

The international debate on T-patterns and self-similarity of patterning and organisation from RNA to Cell City and the only large brain mass societies

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This talk presents a self-similar pattern type called T-pattern, a kind of statistical pseudo fractal recurring with significant translation symmetry on a single discrete dimension (now with a specialized detection algorithm and software THEME 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 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 and examples. The potential importance of T-patterns is finally illustrated through a comparison between human mass

societies 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 based on massively copied standardized T-patterned letter strings such as holy, legal and scientific texts. The invention of writing and thus a durable external T-patterned memory only a few thousand years ago -- a biological eye-blink -- allowing socio-cultural memory to become largely external to brains and the rise of the only large-brained mass-societies and advanced science and technology. The analogy and self-similarity is striking with the invention of DNA by the RNA world countless millions of years ago.