PERSONAL IDENTIFICATION: ITS MODERN DEVELOPMENT AND SECURITY IMPLICATIONS

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Preface

This book is an outgrowth of my years of curiosity about who invented the laminated photo identification badge, and in modern times, who issued the first secure personal identification documents. It was never intended to be a published book, as my study began with establishing a chronology, and *who* developed various photo identification technologies. It ended up as *why* we have personal identification documents—a subject that certainly appears not to have been previously studied.

Because this book necessarily covers subjects that I was not familiar with, I am indebted to the many people who assisted me. In particular, I want to acknowledge Dr. Isador Kreel, M.D., who basically wrote Chapters 2, 3, and 4. Not only did he study the new material that I obtained for those chapters, but he brought his vast knowledge to the forefront and was able to document and provide the early historical continuity that was needed.

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Introduction

THE MOTIVATION FOR WRITING THIS BOOK

I began this study to learn who invented the first photo ID badge and how the photo ID evolved into the plastic cards we have today. Once I determined that Ned Whitehead developed the first practical laminated photo IDs in 1940, the question arose as to why these first tamper-resistant (secure) IDs evolved into the various identification documents we have today. Why do we *have or even need* ID documents today?

ID devices, credit cards, and other cards have been generically known as portable *identification data devices.* They were portable because people could conveniently carry or wear them. They identified the individual by displaying biometrics, whether it was an individual's photograph, a fingerprint, a signature, or other physical characteristic. These devices visually, mechanically, or electronically transmitted an individuals' personal identification data to receptors or sensors, and they were manufactured as cards, badges, keys, electronic chips, or tokens.

Whereas the development of each type of card is intended for a specific purpose, the portable identification data device developed to perform vastly different functions. IDs and credit cards have become the primary device for communicating with today's omnipresent world of computers. It is the number on the card that the computer uses. These ID devices were available long before the computer revolution, but computers are now using them to communicate and collect data for each individual. Many of these uses are new, including a form of mass surveillance, as so clearly described by author James B. Rule in his many writings (529). Whereas IDs were never intended to be used to trace our activities, each ID serves as the primary *channel* to communicate with computers around the world to produce a new form of information database: a mass surveillance entity that evolved simply from the IDs being recorded in computer databases. Now that this phenomenon exists, we must understand and control it. These new phenomena of computers reading and storing our data every time a portable identification data device (card) is used properly is called *mass surveillance*. The increased governmental use of this mass surveillance phenomena created by the existence of personal ID documents is another consequence of the 9/11 event (496).

THE SUBJECT OF PERSONAL IDENTIFICATION

Personal identification refers to a wide variety of subjects. It may attempt to answer such questions as: Who am I? Where did I come from? Why was I born? What is my place in my family, my society, and in the universe? This book does not deal with any of those philosophical questions. It deals only with the physical identification

of the person, the historical development of the documents carried on a person for identifying themselves, and to what degree a particular individual may be differentiated from others. False documents of the type shown in Figure 0-1 and Figure 0-2 are an ongoing problem (206, 500, 71). In this book, we describe the documents required by governments to confirm identity (breeder documents), how these documents are generated, how they may be interpreted, and their degree of reliability and security.

As we trace the evolution of the means of personal identity, we will also describe the major social, political, and technological changes that progressively created the demands for more refined and secure methods of identification. We give special attention to the changing conditions from the end of the 19th century to the present. During this period, the two world wars, massive migrations, and extensive social upheavals created a need for more secure and reliable types of personal identification. This same period was confluent with major advances in recognition technology. The largest part of this text describes these recent advances and their applications in creating more secure identification documents. We provide many references and describe in detail the passport, the national identity card, the driver's license, and a host of other documents as prime examples of this evolution (534). The computers of each country require assigned numbers to process their citizens' data. This book describes the documents created for people to carry and to display these numbers on their personal identification documents.