

Rethinking the Tyranny of Distance in Information Warfare: Strategic Depth and Power Projection

Authors

Panagiotis Palaios, (Presenter), School of Business and Economics, Deree - The American College of Greece, ppalaios@acg.edu

Jordan Becker, United States Military Academy at West Point, New York. jordan.becker@westpoint.edu

Maria Papageorgiou, School of Geography, Politics, and Sociology at Newcastle University. maria.papageorgiou@newcastle.ac.uk

Michal J. Cantrell, United States Military Academy at West Point, New York. michal.cantrell@westpoint.edu

This paper examines how information-warfare (IW) capabilities transform the traditional spatial logic of conflict by reshaping the economic foundations of power projection and strategic depth. Building on Kenneth Boulding's loss-of-strength gradient and the strategic-depth tradition, we develop a microeconomic marginal-analysis framework in which offense and defense are analyzed jointly through marginal benefits and marginal costs. Within this framework, information warfare alters the cost-benefit calculus of conflict by flattening the loss-of-strength gradient and repricing strategic depth, thereby weakening the constraining role of geographic distance.

Our theoretical model derives an equilibrium zone of influence and shows how digital capabilities shift this zone outward for attackers or closer to the defender's core, reducing buffer zones and increasing the likelihood of persistent, indecisive conflict. Extending the model to informational domains highlights how informational proximity can substitute for physical proximity, enabling contestation across geographically remote theaters.

We complement the theoretical analysis with an empirical examination of information-warfare severity, showing that IW intensity increases with distance and that traditional spatial constraints lose predictive power in digitally mediated conflict. The results indicate that information warfare operates as a below-threshold instrument of competition, facilitating prolonged engagement while avoiding conventional escalation.

Taken together, the findings offer a theoretical mechanism for "wars without end," in which flattened distance constraints and enhanced strategic depth generate conditions of mutual invulnerability and protracted contestation. More broadly, the paper provides a formal extension to recent empirical work on the "tyranny of distance" and contributes to the economics of security and conflict by translating traditionally descriptive strategic concepts into a tractable, equilibrium-based analytical framework.