

Application of the Theory of “Military Campaign Success” Based on the Genetic Algorithm of “The Art of War” to the War between Israel and Iran

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Abstract:

This paper discusses the development of dynamics in the Israel-Iran conflict, with a forecast for 2024, using military wisdom inspired by Sun Tzu's Art of War in combination with genetic algorithms and complexity theory. The research points out how a variety of strategies undertaken result in combat resource consumption, morale, changes in international politics, and the creation of a multisegmented simulation in war between Israel and Iran. The research methodology includes a genetic algorithm that optimizes strategies, a nonlinear interaction analysis of complexity theory, and a calculus model that simulates resource depletion and morale changes. The results indicate that the rapid strike strategy of Israel participates in short-term superiority and deteriorates logistically and in morale as the duration of the war lengthens. On the contrary, Iran can flexibly adapt to a long war of attrition by using guerrilla warfare and asymmetric warfare. The result of the study indicates that Israel's capability for combat and supply lines would be weakened by the long war strategy, and asymmetric tactics by Iran hold an even higher advantage in this type of conflict; it must serve as a reference for strategic decision-making of nations in the future when confronting similar conflicts.

Keywords:

Sun Tzu's Art of War, Genetic Algorithm, Complexity Theory, Asymmetric Warfare.