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Biography

Magnus S Magnusson is a Research Professor. He did his PhD from University of Copenhagen. He is the author of the T-pattern model and detection algorithms implemented in THEMETM (PatternVision.com). He has focused on real-time organization of behavior, co-directed DNA analysis, published numerous papers and given invited talks and keynotes at international conferences in ethology, psychology, neuroscience, mathematical sciences, science of religion, proteomics and mass spectrometry, and at universities in Europe, USA and Japan. He is the Associate Professor and Deputy Director 1983-1988, Anthropology Laboratory, Museum of Mankind, National Museum of Natural History, Paris. Repeatedly invited Professor in Psychology and Ethology (the biology of behavior) at the University of Paris, V, VIII and XIII. Since 1991, Founder and Director of the Human Behavior Laboratory (hbl.hi.is), University of Iceland. Since 1995, he is in collaboration between 32 universities on Methodology for the Analysis of Social Interaction (MASI) initiated at the University Rene Descartes, Sorbonne, Paris based on Magnusson's analytical model.

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ONLY LARGE-BRAIN MASS-SOCIETIES AS BEST REFLECTIONS OF THOSE OF PROTEINS: T-PATTERNS, SELF-SIMILARITY AND STRING-CONTROL ACROSS MANY ORDERS OF MAGNITUDE IN TIME AND SPACE

This work goes back to the 1970's, inspired among other by the ethological (biology of behavior) work of Nico Tinbergen, Konrad Lorenz and von Frish, rewarded in 1973 by a shared Nobel Prize in Medicine or Physiology, for their study of insect, animal and human behavior. Inspired also by studies of primate social groups and E. O. Wilson's monumental research on social insect societies evolved over hundreds of millions of years. If a mass society is taken to mean a society of, for example, more than ten thousand individuals, these are very rare in nature and mostly found in insects and in humans, the only large-brained species where mass-societies exist, and only in modern humans, that is, evolving in cultural time (tens of thousands of years), essentially a biological eye blink. The smallest individuals were insects. None were parts of others and there was no mentioning of self-similarity. Fractals, A.I., computational pattern detection or nanoscience were barely mentioned. Access to computers with adequate software was rare. Comparisons of animal and human mass societies were mostly between those of insects and "modern" humans. Technological and scientific progress now facilitates cell biology research, where striking analogies have appeared between human mass-societies and the "Cell City" of proteins. The present work has to a large extent focused on the development of mathematical/statistical pattern types, the T-pattern and the T-system, which have allowed detection of self-similarity of various kinds from the temporal scales of human and neuronal interactions to the spatial nano scale of DNA and proteins, notably mobile and motor neurons bringing to light, essential similarities between protein and mass societies of modern humans, absent in all other mass societies. The time may thus have come for "nano-ethology" add a new focus to the study of molecules within the biological cell.