Coupled Dynamics in Context: Is There Moderation in All Things?

Abstract of talk
conference on Modeling Developmental Processes in Ecological Context
in Tempe, Arizona – March 2004

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Many behaviors exhibit within-individual change over time. Some of these behaviors are likely to exhibit a form of self-regulation such that measurements of them will tend to stay near an equilibrium value. For instance, husbands and wives may disclose more or less to one another or feel more or less intimate with one another on a daily basis. One way that these data have been modeled is using differential equations the parameters of which can be taken to represent specific hypotheses about the process of regulation. If a husband and wife adapt their behavior to one another, these parameters of self-regulation might be considered to be moderated by each other. One might plausibly wonder whether this sort of continuously and mutually adapting behavior can be modeled such that specific hypotheses of moderation can be disconfirmed. This talk outlines such a method and demonstrates that at least with respect to coupled dynamics there need not be "moderation in all things". (Profuse apologies are extended to Aristotle.)