

Tutorial

Linguistic Geometry: A Strategic Guide to Battles, From Ancient to Modern Ones

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Linguistic Geometry (LG) is a type of game theory scalable to solving complex real world problems that are considered intractable by conventional approaches. Modern applications of LG, related to the US national defense, generate, in real time, courses of action that are highly creative and even exceed the level of those developed by human commanders. Currently, the U.S. Army is adopting the LG software to a wide spectrum of defense systems around the world. This tutorial will consist of two historical surveys:

- In the first survey I will review defense applications of LG, from modern battles going backward in history to the ancient ones. I will introduce participants to several advanced applications of LG, especially those developed for DARPA and US Army and to major experiments utilized those applications. I will also establish link between LG and legendary ancient battles of Alexander the Great and Hannibal. I will introduce the hypothesis that LG is one the ancient algorithms based directly on the Primary Language of the human brain crucial for development of human intelligence.
- In the second survey I will cover development of LG beginning from the famous Turk Chess “Robot” going forward in history to the chess program PIONEER to the foundation of STILMAN Advanced Strategies. Within this survey I will introduce participants to the elements of the theory of LG with the focus on the formal linguistic components. They include controlled grammars, languages of trajectories, networks of trajectories, and translations of those languages.

Eight narrated movies on past LG projects can be downloaded from <http://www.stilman-strategies.com> (click to “Demos”). A brochure “Linguistic Geometry Tools: LG-PACKAGE” can be downloaded from <http://www.stilman-strategies.com/movies/LG-PACKAGE.pdf>

A short bio of Dr. Stilman can be found at <http://www.stilman-strategies.com/> (click on “Personnel”). Even more details can be found at <http://www.stilman-strategies.com/bstilman> (click on “RESUME”).