



# 1. *Non-ergodic*

(non-stationarity of level & trend of central moments, non-homogenous fluctuations/variance)

2. No *memorylessness* property  
(after-effects of interactions with internal and external environment: long-range dependence, anomalous diffusion)

3. Subject to *ageing* and '*ecometamorphism*'  
(loss of identity over time which leads to increased individuality; loss of specificity/coherence  
of form/boundary/individuality)

# >> **Complex Adaptive System with Internal State Dynamics**

*(internal state dynamics = internal degrees of freedom: Many interacting constituent parts which can also be complex adaptive systems with their own dynamics, unique interaction biography, idiographic approach. A coupled system can also have an “internal” state = not a physical boundary)*



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