

CURRICULUM VITAE

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Date of birth: 26th January 1964

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Education: **1999-present** I have been awarded a PhD in Psychology from University of London in July 2004.

1999 BSc (Hons.) Psychology, Birkbeck College, University of London.

1986-1987 Jazz guitar and composition, Jazzhochschule, Graz, Austria.

1983-1986 German language and linguistics, Faculty of Philology, University of Belgrade.

1978-1982 Baccalaureate (Distinction) in Translation and Interpretation (English/German/Serbo-Croat). Osma Beogradska Gimnazija, Belgrade, F R Yugoslavia.

1970-1978 Primary education, Belgrade, Yugoslavia.

Research interests: The topic of my PhD is "Gamma-band synchronisation and the integration of pure tones" (Supervisor: Dr Paul J. Barber). My other research interests include the dynamics of perceptual grouping, memory for visual form and perception of music. More generally, I am interested in complexity, randomness and information theory in psychology.

Awards: **2003** ESRC Postdoctoral fellowship

2002 Armitage Smith Memorial Prize for "excellent research in the field of science".

2000 Departmental PhD Studentship

1999 Honorary Research Fellows in Psychology Prize for my final-year project "Auditory gamma-band response and perceptual integration of pure tones: a psychoacoustical investigation".

Publications:

Aksentijevic, A., Gibson, K. (2003). Towards a universal index of structural complexity. Proceedings of the Eighth International Conference of Cognitive Science, Vol. 1, pp. 12-18. Sydney: The University of New South Wales.

Aksentijevic, A., Elliott, M. A., & Barber, P. J. (2002). Process timing and its relation to the perception of tonal harmony. Proceedings of the Eighteenth Annual Meeting of the International Society for Psychophysics, 161-166.

Aksentijevic, A., Elliott, M. A., & Barber, P. J. (2001). Dynamics of perceptual grouping: Similarities in the organization of visual and auditory groups. *Visual Cognition*, 8, (3/4/5), 349-358.

Aksentijevic, A., Elliott, M. A., & Barber, P. J. Effects of gamma-band entrainment on harmonic binding. (awaiting submission to JEP).

Aksentijevic, A., Elliott, M. A., & Barber, P. J. Harmonic reset mechanism – psychophysical evidence for harmonic templates (in preparation).

Aksentijevic, A., Chen, L., Elliott, M. A., & Barber, P. J. Homogeneity of perceptual field as the primary determinant of perceptual organization (in preparation).

Prasher, D. & Aksentijevic, A. NOISECHEM: Effects of solvents and noise on the hearing of factory workers in Europe (in preparation).

Johnson, A.-C., Morata, T., Lindblad, A.-C., Nylen, P. R., Svensson, E. B., Krieg, E. & Aksentijevic, A. Audiological findings in workers exposed to styrene alone or in concert with noise (in preparation).

Aksentijevic, A. & Gibson, K. Structure surfaces and DNA sequences (awaiting submission).

Aksentijevic, A. Entropy as change (In preparation).

Invited talks:

Aksentijevic, A. Entropy as change. Talk to be given at the Workshop of the Centre for Interdisciplinary Research, University of Bielefeld, entitled “Endophysics, Time, Quantum and the Subjective” in Bielefeld, 22nd January, 2005.

Aksentijevic, A. & Gibson, K. Towards a universal index of structural complexity. Talk given at the 8th International Conference of Cognitive Science in Sydney, 16th July, 2003.

Aksentijevic, A., Elliott, M. A., & Barber, P. Process Timing and its Relation to the Perception of Tonal Harmony. Talk given at the 18th Annual Meeting of the International Society for Psychophysics in Rio de Janeiro on 24th October, 2002.

Presentations:

Gibson, K. & Aksentijevic, A. A measure of the structural complexity of sequences. Talk given at School of Computer Science and Information Systems Research Day at the London Knowledge Lab, 30th June, 2004.

Aksentijevic, A. Pitfalls in auditory brainstem response interpretation in audiovestibular diagnosis. Talk given to the staff of Institute of Laryngology and Otology, UCL in London on 7th May, 2004.

Gibson, K. & Aksentijevic, A. Generalised palindromes – some combinatorial issues. Talk given to the staff and students of the Department of Mathematics, Royal Holloway, University of London, 3rd October, 2003.

Aksentijevic, A. & Gibson, K. Towards a universal index of structural complexity. Presentation given to the staff of the Laboratory of Bioinformatics, Cancer Research UK, 15th September, 2003.

Aksentijevic, A. Overview of research. Presentation given to the staff of the Psychology Department, Lancaster University, 5th September, 2003.

Gibson, K. & Aksentijevic, A. Generalised palindromes. Seminar given to the staff and students of the Department of Computing Science and Information systems, Birkbeck College, University of London, 9th July, 2003.

Aksentijevic, A. & Gibson, K. Towards a universal index of structural complexity. Seminar given to the staff and students of the Laboratory of Experimental Psychology, Faculty of Philosophy, University of Belgrade, 30th December 2002.

Aksentijevic, A., Chen, L., Elliott, M. A., & Barber, P. (W)holes in Space-time: Towards a general theory of perceptual organisation. Presentation given to the staff and students of the Key Laboratory of Cognitive Science, Chinese Academy of Sciences in Beijing on 9th August and 5th September, 2002.

Posters:

Aksentijevic, A., Elliott, M. A., & Barber, P. J. The effects of oscillatory harmonic masking on auditory detection times (Seventeenth Annual Meeting of the International Society for Psychophysics, Leipzig, Germany, October 20-23, 2001).

Aksentijevic, A., Elliott, M. A., & Barber, P. J. Auditory gamma-band response and perceptual integration of pure tones: a psychophysical investigation (The Third International Conference on Cognitive Science, Beijing, China, August 27-31, 2001).

Aksentijevic, A., Elliott, M. A., & Barber, P. J. Auditory gamma-band response and perceptual integration of pure tones: a psychophysical investigation (International Symposium on Neural Binding of Time and Space, Leipzig, Germany, March 16-18, 2000).

Abstracts:

Aksentijevic, A., Elliott, M. A., & Barber, P. J. (2001). Auditory gamma-band response and perceptual integration of pure tones: a psychophysical investigation. Proceedings of the Third International Conference on Cognitive Science, Beijing, China, p. 667.

Research visits and meetings:

Meeting of the principal grant holders for the NOISCHEM project on data analysis, held in Funchal, Madeira, from 2nd to 7th February, 2004.

Guest scientist at the Key Laboratory of Cognitive Science, Chinese Academy of Sciences, Beijing, from 24th July to 15th September 2002.

Other:

Advisor to the European Project on Noise and Chemicals (NOISECHEM).

Current projects:

London

Dr Keith Gibson (School of Computer Science and Information Systems, Birkbeck College, University of London). Structural complexity and entropy.

Beijing

Professor Lin Chen (Key Laboratory of Cognitive Science, Chinese Academy of Sciences). Topological models of grouping.

Planned projects:

Munich

Dr Mark A. Elliott (Institut für Allgemeine und Experimentelle Psychologie, Ludwig-Maximilians Universität, München). Oscillatory mechanisms of auditory and visual binding.

London

Professor Deepak Prasher (School of Audiology, UCL) Harmonic integration in the auditory cortex: a combined approach.

Leipzig

Professor Hans-Georg Geissler & Dr Raul Kompass (Institut für Allgemeine Psychologie, Universität Leipzig). Quantal timing in auditory perception.

Lecturing:

2004, 2003, 2002, 2001, 2000, 1999 Statistics with research methods, MSc Audiological Science, Institute of Laryngology and Otology, University College London (Course organiser: Professor Deepak Prasher). My role includes setting and marking the module examination.

2002, 2001, 2000 Statistics with research methods, MSc Human-Computer Interaction with Ergonomics, University College London (Course organiser: Ms Rachel Benedyk)

2001 Introductory statistics, MSc Organisational Psychiatry, Division of Psychological Medicine, King's College London (Course organisers: Dr Nicola Kimber, Dr Geoffrey Sharman)

For all three courses, my duties have included designing the course and advising students on the design- and statistics-related aspects of their theses and projects.

Other teaching activities:

2004, 2003, 2002, 2001, 2000, 1999 Demonstrating (statistics, research methods and critical analysis) for all four years of the BSc Psychology Course at Birkbeck College. My duties have included marking student reports (approximately 100), marking practice exams, leading seminar groups and advising students on their projects and theses.

2002-2003 Supervision of a final year experimental project based on the Aksentijevic, Elliott & Barber (2001) paper.

Professional affiliations: Research associate, Temporal Factors and Psychophysics Laboratory, Institut für Allgemeine und Experimentelle Psychologie, Ludwig-Maximilians Universität, München.

Membership of professional societies: International Society for Psychophysics

Programming and technical expertise: In my work I use C (for developing experimental code) and MATLAB (for modelling, signal processing and advanced statistical procedures). Currently, I am also using the following software packages: SPSS (statistics), TISEAN (non-linear and chaotic time series), Word (word processing), Excel (data conversion and basic statistics), Powerpoint (presentations) and Adobe Illustrator (graphs and illustrations). I am also familiar with Superlab and E Prime (experimental software). My work requires the use of the sound-level meter, oscilloscope and artificial ear. Finally, I am currently running visual experiments using a three-field tachistoscope.

Nationality: Yugoslav. I was given indefinite leave to remain in Great Britain on the grounds of marriage in 1997.

Marital Status: Married with three children.