

## Peer Review

# Review of: "Genomic Testing of Clark's Theory of the British Industrial Revolution: A Monte Carlo Analysis of Statistical Feasibility"

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## Review of Connor (2025)

Connor provides a fascinating statistical simulation destined to test Gregory Clark's Theory of the Industrial Revolution (2008). For Clark, such a historical transition was in part attributable to a shift in genetic frequencies associated with middle-class values and intelligence (2008). I have included some points concerning several aspects that will improve an already strong manuscript. Although the author focused his simulations exclusively on temporal variation in polygenic scores, Clark's model also considered the role of selective pressures leading to the rise and spread of the latter genes; for example, high levels of extrinsic morbidity and mortality operating against less literate and more impulsive and violent phenotypes. Without re-computing the author's simulations, it would be appropriate for the publication to acknowledge the scientific importance of examining the potential diachronic association between polygenic scores and macrohistorical epidemiological data such as homicide rates as well as the frequency and severity of epidemics (two proxies for extrinsic morbidity and mortality). Additionally, cliodynamic research by Woodley of Menie and colleagues (2017) indicates a strong positive association between heritable general intelligence and the intensity of between-group competition (operationalized as war casualty rates per 100,000 individuals) in Britannic populations in the last 400 years. Consequently, the macrohistorical data strongly suggest that in addition to infra-national socioecological conditions, competition with other nations during the early and late Modern Era also contributed to the observed temporal variation in heritable general intelligence (Woodley of Menie et al., 2017). Quite evidently, linear models would be inadequate for these empirical examinations. Consequently, I

recommend that the author finalize his publication with a call for subsequent examinations, considering the latter selective pressures after controlling for temporal autocorrelations via statistical procedures such as linear mixed models.

### **References**

Clark, G. (2008). A farewell to alms: a brief economic history of the world. In *A Farewell to Alms*. Princeton, NJ: Princeton University Press.

Woodley of Menie, M. A., Figueredo, A. J., Sarraf, M. A., Hertler, S., Fernandes, H. B. F., Peñaherrera Aguirre, M. (2017). *The Rhythm of the West: A biohistory of the modern era, AD 1600 to present*. *Journal of Social, Political and Economic Studies, Monograph Series, Number 37*. Washington, DC: Council for Social and Economic Studies. ISBN: 978-1-878465-49-8.

### **Declarations**

**Potential competing interests:** No potential competing interests to declare.