

Klaus B. Beckmann | Lennart Reimer

An Enquiry Into Linear Conflict Models



Nomos

GIDS

GERMAN INSTITUTE
FOR DEFENCE AND
STRATEGIC STUDIES

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Preface

The German Institute for Defence and Strategic Studies (GIDS) is on a mission to improve the quality of strategic studies in Germany in both an academic and a consulting dimension. This mission is relevant because the field has been neglected by German academics as well as by the German military community for understandable historical reasons. Military strategy and operational art used to smack too much of the old *Generalstab* for post-war Germans, and consequently this field was regarded as unpalatable and as a politically unacceptable subject matter for academic research.

The result of this is a dearth of strategic thinking in our country. Interestingly, this historical development has also spawned a peculiar German specialisation on *Friedens- und Konfliktforschung* that emphasises the *avoidance* of conflict, and which largely replaces the traditional field of strategic studies in Germany.

The authors of this monograph admit to be firmly rooted in the strategic studies camp. For once conflict has become inevitable, we want our side to persevere. This implies that we should try to understand conflict primarily with a view to *win* it, and that recommendations on how nations can pursue their self-interest with an expectation of success are an important objective of scientific study. In the final analysis, our credible ability to win will also help to deter conflict in the first place.

It is the role of HSU / UniBw H to contribute fundamental research to the joint effort with *Führungsakademie* that is the GIDS. We suggest to begin this part of our common task by reviewing, and by extending, the various theoretical approaches to conflict modelling that exist in the previous literature. This is the task that our team took up when we switched our main effort in research from the economics of corruption and tax evasion to conflict economics and began to engage heavily in teaching the German war college Master “*Militärische Führung und Internationale Sicherheit*” (MFIS).

Beckmann’s appointment as President of HSU / UniBw H in April 2018 led to a disruption in this work. We therefore decided to consolidate the existing material and develop it into a series of monographs in order to document our results – incomplete as the may be – and to make them available in the context of GIDS research and beyond. The present small volume is the first result of this effort. It deals with classical models in the tradition of Lanchester (1916, 1956) and Richardson (1919) that do not take agents to be optimising, but accept this restriction in order to tell a dynamic story that is very hard to

establish in differential game (Lee, 2007; Isaacs, 1965) methods. We also link this argument to a proposal on how differential game analysis might be transformed to address these practicality concerns.

The present booklet combines several hitherto unpublished working papers from the last few years. The material has been rearranged, heavily revised and extended for presentation in book form. We sincerely hope that this little monograph will prove useful and further the debate at the GIDS.

Hamburg, December 16, 2020

Klaus Beckmann

Lennart Reimer

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