

FRAMING HUMAN BEHAVIOR IN PHYSICS BEFORE BIOLOGY AND SOCIAL SCIENCE

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ABSTRACT

Social sciences start by looking at the social-psychological attributes of humans to model and explain their observed behavior. However, we suggest starting the study of observed human behavior with the universal laws of physics, e.g., the principle of minimum action. In our proposed three-tier framework, behavior is a manifestation of action driven by physical, biological, and social-psychological principles at the core, intermediate, and top tier, respectively. More broadly, this reordering is an initial step towards building a platform for reorganizing the research methods used for theorizing and modeling behavior. This perspective outlines and illustrates how a physical law can account for observed human behavior and sketches the elements of a broader agenda.

Keywords: principle of minimum action, human behavior, physical laws