A Response to Iberal

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The argument developed by Iberall is an ambitious and important one, that should be of interest to readers of CCR. The argument is that the conceptual and theoretical repertoire of physics can be used to explain social processes, more especially the emergence and duration of civilizations. The author’s deployment of physics goes way beyond Comte’s earlier attempt at social physics, drawing on the recent physics of complex systems. The author has made a heroic attempt to explain his use of concepts and theories drawn from physics to a broader audience.

This approach is then applied to the Mesolithic and Neolithic periods, leading towards the first forms of civilization. A number of features of social organization are analyzed, including population-density and mobility, social bonding, and the stabilization of institutions such as trade, the emergence of settlements, and early forms of political organization.

Methodologically, the paper proceeds by translating social processes into the discourse of physics, more especially the physics of fluids. The claim is that physics explains real processes and is not a metaphor. Selective use is made of other historical literature to buttress the argument. Only a very limited attempt is made to engage with rival arguments.

The major problems with Iberall’s paradigm are as follow.

He sets no limits as to the usefulness of the theories of physics. The author extrapolates from his success in explaining aspects of material culture (such as population density and the energy parameters affecting social action), to all aspects of human culture. There is a huge leap in faith here typical of theories that it is believed will in time explain everything.

The theoretical framework is biased to materialism and against the symbolic domain. To be convincing it would have to explain language and other symbolic systems, but comments on this are not forthcoming. I do not accept that because physics may explain aspects of material culture in a non-metaphorical manner, it can therefore explain all aspects of social organization.

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