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## Linguistic Geometry for Intelligent Defense Systems

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At the time when Artificial Intelligence (AI) comes to fashion, and many authorities claim that it represents the greatest power and, simultaneously, the grave danger to the humanity, it is important to evaluate the most advanced approaches in AI, especially those in defense. 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, the U.S. Navy, and Missile Defense Agency are adopting the LG software to a wide spectrum of defense systems around the world. I will review defense applications of LG, from modern battles going backward in history to the ancient ones as well as the history of development of theory of LG. I will introduce the hypothesis that LG is not an invention but a result of discovery of the ancient algorithm of efficient warfighting crucial for development of human intelligence.

### Biography

Boris Stilman received MS in Mathematics from Moscow State University, Russia, in 1972, and two PhDs in Electrical Engineering and Computer Science from National Research Institute for Electrical Engineering, Russia, in 1984. Based on his 17-year experience in the research project PIONEER led by a former World Chess Champion Professor Mikhail Botvinnik, Dr. Stilman developed Linguistic Geometry (LG), a new theory for solving abstract board games. In 1991-2018, Dr. Stilman was developing the theory and applications of LG at the University of Colorado. A leap in the development LG was made in 1999, when he (with a group of scientists and engineers) founded STILMAN Advanced Strategies, LLC. A growing number of applications of LG developed at STILMAN passed comprehensive testing and powered intelligent defense systems around the world. In 2010, Dr. Stilman broadened the scope of his research on intelligent systems via investigating the structure of the Primary Language of the human brain.

Dr. Stilman published several books and over 200 research papers. He is a recipient of numerous R&D awards including those from the US government agencies such as DARPA and major companies such as Boeing.

### Notes: