Fundamental problems for main-stream Social & Life Sciences

Time series of observables of living systems (e.g. human physiology, performance and self-reports of well-being)

- Often no *stationarity* of central moments
- Often no characteristic scale of fluctuation (*homogeneity*)
- No *memoryless-ness* property (nontrivial after-effects of interactions)
- *Anomalous diffusion* rather than typical diffusion
- *Ageing* (losing identity over time)
- *Scaling* (1/f noise, multifractal spectrum, multiplicative cascades)

>> *non-ergodic, non-equilibrium, non-linear phenomena*

Most common model in Social Sciences: *General Linear Model*

A Manifesto on Psychology as Idiographic Science: Bringing the Person Back Into Scientific Psychology, This Time Forever

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Special Section On A Biological Window on Psychological Development. Edited by Clancy Blair & Jean-Louise Gariepy

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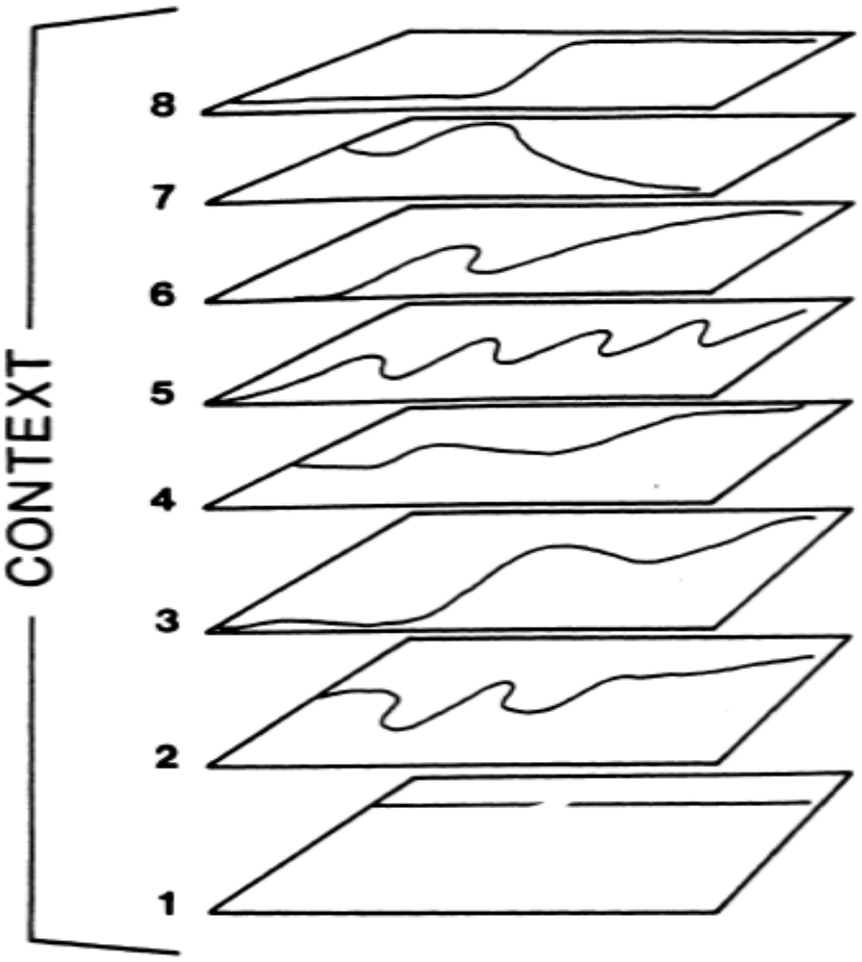
On the Implications of the Classical Ergodic Theorems: Analysis of Developmental Processes has to Focus on Intra-Individual Variation



Development:

Continuous
Occurs across and within multiple nested temporal and spatial scales
The result of interactions with the internal and external environment