

A systems approach to behavior: III. Organismic pace and complexity in time-space fields.

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AB Conducted 2 experiments to explore behavioral organizational dynamics in temporally defined settings. The 1st study investigated relations between the change rate of imposed environmental settings and consequent changes in behavioral flow dynamics in 6 male Long-Evans rats. The 2nd investigation focused on biological rhythms in behavioral-respiratory dynamics of 1 male killer whale (*Orcinus orca*) in an oceanarium. By analyzing behavioral organization at both structural (micro) and functional (macro) levels, sequentially organized and recurrent behavior patterns were found to occur in temporally and spatially defined settings. Conclusions focus on the implications of reported data relative to (a) requirements that adequate behavioral measurements include frequency, duration, and patterned integration; (b) systemics of psychological-physiological (organismic) integration; and (c) potential definitions of functional psychological time boundaries.