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THE ART OF WAR
IN
PHARAONIC EGYPT

An Analysis of the Tactical, Logistic, and Operational
Capabilities of the Egyptian Army
(Dynasties XVII-XX)

by

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A thesis submitted in fulfilment of the requirements for the degree of
Doctor of Philosophy in Ancient History, The University of Auckland,
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ABSTRACT

The primary objective of this thesis is to prove that by the New Kingdom the Egyptian army was practicing a rudimentary form of warfare known in current military circles as Operational Art. The acknowledgement of the concept of operational art has only been a recent development being tied closely to the awareness of an intermediate level of war, termed the operational level. It is at this level we find military actions that belong neither to the tactical nor strategic levels.

In order to ascertain whether the Egyptians did indeed practice this form of warfare, this study examines the military capabilities of the Egyptian army with particular emphasis on its tactical, logistic, and operational capabilities. Each of these areas is analysed in detail and with particular reference to the three primary strategic theatres where the Egyptians campaigned: Asia; Libya; and Nubia.

Overall, it is argued that the Egyptians appreciated the importance of operational level actions in their military encounters and that they themselves were practitioners of operational art especially by the New Kingdom. This would confirm that their military machine and doctrine had reached a high level of sophistication. This would also tend to argue that not only is the concept of an intermediate, operational, level of war a potentially timeless element, but that the temporal origins of operational art itself must be pushed back far earlier than previously thought.
To my wonderful and understanding wife, Yaowarat, who has supported me throughout, my two children Christopher and Samantha, and baby Alexandria who will always be in our hearts
ACKNOWLEDGEMENTS

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I have also been extremely fortunate to have received in terms of financial support the Foundation for Research Science and Technology Top Achiever Doctoral Scholarship as well as the University of Auckland Doctoral Scholarship. Further financial support was provided to me by the Faculty of Arts Research Fund and also the Department of Classics and Ancient History. It was only through this assistance was I able to embark, and continue, with this project. Also from a financially supportive role, I must give my wholehearted thanks to Gretchen Lutz-Spalinger for being very understanding with respect to balancing my thesis and work commitments.

I am also indebted to my many friends and colleagues who have provided me with valuable emotional support throughout this long journey. Thanks must especially go to my good friend Kenneth Porter, who has continued to encourage me throughout this project and has and continues to be a valuable confidante. A very special word of thanks must go to my family, my wife Yaowarat and my two children Christopher and Samantha. Finally, I must also thank my parents for if was not with their initial support in helping me through my early University days, I doubt I ever would have been able to reach this far.
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**ABBREVIATIONS**

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<tr>
<td>AHL</td>
<td>Archaeology and History in Lebanon</td>
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<tr>
<td>AJA</td>
<td>American Journal of Archaeology</td>
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<tr>
<td>AJSLL</td>
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<td>BAR</td>
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<td>British Museum Studies in Ancient Egypt and Sudan</td>
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<td>BRE</td>
<td>Breasted, J., Ancient Records of Egypt</td>
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<td>BSFE</td>
<td>Bulletin de la Société française d’égyptologie</td>
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<tr>
<td>CA</td>
<td>Classical Antiquity</td>
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<td>CdE</td>
<td>Chronique d’Égypte, Musée royaux d’art et d'histoire</td>
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<td>CQ</td>
<td>Classical Quarterly</td>
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<tr>
<td>CRIPEL</td>
<td>Cahiers de recherches de l'institut de Papyrologie et d’Égyptologie de Lille: Sociétés Urbaines en Égypte et au Soudan</td>
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<tr>
<td>EA</td>
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<td>EI</td>
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<td>GM</td>
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<td>IEJ</td>
<td>Israel Exploration Journal, Jerusalem</td>
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<td>JAOS</td>
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<td><strong>JEOL</strong></td>
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<td><strong>JSSEA</strong></td>
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<td><strong>JSOT</strong></td>
<td>Journal for the Study of the Old Testament, Sheffield</td>
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<td><strong>KRI</strong></td>
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<td><strong>WdO</strong></td>
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<tr>
<td>WZKM</td>
<td>Wiener Zeitschrift für die Kunde des Morgenlandes</td>
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<td>Zeitschrift für ägyptische Sprache und Altertumskunde</td>
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<tr>
<td>ZDPV</td>
<td>Zeitschrift des deutschen Palästina-Vereins</td>
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