

Nonlinear analysis to quantify human movement variability from time-series data

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Neuromatch 3.0

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Get source of this slides and see further references from <https://github.com/mxochicale/nmc3>.

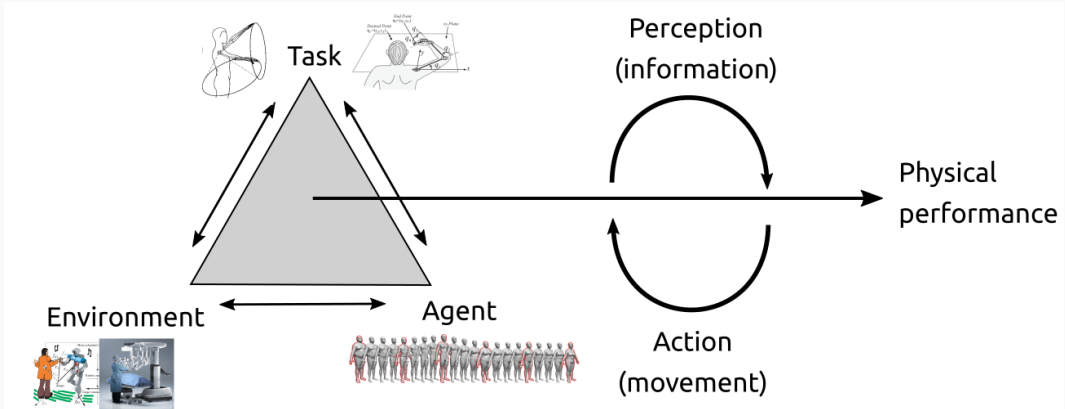


1. Why Movement Variability?

2. Nonlinear Methods

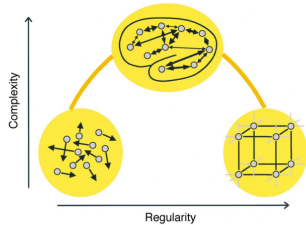
Why Movement Variability?

Modeling movement

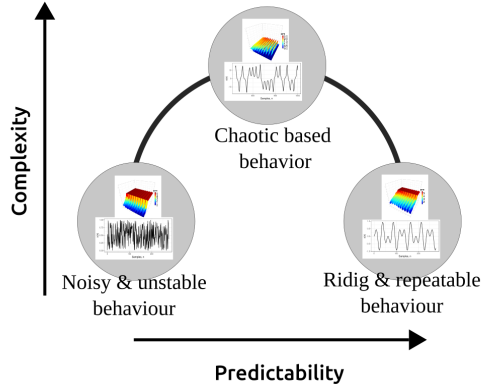


(Bernstein 1967 in *The co-ordination and regulation of movements*; Newell and Vaillancourt 2001 in *Hum Mov Sci*; Davids et al. 2003 in *Sport Medicine*; Warren 2006 in *Psychological Review*)

Modelling Movement Variability



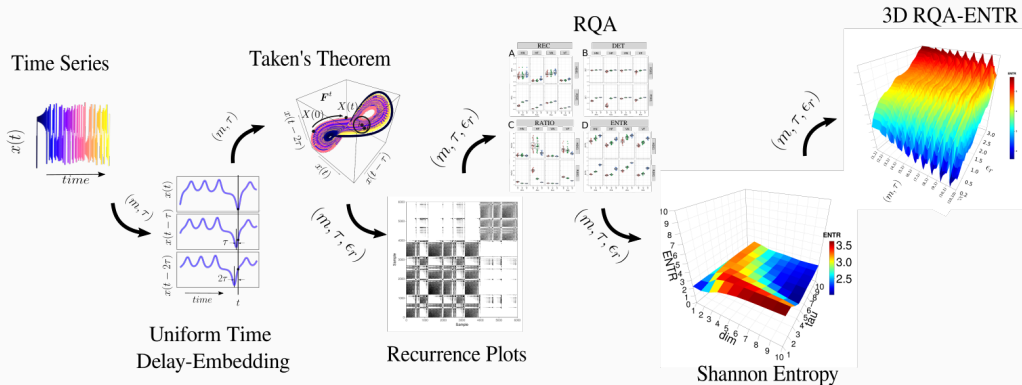
Tononi et. al 1998



Stergiou et al. 2006

Nonlinear Methods

Nonlinear Analysis





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Nonlinear methods to quantify Movement Variability in Human-Humanoid Interaction Activities

In Submission to Scientific Reports

<https://arxiv.org/abs/1810.09249>

Thanks
Questions?