

## MICHAEL GERZON - PUBLICATIONS AND UNPUBLISHED REPORTS

STEPHEN THORNTON

- (1) Michael Gerzon, "The (Un)predictable Future", Circle Magazine, no. 2 pp. 26, 27, 37 (1964 Spring)
- (2) "Elliptical Styli" (Letter), The Gramophone, vol. 43, p.424-425 (1966 Feb.)
- (3) "Compatibility Again" (Letter), The Gramophone, vol. 43, p.539 (1966 April)
- (4) "625 Lines in 405 Channels" (Letter), Practical Television, vol. 17 no. 10, pp. 471-472 (1967 July)
- (5) "625 Lines in 405 Channels" (Letter), Practical Television, vol. 17 no. 11, p. 498 (1967 Aug.)
- (6) "...about hearing above 20 kHz" (Letter), Hi-Fi News, vol. 12, p. 255 (1967 Aug.)
- (7) "The Speed of Sound" (Letter), Audio Record Review, issue 69-2 p. 97 (1969 Feb.)
- (8) "Modern Recording Techniques" (Letter), The Gramophone, vol. 47, p. 486 (1969 Sept.)
- (9) Michael Gerzon, "Recording the 1772 Kirckman Harpsichord", F.B.T.R.C. News and Views, vol. 4 no. 16, pp. 3-4 (1969 Winter) [F.B.T.R.C. = Federation of British Tape Recordists and Clubs]
- (10) C M Edwards and M A Gerzon, "Monotone Convergence in Partially Ordered Vector Spaces?", Ann Inst Henri Poincare, Vol XII, no 4, 323 ? 328 (1970)
- (11) Michael Gerzon, "Record Wear", Audio Annual 1970, Link House Publications, Croydon, England, pp. 54-59 (1970)
- (12) Michael Gerzon, "The Quart Broadcasting System", Hi-Fi News, vol. 15, pp. 719-723 (1970 May) and Audio, vol. 54 no. 9, pp. 26-27 (1970 Sept.)
- (13) Michael Gerzon, "The J.O.K.E. System", Hi-Fi News, vol. 15, pp. 843, 847 (1970 June)
- (14) Michael Gerzon, "Surround Sound from Two-Channel Stereo", Hi-Fi News, vol. 15, pp. 1104-1109 (1970 Aug.)
- (15) Michael Gerzon, "The Principles of Quadraphonic Recording",
  - (a) Part 1: "Are Four Channels Really Necessary?" Studio Sound, vol. 12, pp. 338-342 (1970 Aug.)
  - (b) Part 2: "The Vertical Element", Studio Sound, vol. 12, pp. 380-384 (1970 Sept.)
- (16) Michael Gerzon, "Ultra-Directional Microphones",
  - (a) Part 1: Studio Sound, vol. 12, pp. 434-437 (1970 Oct.)
  - (b) Part 2: Studio Sound, vol. 12, pp. 501-504 (1970 Nov.)
  - (c) Part 3: Studio Sound, vol. 12, pp. 539-543 (1970 Dec.)
- (17) Michael Gerzon, "Quadrature Ambience with Reference Tone", Radio- Electronics, pp. 52, 53, 58 (1970 Dec.)
- (18) Michael Gerzon, "Whither Four Channels?", Audio Annual 1971, Link House Publications, Croydon, pp. 36-41 (1971)
- (19) "Revolutionary Techniques" (Letter), The Gramophone, vol. 48, p. 1395 (1971 Feb.)
- (20) Michael Gerzon, "Why Coincident Microphones?", Studio Sound, vol. 13, pp. 117, 119, 140 (1971 March)
- (21) M.A. Gerzon, "Recording Techniques for Multichannel Stereo", British Kinematography, Sound and Television vol. 53, pp. 274-279 (1971 July)
- (22) Michael Gerzon, "A Year of Surround Sound", Hi-Fi News, vol. 16, pp. 1412-1420 (1971 Aug.)
- (23) Michael Gerzon, "Experimental Tetrahedral Recording",
  - (a) Part 1: Studio Sound, vol. 13, pp. 396-398 (1971 Aug.)
  - (b) Part 2: Studio Sound, vol. 13, pp. 472, 473 and 475 (1971 Sept.)
  - (c) Part 3: Studio Sound, vol. 13, pp. 510, 511, 513 and 515 (1971 Oct.)
- (24) Michael Gerzon, "Matrix Systems for Four Speaker Stereo I", privately circulated report (145 pages), (1971 Sept.)
- (25) (a) Michael Gerzon, "Anomalies in the CBS ?SQ? Stereo/Quadraphonic System?", privately circulated report, (13 pages) (September 1971)  
(b) Michael Gerzon, "What cannot be recorded with the CBS ?SQ? Four-Channel System?", privately circulated report (6 pages) (1971)
- (26) Michael Gerzon, "???about misunderstanding and incomprehension? (letter), Hi Fi News vol 16, p1605 (1971 Sept)
- (27) Michael Gerzon, "Synthetic Stereo Reverberation",
  - (a) Part 1: Studio Sound, vol. 13, pp. 632-635 (1971 Dec.)
  - (b) Part 2: Studio Sound, vol. 14, pp. 24-28 (1972 Jan.)
- (28) M.A. Gerzon, "Predistortion Techniques for Complex but Predictable Transmission Systems", J. Audio Eng. Soc., vol. 20 no. 8, pp. 475-482 (1972 July/Aug.)
- (29) Mike Anthony, "The Shape of Sounds to Come", Studio Sound, vol. 14, pp. 49-50, (1972 Sept.)
- (30) Michael Gerzon, "Minimizing Print Through", Studio Sound, vol. 14, pp. 67, 71 (1972 Sept.)

- (31) Michael Gerzon, "Quadraphonic Coding", Hi-Fi News Annual 1973, Link House Publications, Croydon (1973) pp. 20-25, 29
- (32) M.A. Gerzon, "Periphony: With-Height Sound Reproduction", J. Audio Eng. Soc., vol. 21, pp. 2-10 (1973 Jan./Feb.)
- (33) Michael Gerzon, "Criteres Psychoacustiques Relatif a la Conception des Systemes Matriciels et Discrets en TetrAPHONIE", Conferences des Journees d'Etudes, Festival International du Son 1974, Editions Radio, Paris (1974) pp. 145-155 English version
- (34) Michael Gerzon, "Surround Sound Psychoacoustics", Wireless World, vol. 80, pp. 483-486 (1974 Dec.)
- (35) M.A. Gerzon, "Comments on 'The Delay Plane, Objective Analysis of Subjective Properties: Part I'", J. Audio Eng. Soc., vol. 22, pp. 104, 105 (1974 Mar.)
- (36) Mike Anthony, "How to Ruin a Good Recording", Studio Sound, vol. 16 no. 4, p. 38 (1974 April)
- (37) Michael Gerzon, "What's Wrong with Quadraphonics?", Studio Sound, vol. 16 no. 5, pp. 50, 51, 56 (1974 May)
- (38) M.A. Gerzon, "The Presentation of Statistical Information on a Circle", J. Audio Eng. Soc., vol. 22, p. 536 (1974 Sept.)
- (39) M.A. Gerzon, "On a "Rosetta Stone" for Acoustic Recordings", J. Audio Eng. Soc., vol. 22, p. 638 (1974 Oct.)
- (40) Mike Anthony, "Audio Jargon; A Nonsense Alphabet", Studio Sound, vol. 16 no. 7, p. 72 (1974 July), and Michael Gerzon and Hugh Ford "What Quad Terms Really Mean? Electronics Today (Australian edition), vol. 4 no. 5, p.47 (1974 Aug.)
- (41) Michael Gerzon, "Stabilising Stereo Images", Studio Sound, vol. 16 no. 12, pp. 60-64 (1974 Dec.)
- (42) M.A. Gerzon, "A Geometric Model for Two-Channel Four-Speaker Matrix Stereo Systems", J. Audio Eng. Soc., vol. 23, pp. 98-106 (1975 Mar.)
- (43) Michael Gerzon, "Dummy Head Recording", Studio Sound, vol. 17 no. 5, pp. 42-44 (1975 May)
- (44) M.A. Gerzon, "The Design of Precisely Coincident Microphone Arrays for Stereo and Surround Sound", preprint of the 50th Audio Engineering Society Convention, London (1975 March)
- (45) P.G. Craven & M.A. Gerzon, "The Elimination of Scratch Noise from 78 r.p.m. Records", Preprint of the 50th Audio Engineering Society Convention, (1975 March)
- (46) M.A. Gerzon, "Calculating the Directivity Factor 'gamma' of Transducers from Limited Polar Diagram Information", J. Audio Eng. Soc., vol. 23, pp. 369-373 (1975 June)
- (47) Michael Gerzon, "Ambisonics. Part Two: Studio Techniques", Studio Sound, vol. 17 no. 8, pp. 24-26, 28 and 30 (1975 Aug.) Correction: Studio Sound, vol. 17 no. 10, p. 60 (1975 Oct.)
- (48) M.A. Gerzon, "More on 'The Presentation of Statistical Information on a Circle'", J. Audio Eng. Soc., vol. 23, pp. 471-473 (1975 July/Aug.)
- (49) M.A. Gerzon, "Recording Concert Hall Acoustics for Posterity", J. Audio Eng. Soc., vol. 23, pp. 569, 571 (1975 Sept.)
- (50) P.B. Fellgett & M.A. Gerzon, "Encoding Standards for 2-Channel Surround-Sound", Electronics Letters, vol. 11, pp. 518-519 (1975 Oct. 16)
- (51) M.A. Gerzon, "Residual Distortion Remaining after Pre- or Postdistortion", Electronics Letters, vol. 11, pp. 601-602 (1975 Nov. 27)
- (52) M.A. Gerzon, "Compatible 2-Channel Encoding of Surround Sound", Electronics Letters, vol. 11, pp. 615-617 (1975 Dec. 11)
- (53) M.A. Gerzon, "Decomposition of Nonlinear Operators into 'Harmonic' Components, with Applications to Audio Signal Processing", Electronics Letters, vol. 12, pp. 23-24 (1976 Jan. 8)
- (54) M.A. Gerzon, "Blumlein Stereo Microphone Technique", J. Audio Eng. Soc., vol. 24, pp. 36, 38 (1976 Jan./Feb.)
- (55) (Reply to John Dwyer) (Letter), Hi-Fi for Pleasure, vol. 4 no. 3, p. 45 (1976 Mar.)
- (56) "Audibility of Phase Distortion" (Letter), Wireless Word, vol. 82 no. 1483, pp. 60-61 (1976 Mar.)
- (57) M.A. Gerzon, "Unitary (Energy Preserving) Multichannel Networks with Feedback", Electronics Letters, vol. 12, pp. 278-279 (1976 May 27)
- (58) M.A. Gerzon, "Comments on 'A Three-Dimensional Digital Image Display System' and 'A Compatible Stereo Television System'", IEEE Trans. Broadcasting, vol. BC-22, p. 53 (1976 June)
- (59) M.A. Gerzon, "Maximum Directivity Factor of n'th-Order Transducers", J. Acoust. Soc. Am., vol. 60, pp. 278-280 (1976 July)
- (60) M.A. Gerzon, "Volterra Series Describing the Substitution of Nonlinear Components into Nonlinear Networks", IEEE Trans. Circuits and Systems, vol. CAS-23, pp. 509-510 (1976 Aug.)
- (61) M.A. Gerzon, "Psychoacoustics - The Criteria of Hearing and Microphone Techniques" (16 pages) in: Sound from Microphone to Ear, British Kinematograph, Sound and Television Society Education & Training Committee, London (1976 Sept.)
- (62) M.A. Gerzon, "Effect of Gain Control and Modulation on Harmonic Nonlinear Operators, with Applications to Audio Signal Processing", Electronics Letters, vol. 13, pp. 118-120 (1977 Feb. 17)
- (63) M.A. Gerzon, "The Optimum Choice of Surround-Sound Encoding Specification", Preprint no. 1199 of the 56th Audio Engineering Society Convention, Paris, (1977 Mar. 1)
- (64) Michael Gerzon, "NRDC Surround-Sound System", Wireless World, vol. 83 no. 1496, pp. 36-39 (1977 April)
- (65) Michael Gerzon, "Variomatrix Adaptor for System 45J and Matrix H", Wireless World, vol. 83 no. 1497, pp. 50-51 (1977 May)
- (66) P. Fellgett & M. Gerzon, "From quadro to surround sound", Elektor, vol. 3 no. 5, pp. 5-19 to 5-25 (1977 May)
- (67) M.A. Gerzon, "Criteria for Evaluating Surround-Sound Systems", J. Audio Eng. Soc., vol. 25, pp. 400-408 (1977 June)
- (68) Michael Gerzon, "Multi-System Ambisonic Decoder",
  - (a) Part 1: "Basic Design Philosophy", Wireless World, vol. 83 no. 1499, pp. 43-47 (1977 July)
  - (b) Part 2: "Main Decoder Circuits", Wireless World, vol. 83 no. 1500, pp. 69-73 (1977 Aug.) later parts never written & published.
- (69) M A Gerzon, "Design of Ambisonic Decoders for Multispeaker Surround Sound." Presented 58th Audio Engineering Society Convention, New York (1977 4 November)
- (70) Michael Gerzon, "Don't say quad - say psychoacoustics", New Scientist, vol. 76, pp. 634-636 (1977 Dec. 8)
- (71) M.A. Gerzon, "Mathematics and Sound Perception", J. Audio Eng. Soc., vol. 26, pp. 46-50 (1978 Jan./Feb.)
- (72) M.A. Gerzon, "More Comments on 'A Dynamic Noise Reducer for Sum-Difference Multiplex Systems'", J. Audio Eng. Soc., vol. 26, pp. 229-230 (1978 April)
- (73) M.A. Gerzon, "FM Multiplex Broadcasting of 2/2?/3 Channel Surround Sound", Preprint 1429 of the 61st Audio Engineering Society Convention, New York (1978 Nov.)
- (74) M.A. Gerzon, "Pictures of 2-Channel Directional Reproduction Systems", Preprint 1569 of the 65th Audio Engineering Society Convention, London (1980 Feb.)
- (75) M.A. Gerzon, "PracticalPeriphony", Preprint 1571 of the 65th Audio Engineering Society Convention, London (1980 Feb.)
- (76) M A Gerzon, "Ambisonics in Multichannel Broadcasting and Video?". Preprint 2034 of the 74th Audio Engineering Society Convention, New York 8-12 October 1983

- (77) M.A. Gerzon & G.J. Barton, "Ambisonic Surround-Sound Mixing for Multitrack Studios", Conference Paper C1009 of the 2nd Audio Engineering Society International Conference, Anaheim (1984 May 11-14)
- (78) Michael Gerzon, Oxon Magazine:
- (a) Issue 29, p8, 12 ? 26 April 1985, ?M4?
  - (b) Issue 31, p10, 10 ? 23 May 1985, ?Evan Parker?
  - (c) Issue 36, p11, 19 July ? August 1 1985, ?Research into Improvised Music?
  - (d) Issue 39, p12, 30 August ? 12 September 1985, ?Improvised Music in the First Oxford World Music Festival?
  - (e) Issue 40, p9, 13 ? 26 September 1985, ?Derek Bailey?
  - (f) Issue 44, p13, 8 ? 21 November 1985, ?Mayhem?
  - (g) Issue 45, p12, 22 November ? 5 December 1985, ?Hans Reichel?
  - (h) Issue 47/48, p10, 20 December 1985 ? 16 January 1986, ?AMM?
- (79) M.A. Gerzon, "Ambisonics in Multichannel Broadcasting and Video", J. Audio Eng. Soc., vol. 33 no. 11, pp. 859-871 (1985 Nov.)
- (80) Michael Gerzon, "The Politics of P.A.", Re Records Quarterly Magazine, vol. 1 no. 4, pp. 21-25 (1986 May)
- (81) Michael Gerzon, "Stereo Shuffling, New Approach - Old Technique", Studio Sound, vol. 28, pp. 122-130 (1986 July)
- (82) Michael Gerzon, "The Electronic Music Tradition. Influences from Classical on Popular Music", Re Records Quarterly Magazine, vol. 2 no. 1, pp. 17-22, (1987 March)
- (83) Michael Gerzon, "A Question of Balance. A Critical Look at the Mixdown Process", Re Records Quarterly Magazine, vol. 2 no. 2, pp. 48-53 (1987 Autumn)
- (84) Michael Gerzon, "Digital Technology: The Next Generation?", unfiled, RER1 Recommended Sourcebook 0401, 27 ? 333 (Around 1987)
- (85) M.A. Gerzon, "Stereo Recording of Live Amplified Music", Proceedings of "Reproduced Sound 3" Institute of Acoustics Conference, Windermere (1987 Nov. 5-8) pp. 69 - 87
- (86) M.A. Gerzon, "Reply to 'Comments on "Spaciousness and Localization in Listening Rooms and their Effect on the Recording Technique"'", J. Audio Eng. Soc., vol. 35 no. 12, pp. 1013-1014 (1987 Dec.)
- (87) Michael Gerzon, "Creative Possibilities of the CD Medium", Re Records Quarterly Magazine, vol. 2 no. 4, pp. 5-8 (1988)
- (88) Michael Gerzon, "Live Rock Recording",
- (a) Part 1: Home & Studio Recording, vol. no., pp. 36-38 (1989 May)
  - (b) Part 2: Home & Studio Recording, vol. no., pp. 64-66 (1989 June)
  - (c) Part 3: Home & Studio Recording, vol. no., pp. 17-18 (1989 July)
  - (d) Part 4: Home & Studio Recording, vol. no., pp. 16, 18 (1989 Aug.)
- (89) M.A. Gerzon & P.G. Craven, "Optimal Noise Shaping and Dither of Digital Signals", presented at the 87th Convention of the Audio Engineering Society, New York (1989 Oct. 18-21) J. Audio Eng. Soc. (Abstracts), vol. 37, p. 1072 (1989 Dec.), preprint 2822.
- (90) Michael Gerzon, "The Gentle Art of Digital Squashing", Studio Sound, vol. 32 no. 5, pp. 68, 70, 72, 74 & 76, (1990 May)
- (91) Michael Gerzon, "Three Channels. The Future of Stereo?", Studio Sound, vol. 32 no. 6, pp. 112, 114, 117, 118, 120, 123 & 125 (1990 June)
- (92) Michael Gerzon, "Why Do Equalisers Sound Different?", Studio Sound, vol. 32 no. 7, pp. 58, 60, 62, 64, 65 (1990 July)
- (93) Michael Gerzon, "Fixing It Outside The Mix", Studio Sound, vol. 32 no. 9, pp. 78, 81, 82, 85, 86, 88, 90 & 93 (1990 Sept.)
- (94) M.A. Gerzon, "Masking of Coding/Decoding Errors in Audio Data Compression", Proc. Inst. of Acoustics, vol. 12 part 8, pp. 175-182 (1990 Nov.)
- (95) M.A. Gerzon, "Problems of Error-Masking in Audio Data Compression Systems", Preprint 3013 of the 90th Audio Engineering Society Convention, Paris (1991 Feb.)
- (96) M.A. Gerzon, "Super-Resolving Short-Term Spectral Analyzers", Preprint 3174 of the 91st Audio Engineering Society Convention, New York (1991 Oct.)
- (97) M.A. Gerzon, "The Use of Ohm's Acoustical Law in the Design of Nonlinear Audio Signal Processors and Analyzers", Preprint 3184 of the 91st Audio Engineering Society Convention, New York (1991 Oct.)
- (98) M.A. Gerzon, "Optimal Reproduction Matrices for Multispeaker Stereo? Preprint 3180 of the 91st Audio Engineering Society Convention, New York (1991 Oct.)
- (99) M.A. Gerzon, "Hierarchical Transmission System for Multispeaker Stereo? Preprint 3199 of the 91st Audio Engineering Society Convention, New York (1991 Oct.)
- (100) M.A. Gerzon, "Directional Masking Coders for Multichannel Subband Audio Data Compression Systems", Preprint 3261 of the 92nd Audio Engineering Society Convention, Vienna (1992 Mar.)
- (101) M.A. Gerzon, "General Metatheory of Auditory Localisation", Preprint 3306 of the 92nd Audio Engineering Society Convention, Vienna (1992 Mar.)
- (102) M.A. Gerzon, "The Design of Distance Panpots", Preprint 3308 of the 92nd Audio Engineering Society Convention, Vienna (1992 Mar.)
- (103) M.A. Gerzon, "Panpot Laws for Multispeaker Stereo", Preprint 3309 of the 92nd Audio Engineering Society Convention, Vienna (1992 Mar.)
- (104) M.A. Gerzon, "Hierarchical System of Surround Sound Transmission for HDTV", Preprint 3339 of the 92nd Audio Engineering Society Convention, Vienna (1992 Mar.)
- (105) M.A. Gerzon & G.J. Barton, "Ambisonic Decoders for HDTV", Preprint 3345 of the 92nd Audio Engineering Society Convention, Vienna (1992 Mar.)
- (106) P.G. Craven & M.A. Gerzon, "Practical Adaptive Room and Loudspeaker Equaliser for Hi-Fi Use", Preprint 3346 of the 92nd Audio Engineering Society Convention, Vienna (1992 Mar.). Revised version in: Proceedings of the Audio Engineering Society UK Conference on DSP, London (1992 Sept. 14-15), pp. 121-153
- (107) M.A. Gerzon, (Article on Ambisonics, translated into Japanese), presented to the Japan Audio Society, Tokyo (1992 June 6)
- (108) Michael Gerzon, "Measure for Measure", Studio Sound, vol. 34 no. 7, pp. 46-53 (1992 July)
- (109) M.A. Gerzon, "Optimum Reproduction Matrices for Multispeaker Stereo", J. Audio Engineering Society, vol. 40 no. 7/8, pp. 571-589 (1992 July/Aug.)
- (110) M.A. Gerzon, "Hierarchical Transmission System for Multispeaker Stereo", J. Audio Eng. Soc., vol. 40 no. 9, pp. 692-705 (1992 Sept.)

- (111) P.G. Craven & M.A. Gerzon, "Compatible Improvement of 16-Bit Systems Using Subtractive Dither", presented at 93rd Convention of the Audio Engineering Society, San Francisco (1992 Oct. 1-4), J. Audio Eng. Soc. (Abstracts), vol. 40, p. 1039 (1992 Dec.), Preprint 3356.
- (112) M.A. Gerzon, "Problems of Upward and Downward Compatibility in Multichannel Stereo Systems", Preprint 3404 of the 93rd Audio Engineering Society Convention, San Francisco (1992 Oct. 1-4)
- (113) M.A. Gerzon, "Compatibility of and Conversion Between Multispeaker Systems", Preprint 3405 of the 93rd Audio Engineering Society Convention, San Francisco (1992 Oct. 1-4)
- (114) M.A. Gerzon, "Psychoacoustic Decoders for Multispeaker Stereo and Surround Sound", Preprint 3406 of the 93rd Audio Engineering Society Convention, San Francisco (1992 Oct. 1-4)
- (115) M.A. Gerzon, "Signal Processing for Simulating Realistic Stereo Images", Preprint 3423 of the 93rd Audio Engineering Society Convention, San Francisco (1992 Oct. 1-4)
- (116) M.A. Gerzon, "Applications of Blumlein Shuffling to Stereo Microphone Techniques", Preprint 3448 of the 93rd Audio Engineering Society Convention, San Francisco (1992 Oct. 1-4)
- (117) M.A. Gerzon, "Microphone Techniques for 3-Channel Stereo", Preprint 3450 of the 93rd Audio Engineering Society Convention, San Francisco (1992 Oct. 1-4)
- (118) Michael Gerzon, Peter Craven, Robert Stuart and Rhonda Wilson, "Psychoacoustic Noise Shaped Improvements in CD and Other Linear Digital Media?", Preprint 3501 of the 94th Convention of the Audio Engineering Society Berlin (1993 16 - 19 March)
- (119) Michael Gerzon and Peter Craven. "A High-Rate Buried-Data Channel for Audio CD?", Preprint 3551 of the 94th Convention of the Audio Engineering Society Berlin (1993 16 - 19 March)
- (120) M A Gerzon, "Applications of Blumlein Shuffling to Stereo Microphone Techniques". J Audio Engineering Society, vol 42, no.6, 435 - 453 (1994 June)
- (121) M A Gerzon and P G Craven, "A High-Rate Buried-Data Channel for Audio CD?". J Audio Engineering Society, vol 43, No 1/2, 3 - 22 (1995 January/February)
- (122) P G Craven and M A Gerzon, "Lossless Coding for Audio Discs?", Audio Engineering Society UK Conference, Audio for the New Media, London 25-26 March 1996