encourages (metaphor, conversation, and discourse analysis); dialogic in its respect for multiple voices (as opposed to the more familiar monologue); and critical or emancipatory in the consequences it aspires to.

**Content Analysis.** An introduction to the analysis of large bodies of textual matter: content analysis, also called message systems analysis, quantitative semantics, propaganda analysis, text analysis, or an approach to big communication data. The course inquires into the methods, empirical problems, and theories underlying these analytical efforts: sampling, text retrieval, coding, reliability, analytical constructs, computational techniques, and inferences. It demonstrates these with studies of mass media content, interview or panel data, and systematic efforts to provide legal evidence or draw valid inferences from personal documents or electronic exchanges. Students learn to design a content analysis and do the preliminary work on it. They may also perform a content analysis on already available data, develop a new analytical technique from available theories and test it, or they may explore relevant literature to solve a methodological problem in content analysis.

**Seminar in Message Analysis.** Advanced topics in the analysis of verbal and non-verbal message content will be considered and methodological or practical problems arising out of research projects will be solved in a seminar format. Among the topics that might be considered are: experiments with recording qualitative data, expansion of the system of agreement analysis, further formalization of data languages, attempts at validation, development of new analytical techniques and computer aided text analysis procedures, analytical use of available theories of cognition and symbolic behavior, exploration of systems that could integrate the results of different kinds of empirical research techniques with content analysis findings.

## **Undergraduate Courses:**

**Language in the Social Construction of Realities.** Departing from traditional notions of language as a medium, this course sheds light on the discursive practices that constitute the realities we come to live in and observe. Readings and lectures develop the concepts needed to understand how realities are socially

constructed or 'language'd into being. Seminar-like discussions and individual students' contributions offer opportunities to critically examine a variety of constructions of reality from this perspective: facts, emotions, social problems, race, gender, hegemony, family, science, technology, and more. Students learn to appreciate how their own identity and their own world is shaped by the language they use. They take with them analytical skills and practical abilities to alter if not the way social reality is constructed so at least their own participation in it.

**Social Cybernetics.** Basic ideas about communication in society are explored from a cybernetic and systems theoretical perspective. The course acknowledges the traditional assumptions of linearity (communication as an intentional and one-way process) but builds on the recognition that most social processes are circular, emerging, self-sustaining, and controlling their own destiny. It starts with simple circularities, such as feedback, moves through the biological idea of autopoiesis (the ability of living systems to create and maintain their own boundary while organizing themselves within it) to self-organizing social systems. Principles of information generation, processing, storing, and communication are discussed. Evolutionary aspects of cultural artifacts, such as rituals, and of technological systems are explored. The lives of large communication networks are examined, and paradigms of self-observing systems are developed.

**Human-centered Design.** The word "design" derives from "de + signare," to "mark," "to make things into signs" or to make them meaningful to their users. Starting with the axiom that humans do not respond to the physics of things but to what they mean to them, the course explores how artifacts, especially language-like or intelligent ones, constitute themselves in various social practices and in their users' understanding. Key to this approach is the recognition that artifacts are understandable only through their interfaces and that human-centered design, as opposed to engineering or the design of functions has to address these.

- The course distinguishes four contexts in which artifacts must survive: use, language, ontogenesis, and the ecology of other artifacts.
- It develops a vocabulary, a language, to empirically study and describe a variety of meanings – a semantics – for each context in which artifacts must survive in interaction with different stakeholders, including among designers who too have a stake in the viability of their designs.
- It develops methods for designing artifacts that are culture-sensitive and respect what users or more generally stakeholders can make sense of and learn in their respective domains of experiences.
- And it develops empirical tests to validate the semantic claims that designers need to make to those who could bring their design to fruition.



**From Conversation to Discourse**, lecture at the Annenberg School for Communication and Journalism at the University of Southern California, October 10, 2011. <https://www.asc.upenn.edu/news-events/annenberg-video/faculty-videos/klaus-krippendorff-lecture-annenberg-west>

Discussion of key concepts in his *The Semantic Turn; A New Foundation for Design*, at the Konstfack in Stockholm, 2012. <https://www.asc.upenn.edu/news-events/annenberg-video/faculty-videos/professor-klaus-krippendorff-discusses-key-concepts>

**Five interviews** of Klaus Krippendorff at his home, conducted by Jeff Pooley as part of the oral history project of the Annenberg Library Archive, The Annenberg School of Communication, University of Pennsylvania.

1<sup>st</sup> on December 20<sup>th</sup>, 2016 <https://vimeo.com/198725732>

2<sup>nd</sup> on January 18<sup>th</sup>, 2017 <https://vimeo.com/200237170>

3<sup>rd</sup> on February 22<sup>nd</sup>, 2017 <https://vimeo.com/205610302>

4<sup>th</sup> on April 12<sup>th</sup>, 2017 <https://vimeo.com/214223618>

5<sup>th</sup> on May 17<sup>th</sup>, 2017 <https://vimeo.com/218011456>

Password: klaus

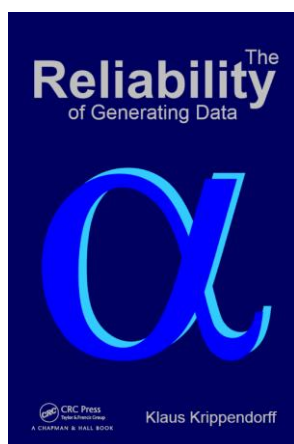
### A Podcast

About the first chapter of my *Semantic Turn*, put together at the Ostbayerische Technische Hochschule, Regensburg, Germany in a seminar on Design Theory, Summer Semester 2019 taught by Prof. Dr. Rosan Chow, and visualized by 4th. semester students: Alicia Lindner, Andrea Florea, Bianca Spronraft, Gian van Rooyen & Patricia Lang.

<https://vimp.oth-regensburg.de/video/The-Semantic-Turn-/53e78d919c5fd75bf94cae72c2bb2ead>

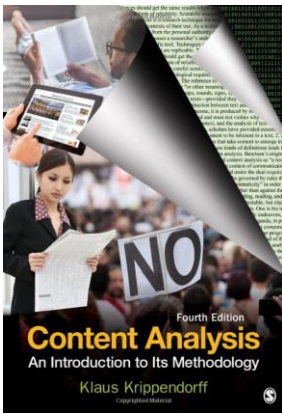
### Publications:

#### Books and Monographs



*The Reliability of Generating Data.*  
Abingdon, UK: Chapman and Hall/CRC press,  
2021 forthcoming.

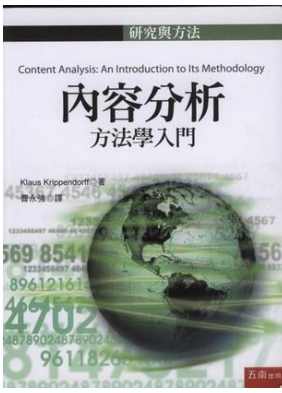
The Chinese translation of the 4<sup>th</sup> edition of *Content Analysis* in progress by Li Ming of the School of Journalism & Communication, Nanjing University for Tsinghua University Press in Beijing – in process.



*Content Analysis; An Introduction to Its Methodology, 4<sup>th</sup> Edition.*  
Thousand Oaks, CA: Sage, 2019.



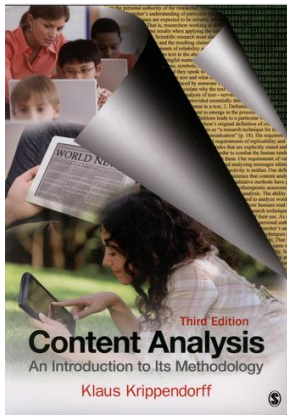
Chinese translation by Prof. Dr. Fei Hu of  
*The Semantic Turn; A New Foundation for Design.*  
Beijing: China Architecture & Building Press, 2017.



Chinese translation by Tommy Cho, Ph.D.  
*Content Analysis; An Introduction to Its Methodology 3<sup>rd</sup> Edition*; 488 pages.  
Taipei, Taiwan: Wunan Publishing Co, 2014.



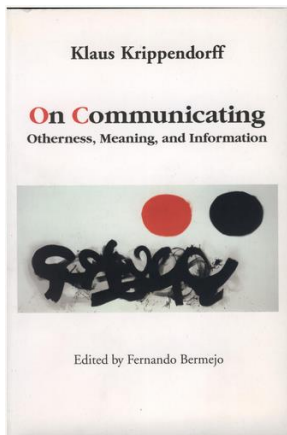
German translation of  
*The Semantic Turn; A New Foundation for Design:*  
*Die semantische Wende. Eine neue Grundlage für Design.*  
Schriften zur Gestaltung / Züricher Hochschule der Künste. R. Michel (Ed.).  
Basel: Birkhäuser Verlag/ De Gruyter, 2013.



*Content Analysis; An Introduction to Its Methodology 3<sup>rd</sup> Edition*; 441 pages.  
Thousand Oaks, CA: Sage Publications, 2013.  
Replacement of Section 12.4 to be introduced into its 4<sup>th</sup> edition.  
<http://www.asc.upenn.edu/usr/krippendorff/U-alpha.pdf>



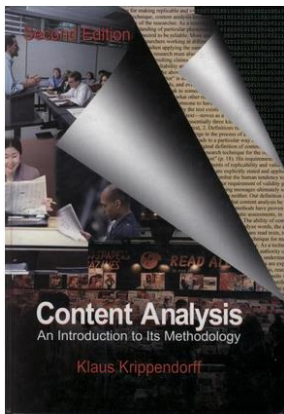
Japanese Translation of  
*The Semantic Turn; A New Foundation for Design*  
394 pages. Tokyo: SIBaccess Co. Ltd. 2009.



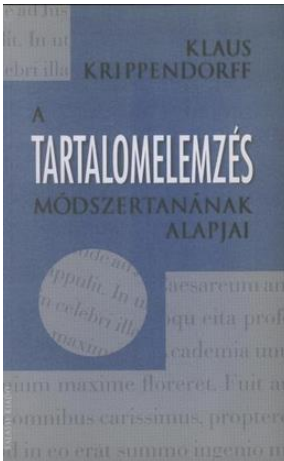
*On Communicating; Otherness, Meaning, and Information.*  
Fernando Bermejo (Ed.). New York: Routledge, 2009.



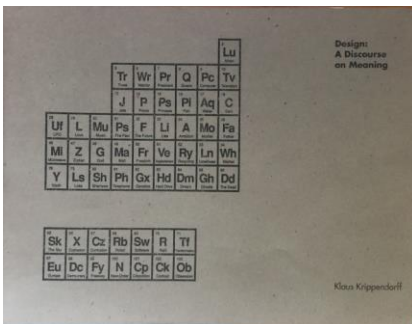
*The Semantic Turn; A New Foundation for Design.*  
Boca Raton, London, New York: Taylor & Francis CRC, 2006.



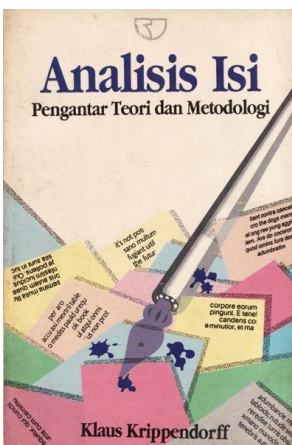
*Content Analysis; An Introduction to Its Methodology 2<sup>nd</sup> Edition*;  
413 pages. Thousand Oaks, CA: Sage Publications, 2004.



*A Tartalomelemzés Módszertanának Alapjai*. Budapest: Balassi Kiad, 1995.  
Hungarian translation of *Content Analysis; An Introduction to its Methodology*.



*Design: A Discourse on Meaning; A Work Book*.  
Philadelphia, PA: University of the Arts, Summer 1994.



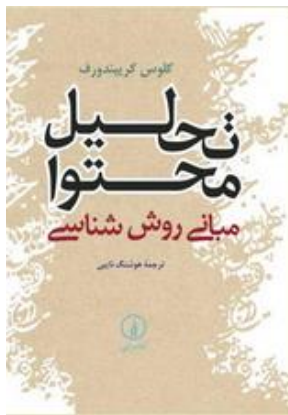
Analisis isi: Pengantar teori dan metodologi.  
Terjemahan Farid Wajidi, (Tr.). Jakarta: Rajawali Press, 1991.  
Indonesian translation of *Content Analysis; An Introduction to its Methodology*.



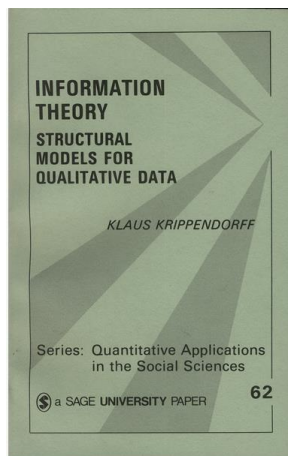
*Metodología de análisis de contenido: Teoría y práctica.*  
 Barcelona-Buenos Aires-Mexico: Ediciones Paidós, 1990.  
 Spanish translation of *Content Analysis; An Introduction to its Methodology*.



Japanese translation of a revised version of  
*Content Analysis; An Introduction to its Methodology*.  
 Tokyo: Keiso Communication, 1990.

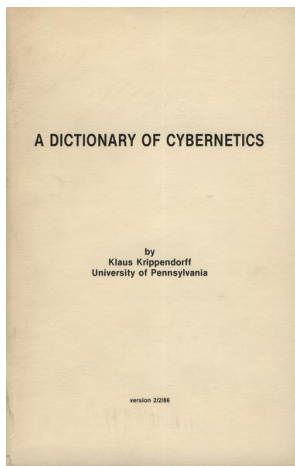


Farsi translation by Houshang Nayebi of  
*Content Analysis; An Introduction to its Methodology*. Tehran:  
 NEY, 1988.



*Information Theory: Structural Models for Qualitative Data;*  
 96 pages. Beverly Hills, CA: Sage Publications, 1986.





*A Dictionary of Cybernetics.*

Norfolk, VA: The American Society for Cybernetics, 1986.

[http://repository.upenn.edu/asc\\_papers/224](http://repository.upenn.edu/asc_papers/224)

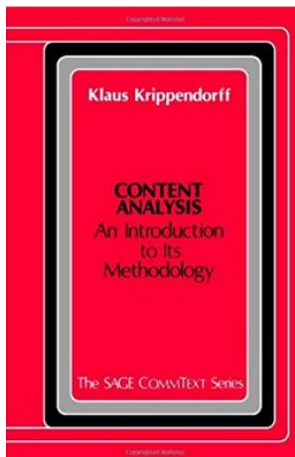
Entrees also available on: <http://pespmc1.vub.ac.be/ASC/INDEXASC.html>



*Analisi del Contenuto; Introduzione Methodologica.*

Introduzione di Enzo Campelli. Torino: ERI, 1983.

Italian translation of *Content Analysis; An Introduction to its Methodology*.



*Content Analysis; An Introduction to its Methodology.*

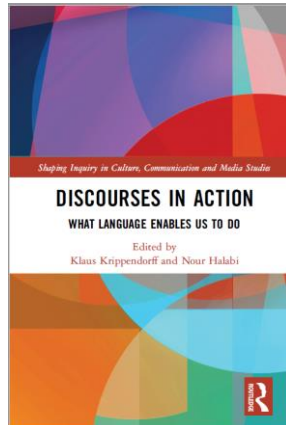
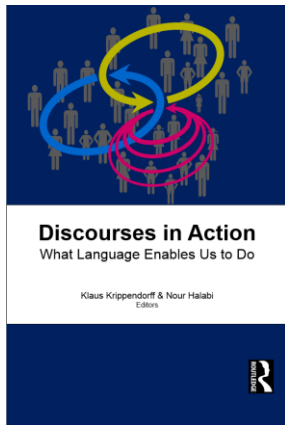
Beverly Hills, CA: Sage, 1980.

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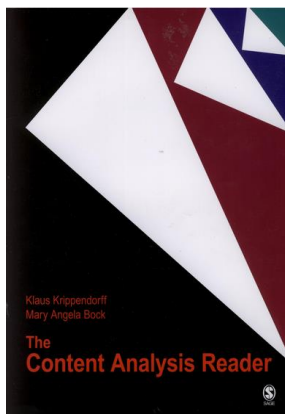
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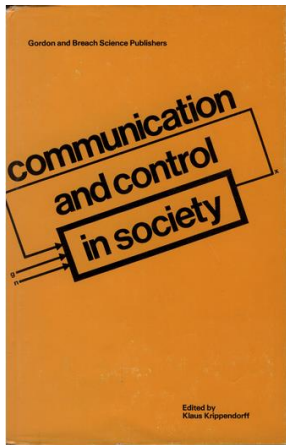


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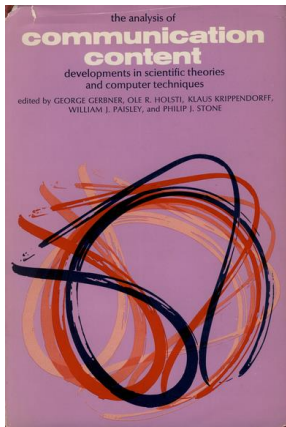
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Agency, algorithms, a new form of oppression and how cyberneticians might respond. Keynote to the American Society for Cybernetic (ASC) meeting in Montreal, Canada, 2019.06.22-27.

Social Implications of Three Models of Design. Keynote address to an international conference titled “Design for a Billion” hosted by the Indian Institute of Technology, Gandhinagar, November 7-9, 2014.

A Conversation with Ken Friedman on the Challenges that Digital Media Present to Design Discourse, Education, and Practice. On the occasion of the 20<sup>th</sup> anniversary celebration of the Media Lab at Aalto University in Helsinki, September 25, 2014.

A Future for Cybernetics. Keynote address to the 50<sup>th</sup> anniversary meeting of the American Society for Cybernetics at the George Washington University in Washington, DC, August 3-9, 2014.

Discourses in the Design of Cultural Artifacts. Paper presented at a panel devoted to a “Dialogic understanding of phenomena in different fields of the humanities – finding common grounds and diversities.” at the 15<sup>th</sup> international Bakhtin Conference, July 23-27, 2014 in Stockholm Sweden.

Languaging Reality; Dialogue and Interaction. Keynote address to a conference on “*Language and Interaction*” February 6-8, 2014 in Amsterdam, organized by the international Interaction Design Conference (IxDA). <http://vimeo.com/album/2488675/video/86240674>

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The Diversity of Meanings of Cultural Artifacts and Human-Centered Design. Paper prepared for the DeSForM 2008 Conference, November 6-7, 2008, at the Hochschule für Gestaltung Offenbach, University of Frankfurt/Main.

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## Recent receptions

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Last revisions 2021.5.28