

Felix Christoph Lotzin

# The Emperor on the Battlefield

Napoleon's Worth as a Military Commander



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Felix Christoph Lotzin

**The Emperor on the Battlefield: Napoleon's Worth as a Military Commander**

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I used to say of him that his presence on the field made the difference of forty thousand men.

*Arthur Wellesley, 1. Duke of Wellington*

## 1. Introduction

Though centuries have passed since the rise and fall of Napoleon, his military performance continues to fuel discussion among scholars of history and military science. Scientific discourse about him and the battles and campaigns fought during his age are extensive, nevertheless most research on this topic can broadly be divided into two approaches: historical and from a practical perspective employed by military science. Without conflicting the other, these complement one another, as they independently attempt to explore very different aspects of Napoleonic warfare.

The first approach is the historical perspective, practiced – among many others – by the likes of Blanning<sup>1</sup> or Smith<sup>2</sup>. Scholars focus on the broad lines of the military encounters and the grand strategy<sup>3</sup> as the central theme, interpreted in light of social and cultural aspects as well. A work of such breadth would usually be written by a historian and would be culminating in a good descriptive impression and an overview of most of the aspects of the Napoleonic times. Due to the nature of historical science, empirical data would normally only be used in a qualitative way without employing in-depth quantitative analysis.<sup>4</sup> Moreover the broader perspective is normally emphasized at the expense of

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<sup>1</sup> Blanning (1996).

<sup>2</sup> Smith (2005).

<sup>3</sup> In this thesis I will use the definitions of grand strategy, strategy, grand tactics and tactics as proposed by Chandler (2001).

<sup>4</sup> E. g. statements along the lines of ‚he fielded more troops’ or ‚he had a higher amount of artillery at his disposal’. These statements, although backed by numbers, do not give insight into the size of the effect or the nature of it and therefore can not qualify as quantitative analysis.

detailed aspects and so only statistics of the highest importance are included so not to obscure the leitmotif of history.

Military scientists and practitioners using the second approach usually focus on campaigns and describe the course of them and the important battles that took place during them. Their work is highly detailed and covers many different aspects of Napoleonic warfare. Logistics, infantry tactics, cavalry attacks and artillery bombardments are explained in great detail and their effects are scrutinised. These works usually contain high amounts of empirical data about all the different subjects and facets of contemporary warfare. Nevertheless the focus is on the strategy and the tactics and although numbers are taken into account, their exact impact is not worked out in detail through a quantitative and methodical analysis. Their focus on the military factors furthermore prevents these works to give a comprehensive view of the Napoleonic times but makes them dependent on the general approach discussed before.

Although both approaches can be combined for a very detailed qualitative description of Napoleonic warfare, history and times there is an evident lack of thorough empirical analysis of Napoleons military efficiency. Recent research in economic science has seen an increasing number of papers, books and theories addressing the subject of conflict from an economical and rational choice perspective. Starting with the analysis of 'rent seeking' by Gordon Tullock, several other important theorists<sup>5</sup> have ventured out to study the different aspects of conflict that border both social sciences and economics. This thesis attempts to apply their theories of

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<sup>5</sup> I especially owe much to the work of Hirshleifer, who studied conflicts for years and always encouraged other economists to apply the economic theories to other field of scientific work.



conflict to the battles of the Napoleonic age and to test several assumptions derived from the so called Contest Success Functions that have been put forth as models for the prediction of conflict outcomes. Although these concepts have been around for several years and sparked frequent discussion, there are only some works that actually try to verify these theories by applying them on actual data.

Hence this thesis seeks to explore the following two working hypotheses: Firstly, that Napoleon's alleged military superiority in terms of skill and battlefield competence over his peers can be empirically quantified and proven. Secondly, that the results of Napoleonic warfare can be predicted by applying the theory of Contest Success Functions to these battles.<sup>6</sup>

To address these claims this paper is organized into this introduction and four different sections, with eleven chapters in total as follows:

### *Theory*

The first of the conceptual sections summarizes the theoretical underpinning behind the economical understanding of conflict. This so called 'second approach'

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<sup>6</sup> Interestingly, a similar approach was chosen by two research teams before. In 1962 the Research Analysis Corporation conducted a study on the Lancaster Equations for the United States Department of Defence. [The Lancaster Equations being early developments of Contest Success Functions there are some similarities in the approach, especially in the use of regressions. Willard concluded that the Lancaster Equations only had a poor predictive value for his data. Compare Willard (1962) for further information. The second research work is the so-called Quantitative Judgment Method Analysis developed by Colonel Dupuy. [Dupuy(1985)] This analysis started from a historical perspective by manually fitting curves until the conduct of a battle could be predicted. Although this method has high value for predicting the outcome of battles, this is only accomplished by using dozens of variables to increase the predictive value. Although some of the curves are variants of the Logit-Function this thesis relies on as well, the method used and the sheer magnitude of explaining variables makes comparison only possible for small aspects.

<sup>7</sup> Hirshleifer (1994).

and its merits are outlined and the history of these theoretical concepts is explained. Chapter three introduces the Ratio Contest Success Function (RCSF) put forth by Tullock and the Difference Contest Success Function (DCSF) employed by Hirshleifer, the concepts for predicting probabilities of success in conflict theory.

### *History*

The fourth and fifth chapters are used to outline the actual conditions during the Napoleonic wars and the data used for this study. The focus of this part is especially what we actually do now about these battles and how it may be used. The fourth chapter gives a brief report on warfare during the Napoleonic ages. A special emphasis lies on an analysis that evaluates if the key parameters have been homogenous over the time and what kind of technology was employed during these battles. The results are then compared with the demands of conflict theory. The fifth chapter then explicates the data set. The different variables that could be obtained are introduced and at last the scope of the further analysis is specified. This is done by picking the variables that actually can be used for an in-depth quantitative.

### *Modelling*

The third part of the thesis is of especial importance, as the focus of this work is to answer the two hypotheses by empirical work. In the four chapters that deal with the actual modelling, the theory is applied on the historical data to yield the results we need to verify the working hypotheses. After the two different estimators used have been introduced in chapter six, the chapters seven and eight deal with utilising each of the estimators to answer these questions. The results from the estimates are interpreted and are compared in chapter nine. In addition, chapter nine attempts to weigh the explanatory value

of the two approaches and places them in the historical perspective.

*Résumé* The last section of my thesis contains two chapters. Chapter ten answers comments on Napoleon's personal worth on the battlefield and applies the findings of the empirical work on three short case studies.<sup>8</sup> The subsequent summary then merges the results of the whole study and concludes with follow-up questions for future research.

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<sup>8</sup> The case studies then should answer if Napoleon really had the impact of 40,000 soldiers, like Wellington attributed it to him.

# I Theory

There are but two powers in the world, the sword and the mind. In the long run the sword is always beaten by the mind.

*Napoleon Bonaparte*