Klaus Krippendorff's Publications

!!! **Books and Monographs**

- With Reinhart Butter. *Die Semantische Wende; Eine Neue Grundlage für das Design*. Frankfurt/Main: Form Verlag (in press).
- *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.
- *Metodologia de analisis de contenido: teoria y practica*. Barcelona-Buenos Aires-Mexico: Ediciones Paidos, 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.
- *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.
- *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*. 188 pages. Beverly Hills CA: Sage, 1980.
- *An Examination of Content Analysis: A Proposal for a Framework and an Information Calculus for Message Analytic Situations*. 400 pages. Ph.D. Dissertation. Urbana: University of Illinois, 1967.
- *Über den Zeichen- und Symbolcharakter von Gegenständen: Versuch zu einer Zeichentheorie für die Programmierung von Produktformen in sozialen Kommunikationsstrukturen*. 138 pages. Diplom Thesis. Hochschule für Gestaltung, Ulm, 1961.

!!! **Edited Volumes**

- *Design in the Age of Information, A report to the National Science Foundation (NSF)*. 184 pages. Design Research Laboratory, School of Design, North Carolina State University, Raleigh, NC, 1997.
- A special issue devoted to Product Semantics, with Reinhart Butter. 140 pages. *Design Issues 5*,2, 1989.
- A special issue devoted to Product Semantics, with Reinhart Butter. 32 pages. *Innovations 3*,2, 1984.
- A special issue devoted to Autopoiesis with Milan Zeleny (Ed.) 39 pages. *Cybernetic Forum 10*, 2&3, 1981.
- *Communication and Control in Society*. (Ed.). 597 pages. New York: Gordon and Breach, 1979.
- *The Analysis of Communication Content; Developments in Scientific Theories and Computer Techniques*. With George Gerbner, Ole R. Holsti, William J. Paisley, Philip J. Stone (Eds.) 529 pages. New York: John Wiley & Sons, 1969.

!!!! **Book Chapters**

- Ecological Narratives; Reclaiming the Voice of Theorized Others. Chapter for! Jose V. Ciprut (Ed.). *The Art of the Feud*. Westport, CT: Greenwood Publishing Group (in Press).
- On the Otherness that Theory Creates. Chapter for! Jose V. Ciprut (Ed.). Of Fears and Foes. Westport, CT: Greenwood Publishing Group (in Press).
- An Introduction to Product Semantics, in Klaus Krippendorff and Reinhart Butter. *Die Semantische Wende; Eine Neue Grundlage für das Design*. Frankfurt/Main: Form Verlag (in press)
- De la construction des gens dans l'enquete sociale. Pages 37-55 in Judith Lazar (Ed.) *Revue europeenne des sciences sociales 37,* no. 114, 1999
- A Field for Growing Doctorate in Design. Page 207-224 in R. Buchanan *et al* (Eds.),! Doctoral Education in Design, 1998, Pittsburgh, PA: The School of Design, Carnegie Mellon University.

- Principales metáforas de la comunicación y algunas reflexiones constructivistas acerca de su utilización. Chapter 4, pages 107-146 in Marcelo Pakman (Ed.). *Construcciones de la Experiencia Humana*. Barcelona, Spain: Gedisa editorial, 1997.
- A Trajectory of Artificiality and New Principles of Design for the Information Age. Pages 91-95 in Klaus Krippendorff (Ed.) *Design in the Age of Information, A report to the National Science Foundation (NSF)*. 184 pages. Design Research Laboratory, School of Design, North Carolina State University, Raleigh, NC, 1997.
- Seeing Oneself through Others' Eyes in Social Inquiry. Chapter 2, pages 47-72 in Michael Huspeck and Gary P. Radford (Eds.). *Transgressing Discourses; Communication and the Voice of Other*. Albany, NY: SUNY Press, 1997.
- On the Reliability of Unitizing Continuous Data. Chapter 2, pages 47-76 in Peter V. Marsden (Ed.). *Sociological Methodology, 1995*, Vol. 25. Cambridge MA: Blackwell, 1995.
- Redesigning Design; An Invitation to a Responsible Future. Pages 138-162 in Päivi Tahkokallio & Susann Vihma (Eds.) *Design - Pleasure or Responsibility?* Helsinki: University of Art and Design, 1995.
- The Past of Communication's Hoped-For Future. Pages 42-52 in Mark R. Levy & Michael Gurevich (Eds.). *Defining Media Studies; Reflections on the Future of the Field*. New York: Oxford University Press, 1994. (Originally *JoC* 43,3:34-44, 1993)
- A Recursive Theory of Communication. Pages 78-104 in David Crowley and David Mitchell (Eds.) *Communication Theory Today*. Cambridge UK: Polity Press, 1994.
- Der Verschwundene Bote; Metaphern und Modelle der Kommunikation. Pages 79-113 in Klaus Merten, Siegfried J. Schmidt & Siegfried Weischenberg (Eds.) *Die Wirklichkeit der Medien; Eine Einführung in die Kommunikationswissenschaft*. Opladen: Westdeutscher Verlag, 1994.
- Two Paths in Search of (the) Meaning (of Things). Pages 113-142 in Michael Titzmann (Ed.) *Zeichen(theorie) in der Praxis*. Passau, Germany: Wissenschaftsverlag Rothe, 1993.
- Schritte zu einer konstruktivistischen Erkenntnistheorie der Massenkommunikation (G. Bentele & M Rühl, transl.), pages 19-51. Commentary by Klaus Merten, Horst Reimann, Lutz Erbring and Ulrich Saxer, pages 52-73. In Günter Bentele and Manfred Rühl (Eds.) *Theorien Öffentlicher Kommunikation*. München, Germany: Ölschlaeger, 1993.
- Transcending Semiotics; Toward Understanding Design for Understanding. Pages 24-47 in Susann Vihma (Ed.) *Objects and Images; Studies in Design and Advertising*. Helsinki: University of Industrial Arts, 1992.
- Reconstructing (some) Communication Research Methods. Chapter 7, pages 115-142 in Frederic Steier (Ed.) *Research and Reflexivity*. London, England: Sage, 1991.
- Product Semantics: A Triangulation and Four Design Theories. Pages a3-a23 in Seppo Väkevä (Ed.) *Product Semantics '89*. Helsinki, Finland: University of Industrial Arts, 1990.
- Models and Metaphors of Communication. Manuscript for a textbook chapter and radio program for an educational series "Media and Communication, Construction of Realities" published, translated and aired by Hessischer Rundfunk, Frankfurt, Germany, 1990. Published as: Der verschwundene Bote; Metaphern und Modelle der Kommunikation. Studienbrief 3: 11-50. *Medien und Kommunikation, Konstruktionen von Wirklichkeiten*. Weinheim & Basel: Beltz Verlag, 1990.
- Content Analysis. Pages 403-407 in Erik Barnouw et al. (Ed.) *International Encyclopedia of Communication*, Vol. 1. New York: Oxford University Press, 1989.
- Cybernetics. Pages 443-446 in Erik Barnouw et al. (Ed.) *International Encyclopedia of Communications*, Vol. 1. New York: Oxford University Press, 1989.
- Information Theory. Pages 314-320 in Erik Barnouw et al. (Ed.) *International Encyclopedia of Communication*, Vol 2. New York: Oxford University Press, 1989.
- Shannon, Claude. Pages 58-61 in Erik Barnouw et al. (Ed.) *International Encyclopedia of Communications*, Vol. 4. New York: Oxford University Press, 1989,
- On the Ethics of Constructing Communication. Presidential address delivered at the International Communication Association Conference on Paradigm Dialogues, Honolulu, Hawaii, May 26, 1985. Chapter 4, pages 66-96 in Brenda Dervin, Larry Grossberg, Barbara J. O'Keefe and Ellen Wartella (Eds.) *Rethinking Communication: Paradigm Issues*, Vol.I. Newbury Park CA: Sage Publications, 1989.

- A Heretic Communication about Communication about Communication about Reality. Keynote address presented at the 40th Anniversary of the Institute of Communication Research, University of Illinois, Urbana-Champaign, March 18-19, 1988. Chapter 10, pages 257-276, in Miriam Campanella (Ed.). *Between Rationality and Cognition*. Turin and Geneva: Albert Meynier, 1988.
- Paradigms for Communication and Development with Emphasis on Autopoiesis. Chapter 14, pages 189-208 in D. Lawrence Kincaid (Ed.) *Communication Theory: Eastern and Western Perspectives*. New York: Academic Press, 1987.
- Produktsemantik. Pages 58-69 in Martin Krampen and Horst Kächele (Eds.) *Umwelt, Gestaltung und Persönlichkeit; Reflexionen 30 Jahre nach der Gründung der Ulmer Hochschule für Gestaltung*. Hildesheim: Georg Olms, 1986.
- Paradox and Information. Chapter 2, in Brenda Dervin and Melvin J. Voigt (Eds.) *Progress in Communication Sciences, 5*:45-71, 1984.
- Validity in Content Analysis. Chapter 3, pages 69-112 in Ekkehard Mochmann (Ed.) *Computerstrategien für die Kommunikationsanalyse*. Frankfurt/New York: Campus, 1980.
- Clustering. Chapter 9, pages 259-308 in Peter R. Monge and Joseph N. Cappella (Eds.) *Multivariate Techniques in Communication Research*. New York: Academic Press, 1980.
- Viestinta ja jarjestelmateoria. Chapter 1.2, pages 43-71 in Elja Erholm and Leif Aberg, (Eds.) *Viestinnan Virtauksia* (The flow of Communication). Helsinki: Otava Oy, 1978.
- Information Systems, Theory and Research: An Overview. Pages 149-171 in Brent D. Ruben, (Ed.) *Communication Yearbook I*. New Brunswick NJ: Transactions, 1977.
- The Systems Approach to Communication. Chapter 10, pages 138-163 in Brent D. Ruben and John Y. Kim (Eds.) *General Systems Theory and Human Communication*. Rochelle Park NJ: Hayden Book Co., 1975.
- Information Theory. Chapter 17, pages 351-389 in Gerhard J. Hanneman and William J. McEvan (Eds.), *Communication and Behavior*. Reading MA: Addison-Wesley, 1975.
- Bivariate Agreement Coefficients for Reliability of Data. Chapter 8, pages 139-150 in Edgar R. Borgatta and George W. Bohrnstedt (Eds.), *Sociological Methodology 1970*, Vol. 2. San Francisco CA: Jossey-Bass, Inc. 1970.
- The Television World of Violence, with Marten Brouwer, Cedric C. Clark and George Gerbner. Pages 311-339, 519-591 in Robert K. Baker and Sandra J. Ball. *Mass Media and Violence*, Vol. IX. A Report to the National Commission on the causes and prevention of violence. Washington DC: U.S. Government Printing Office, 1969.
- Models of Messages: Three Prototypes. Chapter 4, pages 69-106 in George Gerbner, Ole R. Holsti, Klaus Krippendorff, William Paisley, Philip J. Stone (Eds.). *The Analysis of Communication Content; Developments in Scientific Theories and Computer Techniques*. New York: John Wiley & Sons, 1969.
- Introduction to Theories and Analytical Constructs (for Content Analysis). Pages 3-16 in George Gerbner, Ole R. Holsti, Klaus Krippendorff, William Paisley, Philip J. Stone (Eds.) *The Analysis of Communication Content: Developments in Scientific Theories and Computer Techniques*. New York: John Wiley & Sons, 1969.

!!! **Journal Articles**!!!

- Beyond Coherence. *Management Communication Quarterly 13*.1, 1999 in press.
- Wenn ich einen Stuhl sehe - sehe ich dann wirklich nur ein Zeichen? When I See a Chair - Must I See a Sign of It? *formdiskurs 5*,2: 98-107, 1998.
- With Nelda Samarel and Jacqueline Fawcett: Women's perceptions of group support and adaptation to breast cancer. *Journal of Advanced Nursing 28*,6, 1998:1259-1268.
- A Second-order Cybernetics of Otherness. *Systems Research 13*,3:311-328, 1996.
- Undoing Power. *Critical Studies in Mass* Communication 12,2:101-132, 1995.
- Major Metaphors of Communication and some Constructivist Reflections on their Use. *Cybernetics & Human Knowing 2*,1: 3-25, 1993.
- The Past of Communication's Hoped-For Future. *Journal of Communication 43*,3: 34-44, 1993.
- Where Meanings Escape Functions, with Reinhart Butter. *Design Management Journal 4*,2: 30-37,

1993.

- Conversation or Intellectual Imperialism in Comparing Communication (Theories). *Communication Theory 3*,3: 252-266, 1993.
- Information, Information Society and Some Marxian Propositions. *Information and Behavior 5*: 487-521, 1992.
- The Power of Communication and the Communication of Power; Toward an Emancipatory Theory of Communication. *Communication 12*:175-196, 1989 (published 1991).
- Imaging, Computing and Designing Minds. *Design Management Journal 2*,1:29-36, 1991.
- Eine häretische Kommunikation über Kommunikation über Kommunication über Realität. *Delphin 13*,2:52-67, January, 1990.
- The Language of Objects, with Seppo Väkevä. *Blueprint 52*, June 1989.
- Design muss Sinn machen; zu einer neuen Design Theorie. Hochschule für Gestaltung Offenbach's *hfg-forum 14*:24-30, November, 1989.
- "On the Essential Contexts of Artifacts" or on the Proposition that "Design is Making Sense (of Things)." *Design Issues 5*,2:9-39, 1989.
- Association, Agreement and Equity. *Quality and Quantity 21*:109-123, 1987.
- Japanese translation of Exploring the Symbolic Qualities of Form, with Reinhart Butter. *Industrial Design 139-140*:10-13, 1987.
- Monitoring the Symbolic Environment of Organizations, with Michael Eleey. *Public Relations Review 12*,1:13-36, 1986.
- Information, Information Society and Some Marxian Propositions (Shortened version). *Informatologia Yugoslavica 17*,1-2:7-38, 1985.
- Comment on Richard Buchanan's "Declaration by Design." *Design Issues 2*,2:71-72, 1985.
- Communication from a Cybernetic Perspective. *Informatologia Yugoslavica 16*,1&2:51-78, 1985.
- Die Produkt-Semantik öffnet die Türen zu einem neuen Bewustsein im Design. *Form 108-109*:14-16, 1984-85.
- Exploring the Symbolic Qualities of Form, with Reinhart Butter. *Innovations 3*,2:4-9, 1984.
- An Epistemological Foundation for Communication. *Journal of Communication 34*,3:21-36, 1984.
- An Algorithm for Identifying Structural Models of Multi-variate Data. *International Journal of Systems Science 7*:63-79, 1981.
- On the Cybernetics of Time, *Systemsletter 7*,1:1-2, 1978.
- Reliability of Binary Attribute Data. *Biometrics 34*,1:142-144, 1978.
- Some Principles of Information Storage and Retrieval in Society. *General Systems 20*:15-35, 1975. Reprinted in *Communications 4*,1:5-34, & 4,2:141-156, 1978.
- Conclusions from the ASC Conference on Communication and Control in Social Processes, October 31-November 2, 1974 at the University of Pennsylvania. *Kybernetes 4*:188-189, 1975; *Cybernetics Forum 7*,1:22-23, 1975.
- Adding Large Numbers by Computer. *Journal of Cybernetics 3*,3:13-14, 1973.
- A Calculus for Disagreements: A Categorial Equivalence to Variance Analysis. *General Systems 16*:222-235, 1971.
- Communication and the Genesis of Structure. *General Systems 16*:171-185, 1971.
- Reliability of Recording Instructions: Multivariate Agreement for Nominal Data. *Behavior Science 16*:222-235, 1971.
- The Expression of Values in Political Documents. *Journalism Quarterly 47*:510-518, 1970.
- On Generating Data in Communication Research. *Journal of Communication 20*:241-269, 1970.
- Estimating the Reliability, Systematic Error and Random Error of Interval Data. *Educational and Psychological Measurement 30*:61-70, 1970.
- Values, Modes and Domains of Inquiry into Communication. *Journal of Communication 19*:105-133, 1969.
- Produktgestalter Kontra Konstrukteur. *Output 5+6:*18-21, 1961.

!!! Publications in Conference Proceedings!!!

- Design Discourse; A Way to Redesign Design. Keynote address to the Society for Science of Design Studies. Tokyo, Japan: December 6, 1998, in press.
- A Field for Growing Doctorates in Design? Pages 207-224 in *Doctoral Education in Design, 1998*, Proceedings of the Ohio Conference, October 8-11, 1998. Pittsburgh: The School of Design, Canegie Mellon University, 1999.
- On Human-Centeredness in Design. Proceedings of the International workshop on Semantics in Design and the Linguistic Nature of Things, Munich, Germany, February 18-20, 1998. http://semantics-in-design.hfg-gmuend.de
- Stakeholder Theory. Proceedings of the International workshop on Semantics in Design and the Linguistic Nature of Things, Munich, Germany, February 18-20, 1998. http://semantics-in-design.hfg-gmuend.de
- Human-Centeredness; A Paradigm Shift Invoked by the Emerging Cyberspaces. Keynote at a symposium on *Connected Intelligence; Human Beings in Information Systems* at the Zentrum für Kunst und Medientechnology, Karlsruhe, Germany, October 27-28, 1997.
- On the Embodiment of Recursive Communication (Theory). Pages 6-7 in Proceedings of the American Society for Cybernetics meeting on *Cybernetics and Circularity* in Chicago, May 1995.
- Design muss Sinn machen; zu einer neuen Design Theorie. Paper presented at the International Design Forum, Ulm, Germany, September 2-4, 1988. Proceedings published 1989.
- Regression Analysis Using Information Theory. Pages 1007-1012 in Len Troncale (Ed.) *A General Survey of Systems Methodology*. Louisville KY: Society for General Systems Research, January, 1982.
- A Proposal for an Algorithm for Generating Loopless or Recursive Models of Multi-variate Data. Pages 299-304 in Len Troncale (Ed.), in *A General Survey of Systems Methodology*. Louisville, KY: Society for General Systems Research, January, 1982.
- Q: An Interpretation of the Information Theoretical Q-measures. Fifth European Meeting for Cybernetics and Systems Research, Vienna, April 1980 and pages 63-67 in Robert Trapple, George Klir and Franz Pichler (Eds.) *Progress in Cybernetics and Systems Research* Vol. VIII. New York: Hemisphere, 1982.
- On the Identification of Latent Functions in Multi-Variate Data. Fifth European Meeting for Cybernetics and Systems Research, Vienna, April 1980 and pages 31-42 in Robert Trapple, George Klir and Franz Pichler (Eds.) *Progress in Cybernetics and Systems Research*, Vol. VIII. New York: Hemisphere, 1982.
- On Systems Thinking. Pages 13-21 in Paul Broholm and Nic van Dijk (Eds.) *Systems Thinking and Social Science,* Proceedings of a Symposium held at the Inter-universitaire Interfaculteit Bedrijfskunde. Delft, The Netherlands, November 15, 1979.
- Cybernetic Properties of Helping; the Organizational Level, with Frederick Steier. Pages 89-94 in Richard F. Ericson (Ed.). *Improving the Human Condition: Quality and Stability in Social Systems*. Louisville KY: Society for General Systems Research, August 1979.
- On the Identification of Structures in Multi-variate Data by the Spectral Analysis of Relations. Pages 82-91 in Brian R. Gaines (Ed.) *General Systems Research: A Science, A Methodology, A Technology*. Louisville KY: Society for General Systems Research, August 1979.
- An Algorithm for simplifying the Representation of Complex Systems. Pages 1693-1702 in John Rose (Ed.) *Advances in Cybernetics and Systems*. New York: Gorden & Breach, 1974.

!!! Book Reviews

- *The Construction of Social Reality*, by John R. Searle. New York: The Free Press, 1995. *Cybernetics & Human Knowing 3*,4:23-26, 1996.
- Ecological Communication, by Niklas Luhmann. Chicago: University of Chicago Press, 1989. *Journal of Communication 41,*1:136-140, 1991.
- *Angels Fear: Toward an Epistemology of the Sacred*, by Gregory Bateson and Mary Catherine Bateson. New York: MacMillian, 1987. *Continuing the Conversation 11*:1-2, 1987, and *Journal of Communication 38*,3:167-171, 1988.
- *The Dream of Reality: Heinz von Foerster's Constructivism*, by Lynn Segal. New York & London:

Norton, 1986. *Journal of Communication 37*,2:155-158, 1987.

- *Basic Content Analysis*, by Robert P. Weber. Beverly Hills CA: Sage Publications, 1985. *Journal of the American Statistical Association 82*:354-355, 1987.
- *The Sciences and Praxis of Complexity*. New York: U.N. University, 1985. *Journal of Communication 36*,3:180-183, 1986.
- *Self-Organization and Management of Social Systems: Insights, Promises, Doubts and Questions*, by H. Ulrich and G.J.B. Probst (Eds.). Berlin: Springer 1984. *European Journal of Operational Research 27*:253-254, 1986.
- *System and Structure: Essays in Communication and Exchange*, by Anthony Wilden. London: Travistock Publications, 1972. *Contemporary Sociology 5*,3:291-292, 1976.
- *Gewalt im Fernsehen: Literaturbericht über Medienwirkungs-Forschung*, by Helga Kellner and Imme Horn, Mainz, Germany: Universitäts-Druckerei, 1971. *Journal of Communication 24*,1:137, 1974.
- *Content Analysis: A Technique for Systematic Inferences from Communications*, by Thomas F. Carney. Winnipeg: University of Manitoba Press, 1972. *Public Opinion Quarterly 38*,1:155-157, Spring 1974.
- *Crime and Information Theory*, by M.A.P. Willmer. Edinburgh and Chicago: Edinburgh University Press and Aldine Publishing Company, 1970. *Journal of Communication 21*,3:280-294, 1971.
- *Cybernetic Principles of Learning and Educational Design*, by Karl U. Smith and Margaret Foltz Smith, New York: Holt, Rinehart and Winston, Inc., 1966. *AV Communication Review 15*,2:216-218, 1967.
- Wff'n Proof, The Game of Modern Logic, by Layman E. Allen. New Haven, Conn.: Box 71, 1962. *Equations, The Game of Creative Mathematics*, by Layman E. Allen. New Haven CT: Box 71, 1963. *AV Communication Review 14,*1:86-87, 1965.
- *Psychologie der Massenkommunikation: Theorie und Systematik*, by Gerhard Maletzke. Hamburg: Hans Bredow Institut, 1963. *Journalism Quarterly 41*:592-594, 1964.
- *Umfragen in der Massengesellschaft: Einführung in die Methoden der Demoskopie*, by Elisabeth Noelle, Reinbeck bei Hamburg: Rowohlt, 1963. *AV Communication Review 12*,4:468-470, 1964.
- *Film und Philosophie, Ein Essai*, by Gilbert Cohen-Seat. Gütersloh: C. Bertelsmann Verlag, 1962. *Film und Verkündung, Probleme des religiösen Films*, by Gerd Albrecht. Gütersloh: C. Bertelsmann Verlag, 1962. *Die Deutsche Filmmusik von den Anfängen bis 1956*. by Hans Alex Thomas. Gütersloh: C. Bertelsmann Verlag, 1962. *AV Communication Review 11*,6:297-299, 1963.
- *Theorie der Massenmedien: Presse, Film, Rundfunk*, by Erich Feldmann. München-Basel: Ernst Reinhardt Verlag 1962. *AV Communication Review 11*,3:64-65, 1963.

!!! **Research Reports and Proposals**!!

- A Content Analysis of Bias in *Consumer Reports* on Automobiles. A Report of Research. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1982 (mimeo).
- Proof for and illustration of an algorithm that distinguishes structural models with loops from those without loops. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1981 (mimeo).
- Development and Aid, A Study of Self-Organization in Bangladesh Villages. A Proposal for Research. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1978 (mimeo).
- A Method for the Strong Associative Clustering of $2m$ Data. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1975 (mimeo).
- A System for the Continual Monitoring of National Publicity for PBS Programming Report of a Pilot Study. With Mike Eleey. The Public Broadcasting Service, Washington DC, March 1973.
- Some Patterns in Violent Interaction on Television. A preliminary report, Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1969 (mimeo).
- Computer Programs for Multivariate Classification in Content Analysis. A research Proposal submitted to the National Science Foundation. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1969 (mimeo).

- Suggested Domain and Structure of a Ph.D. Program in Social Communication Science. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1965 (mimeo.)
- An Outline for BATIC: A Teaching Device for Demonstration of and Experimentation with B̲asic A̲utomata T̲heory I̲n C̲ybernetics and in Communications. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1964 (mimeo).
- First Notes on Simulating Future-Directed Behavior of Very Large Social Systems on the Basis of the Message Content Circulating Within those Systems. Urbana: Institute of Communications Research, University of Illinois, 1964 (mimeo).
- *Einfluß der Farbe auf die Erkennbarkeit und Auffälligkeit von Objecten*. With M.W. Perrine and Klaus Wegner. Technical Report 3, Ulm: Hochschule für Gestaltung, Research Center for Visual Perception, 1961.

!!! Computer Programs and Instructions

- CONSTRUCT, a computer program for confirmatory analysis of structural models for qualitative data using information theory. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1988.
- A Computer Program for Strong Associative Clustering of 2̲m̲. Data. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1975 (mimeo).
- A Computer Program for Agreement Analysis of Reliability Data (Version 4b), User's Manual. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, July 1973 (mimeo).
- A Computer Program for Contingency Analysis, User's Manual. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1970 (mimeo).
- A Computer Program for Analyzing Semantic Information Content of Symbols, User's Manual. Philadelphia: The Annenberg School of Communication, University of Pennsylvania, 1970 (mimeo).
- A Computer Program for Analyzing Multivariate Agreements, User's Manual. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1967 (mimeo), Version 2 (1970), version 3 (1973).
- A Computer Program for Assessing Agreements Among Many Judges When Data Are Nominal-Scale-Recorded. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1967.

!!! Other Papers and Work in Progress

- Writing; Monologue, Dialogue and Ecological Narrative. Paper presented to the Conference on Writings Across the Curriculum, Ithaca, NY: Cornell University, 1999.
- A Paradigm Shift Invoked by the Emerging Cyberspaces. Paper presented to a conference on "Connected Intelligence; Humans in Information Systems" at the Center for Art and Media, Karlsruhe, Germany, October 28-30, 1997. Also discussed at the conference on Design, Planning and Human Understanding of the American Society for Cybernetics, April 2-5, 1998, Santa Cruz, CA.
- The Social Reality of Meaning. Paper presented at a workshop on *The Meaning of Things*, March 17, 1996, Cooper-Hewitt, National Design Museum, Smithonian Institution, New York.
- Arguments in support of the proposition: *Resolved that "Knowledge about Communication Can Only Be Known By the Knower,"* made during the Information Systems Debate on 1996.5.24 at the ICA Conference in Chicago IL.
- The Semantic Turn; An Introduction to Product Semantics. Principal paper presented to a conference convened for this purpose on December 3-4, 1994, at the University of Ulm, Germany.
- The Principle of Reflexivity. Paper Presented at the ICA Conference in Washington DC, May 27-31, 1993.
- Recent Developments in Reliability Analysis. Paper presented at the ICA Conference in Miami FL, May 21-25, 1992.
- A Calculus for Disagreements. Part I of a Larger Project on "Disagreement and Reliability". Philadelphia: The Annenberg School for Communication, University of Pennsylvania, October 10, 1991

(mimeo).

- Stepping Stones Towards A Constructivist Epistemology for Mass Communication. Keynote address for a conference on Theories of Public Communication by the Deutsche Gesellschaft für Publizistik und Kommunikationswissenschaft, Bamberg, Germany, May 8-10, 1991.
- Information and Information and Information in Theory and Practice. Philadelphia: The Annenberg School for Communication, mimeo. Requested for publication, 1990.
- On Reflexivity in Human Communication. Paper presented at the 10th Temple Conference on Discourse Analysis, March 16-18, 1989. Philadelphia: The Annenberg School for Communication, University of Pennsylvania, 1989 (mimeo).
- Toward a Cybernetics of (Mass-Media) Institutions. Sari Thomas and Nancy Signorielli (Eds.). *Essays in Honor of George Gerbner*, in press.
- On Poppings Agreement Indices. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1988 (mimeo).
- On Constructing People in Social Inquiry. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1986 (mimeo).
- Communication from a Cybernetic Perspective, East and West? Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1982 (mimeo).
- The Model as a Communication Channel; A Quantitative Approach. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1978 (mimeo).
- A Spectral Analysis of Relations, Further Developments. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1978 (mimeo).
- Reliability, The Case of Binary Attributes. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1978 (mimeo).
- Validity in Content Analysis. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1977 (mimeo).
- A Spectral Analysis of Relations. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1976 (mimeo).
- A Non-parametric Test of the Significance of Difference Between One and a Sample of Partitions of the Same Level. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1973 (mimeo).
- An Algorithm for Simplifying the Representation of Complex Systems. Paper presented to the International Congress of Cybernetics and Systems, Oxford, England, August 28-September 1, 1972. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1972 (mimeo).
- The Recording Process. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1972 (mimeo).
- What's Wrong with Content Analysis: A Methodological Critique. Paper presented to the Communication Theory and Methodology Division of the AEJ Annual Conference, Berkeley, California, August 1969. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1969 (mimeo).
- The Structure of an Algorithm for Identifying Values Expressed in Written Text. Philadelphia: The Annenberg School of Communications, University of Pennsylvania, 1965 (mimeo).