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Cybersecurity is a difficult and complex field. The technical, political and legal questions surrounding it are complicated, often stretching a spectrum of diverse technologies, varying legal bodies, different political ideas and responsibilities. Cybersecurity is intrinsically interdisciplinary, and most activities in one field immediately affect the others. Technologies and techniques, strategies and tactics, motives and ideologies, rules and laws, institutions and industries, power and money—all of these topics have a role to play in cybersecurity, and all of these are tightly interwoven.

The SpringerBriefs in Cybersecurity series is comprised of two types of briefs: topic- and country-specific briefs. Topic-specific briefs strive to provide a comprehensive coverage of the whole range of topics surrounding cybersecurity, combining whenever possible legal, ethical, social, political and technical issues. Authors with diverse backgrounds explain their motivation, their mindset, and their approach to the topic, to illuminate its theoretical foundations, the practical nuts and bolts and its past, present and future. Country-specific briefs cover national perceptions and strategies, with officials and national authorities explaining the background, the leading thoughts and interests behind the official statements, to foster a more informed international dialogue.

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Cybersecurity in France

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Foreword

France has always been at the forefront of technological developments in cybersecurity. Its base is in defense and aerospace and its paradigms guiding its sovereignty in security have provided the country with a unique perspective on cybersecurity, supported by great capacities. It started early with strategic thinking and industrial acquisitions in the field, with academic leadership and technology development. Yet France has also been somewhat closed to the outer world with its thoughts and concepts. To a large part, this was intentional. France did not want to share any of its evolution before it reached maturity and much of it was considered national only. Accordingly, most of the activities in aerospace and defense still have not surfaced.

Philippe Baumard has been a part of the history of the field and is an excellent scholar, providing both a first hand account of things and a very thorough, critical, and systematic analysis. This combination is what renders this insight into France so interesting and valuable. It not only opens a window into the mostly secluded activities in France, but also provides a coherent account of histories and causalities of rather universal relevance for any country concerned with strategic cybersecurity. From his accounts on the early history of hacking and IT-security in France, to his systematic analysis of persistent technical issues and the difficulties of possible responses to his political and economic analysis of the underlying issues, the present work provides explanations for many of the hidden and complex mechanisms of the field and develops heuristic frameworks to render them detectable and manageable in the future.

Without question, it will be a must-read for anyone concerned with or interested in the history of cybersecurity or cyberstrategy.

March 2017

Sandro Gaycken
ESMT Berlin

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About the Author

Philippe Baumard, Ph.D. is the founder and CEO of Akheros, Inc., a Paris based machine learning cybersecurity laboratory, laureate of the 2013 and 2014 France national innovation awards. Dr. Baumard is Professor at the French National Conservatory for Arts and Manufacturing (CNAM), Paris; associate researcher at Ecole Polytechnique; and Professor, Dean for Research, at ESLSCA's School of Economic Warfare. He has been a visiting professor in leading universities such as Stanford, UC Berkeley, and New York University. Dr. Baumard has published key publications on cyber-warfare since as early as 1994, and is a renowned expert in the domain of information warfare and implicit learning. He authored 10 books and more than 90 refereed research articles.