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## T-Patterns, external memory and mass-societies in proteins and humans: In an eyeblink the naked ape became a string-controlled citizen

This talk presents a self-similar pattern type called T-pattern, a kind of statistical peseudo fractal recurring with significant translation symmetry on a single discrete dimention. It now comes with a specialized detection (evolution) algorithm implemented as the software THEMETM for Windows (see patternvision.com), which has allowed the discovery of numerous and complex interaction patterns in many kinds of human and animal interactions as well as in neuronal interactions within living brains. T-patterns have also been detected in interactions between robots and humans and also seem characteristic for the structure of DNA and text. A definition of T-patterns is presented as well as the essentials of the current detection algorithms including examples of detected T-patterns using the specially developed T-pattern diagrams. The T-pattern is now a part of a larger set of pattern types and relations called T-system that will be shortly described including examples of patterning detected with specially developed algorithms also implemented in THEMETM. The potential importance of T-patterns is finally illustrated through a comparison of human mass societities and the mass societies of proteins within biological cells (sometimes called "Cell City"), where self-similarity of organization evolved over billions of years is striking from nano to human scales based on self-similar T-patterns, but appearing suddenly among large-brain animals in humans only and partly based on massively copied standardized T-patterned letter strings such as holy books and constitutions.

## **Biography**

Magnuss on is a Research Professor, Founder and Director of the Human Behavior Laboratory, University of Iceland. He has completed his PhD in 1983 from University of Copenhagen. He is the Author of the T-pattern model and detection software THEMETM (PatternVision.com), focused on real-time organization of behavior. He has Co-directed DNA analysis. He has numerous papers (>1700 citations) and talks/keynotes in ethology, neuroscience, mathematics, religion, proteomics and mass spectrometry. He was the Deputy Director 1983-1988, in National Museum of Natural History, Paris. He has been repeatedly invited as a temporary Professor at the University of Paris, V, VIII and XIII.

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