

Klaus B. Beckmann | Lennart Reimer

An Enquiry Into Linear Conflict Models



Nomos

GIDS

GERMAN INSTITUTE
FOR DEFENCE AND
STRATEGIC STUDIES

GIDS Analysis

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Volume 5 | Band 5

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The Deutsche Nationalbibliothek lists this publication in the Deutsche Nationalbibliografie; detailed bibliographic data are available on the Internet at <http://dnb.d-nb.de>

ISBN 978-3-8487-7156-1 (Print)
978-3-7489-1208-8 (ePDF)

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library.

ISBN 978-3-8487-7156-1 (Print)
978-3-7489-1208-8 (ePDF)

Library of Congress Cataloging-in-Publication Data

Beckmann, Klaus B. / Reimer, Lennart
An Enquiry Into Linear Conflict Models
Klaus B. Beckmann / Lennart Reimer
60 pp.
Includes bibliographic references and index.

ISBN 978-3-8487-7156-1 (Print)
978-3-7489-1208-8 (ePDF)



Onlineversion
Nomos eLibrary

1st Edition 2021

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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

Contents

Chapter 1: Introduction	13
Chapter 2: A general linear conflict model for the two-party case	17
Chapter 3: Special case: the Richardson equations in two dimensions	21
A. Richardson's original equations	21
B. An incrementalist Richardson model	23
C. Probabilistic interaction	26
Chapter 4: Richardson-type conflict between three parties	29
A. Extension of the basic model to three parties	29
B. First extension: <i>negative</i> parameters	30
I. Attenuating agents	30
II. Alliances	31
C. Second extension: a psychological reformulation of the Richardson equations	32
D. Monte-Carlo simulations	33
Chapter 5: Empirical analysis	37
A. The ERI-ETI war as case study for the two-agent Richardson model?	37
I. Description of the data set	38
II. Time series analysis and the suitability of the accumulated Goldstein score	39
III. Structural model estimations	41
B. Re-estimating the Francisco (2009) data	42
Chapter 6: Bounded rationality in dynamic models	47
A. Basic approach	47
I. The decision heuristic	48
II. Convergence to Nash equilibrium	48
B. Differential games	49
I. The state equation	49
II. First example: the political business cycle	50
III. Second example: a dynamic rent-seeking model	51
C. Comments	54
Chapter 7: Conclusion	55

Contents

Programme listing	57
Bibliography	59

List of Figures

3.1	The two possible scenarios in the standard Richardson model	22
3.2	The four scenarios in the incrementalist Richardson model	25
4.1	Additional dynamic patterns in the presence of attenuating agents	31
4.2	An unstable vortex in the presence of alliances	31
4.3	Typical results for simulation trials	34
5.1	(Cumulative) Goldstein (1992) scores for the ETI-ERI war	38
5.2	Correlograms for our time series of Goldstein scores	40
5.3	Graphical representation of SEM model	43
6.1	A <i>Stella</i> simulation of the dynamic rent-seeking model	53
6.2	Results from a typical run of the simulation model	54

List of Tables

2.1	A synopsis of two-party differential equation models	18
5.1	Summary of time series analyses	41
5.2	Summary of SEM analyses	42
5.3	Re-estimating the Francesco (2009) dataset using a general model	44

