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## MODELING HISTORICAL DYNASTIES AS EMERGENT, DISSIPATIVE MECHANISMS

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## ABSTRACT

Societies strive to maximize their economic production in accordance with the Maximum Power Principle and its implications for entropy increase. Societies and firms achieve this maximization, in part, by striving for greater efficiency via increasing their economies of scale. However, the process of establishing the structures and institutions required for economies of scale may exhibit substantial barriers to reversibility. This paper traces processes of attaining greater economies of scale using thermodynamic concepts and well as the thermodynamic implications of regimes facing intrinsic drops of overall efficiency and resource depletion.

This paper applies this approach to modeling historical dynasties as emergent, dissipative mechanisms and shows how human history can, in part, be modeled as a progression of series of interacting dynastic dissipative mechanisms.

Keywords: world history, dynasties, Maximum Power Principle, entropy, dissipative mechanisms