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978-1-107-07168-1 - Hoax Springs Eternal: The Psychology of Cognitive Deception

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## HOAX SPRINGS ETERNAL

Unlike sleights of hand, which fool the senses, sleights of mind challenge cognition. This book defines and explains cognitive deception and explores six prominent potential historical instances of it: the Cross of King Arthur, Drake's Plate of Brass, the Kensington Runestone, the Vinland Map, Piltdown Man, and the Shroud of Turin. In spite of evidence contradicting their alleged origins, their stories continue to persuade many of their authenticity. Peter Hancock uses these purported hoaxes as case studies to develop and demonstrate fundamental principles of cognitive psychology. By dissecting each ostensible artifact, he illustrates how hoaxes can deceive us and offers us defenses against them. This book further examines how and why we allow others to deceive us and how and why at times we even deceive ourselves. Accessible to beginner and expert alike, *Hoax Springs Eternal* provides an essential interdisciplinary guide to cognitive deception.

Peter Hancock is Provost Distinguished Research Professor, Pegasus Professor, and Trustee Chair in the Department of Psychology and the Institute for Simulation and Training at the University of Central Florida. He also directs the MIT<sup>2</sup> Laboratory, which researches human factors psychology. He is the author or editor of twenty books, including *Performance Under Stress* (2008); *Mind, Machine and Morality* (2009); and the award-winning historical text *Richard III and the Murder in the Tower* (2009).

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## ADVANCE PRAISE FOR *HOAX SPRINGS ETERNAL*

“*Hoax Springs Eternal* is not the usual work of skeptical debunking but rather a deeply insightful psychological thriller across the ages and into the human mind to explore how we come to believe not the impossible so much as the historical possible. In each of the stories artfully presented here Peter Hancock shows how evidence is evaluated in the context of the culture and the times in a way that allows us to understand why many people believe such claims. A ripping good read!”

– Michael Shermer, publisher of *Skeptic* magazine, monthly columnist for *Scientific American*, author of *Why People Believe Weird Things* and *The Believing Brain*

“Hancock reveals just how we are fooled *and* how we often fool ourselves! He illustrates his many insights with fascinating case studies – letting us tag along on one adventure after another: King Arthur’s Cross, the Vinland Map, Piltdown Man, the Shroud of Turin, and more. The results are illuminating.”

– Joe Nickell, Investigative Reporter,  
Fellow of the Committee for Skeptical Inquiry

“Hancock provides an enjoyable and fascinating journey through historical deceptions, exploring the many facets that contribute to people’s willingness to be deceived, as well as the characteristics of deception itself. A good read for students of both history and psychology.”

– Mica Endsley, Chief Scientist, United States Air Force

“A fascinating and inimitable look at the psychology of deception through the lens of historical hoaxes. Hancock even includes a checklist for how to create one (!), but doesn’t want to make you liable for future hoaxes!”

– Missy Cummings, Massachusetts Institute of Technology

“A tour de force. A highly readable account of well-known historical artifacts sometimes (or often) characterized as hoaxes, such as the Shroud of Turin and the Piltdown Man, viewed through the lens of the psychology of deception. Hancock the scientist meets Hancock the historical scholar to take the reader through a fascinating tour of the human mind and its strengths and pitfalls, including the mechanisms of ‘cognitive deception’ involved in belief or disbelief in these artifacts. An engaging, well-researched, and highly entertaining book.”

– Raja Parasuraman, University Professor, George Mason University

“Hancock’s *Hoax Springs Eternal* is a thoroughly delightful expedition through history’s most infamous and successful hoaxes, from the Shroud of Turin to King Arthur’s Cross and Drake’s Plate, Piltdown Man, and much, much more. Highly recommended to any student of history, observer of human behavior, or someone just looking for an excellent and entertaining read.”

– Steven Casey, author of ‘*Set Phasers on Stun*’ and *Other True Tales of Design, Technology, and Human Error*

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# Hoax Springs Eternal

THE PSYCHOLOGY OF COGNITIVE DECEPTION

Peter Hancock

*University of Central Florida*



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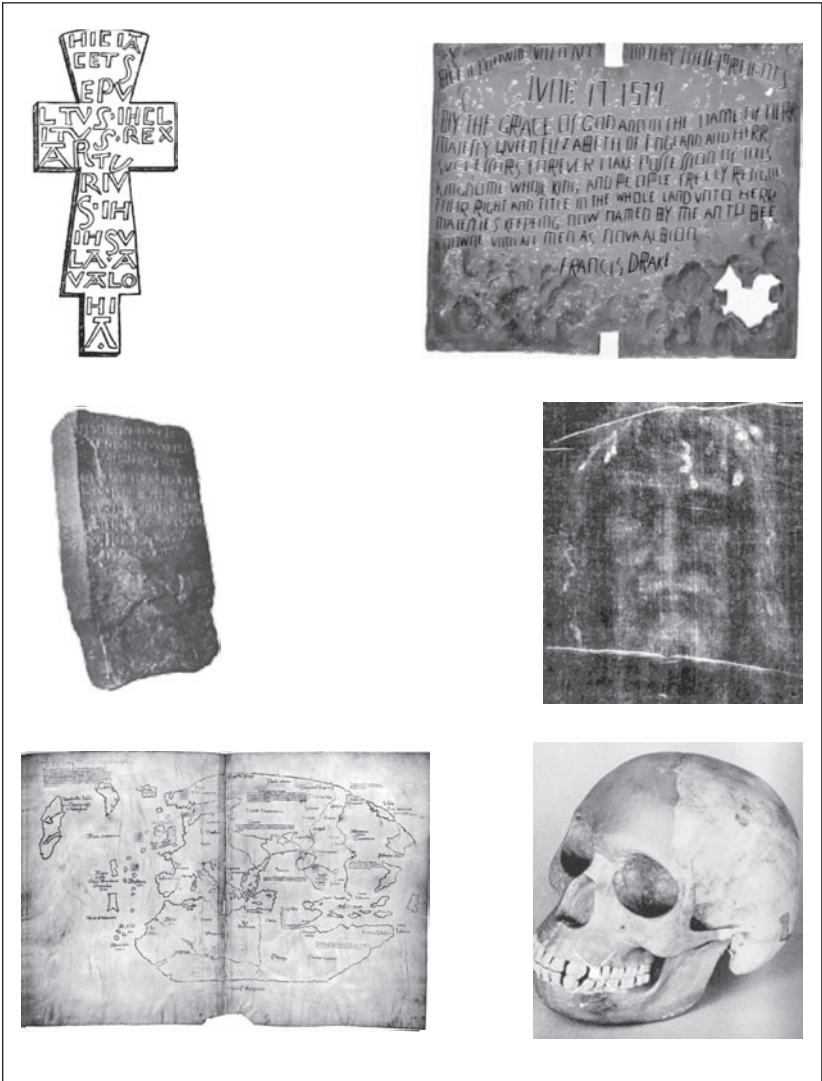
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*A text on the Nature of Cognitive Deception featuring detailed accounts of the Cross, the Plate, and the Stone, the Shroud, the Map, and the Bone. These exemplars illustrate the ways by which humans seek to deceive each other and by which they act to deceive themselves.*

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Order and Approximate Purported Dates of Creation



Alternative Order of Hoaxed Creations



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## PREFACE

This book is about deception. It does not cover all forms of deception but focuses on one particular aspect that I refer to as *cognitive deception*. In this type of deception you are not fooled by some clever sleight of hand. In fact, these cognitive deceptions have been referred to rather as sleights of mind. With cognitive deceptions you are not led into error by some failure or misdirection of your sensory apparatus. In contrast, cognitive deceptions are purposely induced failures of attention, memory, and decision-making capacities. In general, the issue is set before you in a relatively clear and unambiguous manner, and unlike single, one-off events, cognitive deceptions are, by and large, on permanent display. The physical evidence is, in most cases, right in front of you and can be examined repeatedly and even subjected to physical tests and evaluation. These artifacts do not disappear when any particularly skeptical inquisitor approaches. They do not suffer from any sort of Taylor's so-called shyness effects. The objects and entities discussed here do not vanish when a camera or even a mass spectrometer approaches them. Yet important aspects of cognition are involved that induce people into accepting the deception, sometimes even in spite of the results of physical experimentation and examination.

I have framed the present book around a number of stories. Each of the examples discussed exposes different facets of cognitive deception. However, at heart, they have a great deal in common. It is these common elements that form the basis of my discussion of the psychology of cognitive deception, the explorations of which are interpolated between the respective stories. Although each example provides an intriguing case on its own and can be read as an individual study in potential hoax and deception, the purpose here is to take the respective lessons and to weld them into a unified theory of cognitive deception. It is my eventual hope to elaborate that theory beyond cognitive deceptions alone to include other forms such as sensory illusion and motor deception, but that is for the future and not the focus of this text.

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I begin with a discussion of deception in general, which seeks to frame the cognitive dimension of deception within a wider context. Much of what is examined here is *not* concerned with establishing whether any particular artifact discussed is or is not a hoax. As I explain, with one specific exception, there remain arguments about the authenticity for each of the examples presented. Rather, the text is about the psychological principles involved in deception and how these general principles derive from an understanding of human behavior in general and how deception is only one specific part of this wider palette of capabilities. I have used a sequence of stories that focus on progressively more famous cases. Are they hoaxes? Herein lies their fascination. For each case can be viewed as true or false, believable or unbelievable, as the readers themselves decide. What I want to achieve is not the imposition of my personal beliefs on the reader, but to allow them to examine the evidence presented and so come up with their own decision. Obviously, as the author, I have had to construct each narrative. However, I have expressly tried to be careful to provide as balanced an account of each as I can. To accomplish this, I have provided extensive text notes as well as a full listing of research references so that if one or several of the stories presented takes the readers' special interest, they can easily follow up for themselves. Nor, of course, do I claim that the current range of example stories are anything but my own personal selection; many other accounts, artifacts, or contentions can be brought to the table of discussion. At the end of each story chapter, I do render my personal opinion, which the readers can then compare to their own persuasion. Perhaps the most important dimension of cognitive deception is the believability of what is offered. In all of the present examples, there is nothing inherently impossible about each story that is being told. Indeed, these have become celebrated cases precisely because they permit both belief and disbelief in almost equal measure. Further, the context of each claim often creates both ardent advocates and strident critics. It is the ability to sustain this partisan conflict that connotes a good hoax, but division is also evident in the case of authentic artifacts. Thus each circumstance serves to reveal as much about our own decision making and belief as they do about the artifacts themselves.

Concerning the dangers created by these partisan allegiances, I begin with a relatively anonymous case about which few, if any, contemporary individuals sustain any heated dispute. It concerns Arthur's Cross. The story of the Cross, which is purportedly a burial token of the quasi-mythical King Arthur, tells us that cognitive deception is no recent invention and argues that its practice and perfection have been pursued now for millennia. However, the commitment of adversarial constituencies heats up with

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my second story that revolves around Drake's Plate of Brass. It may be a historical fact that such a Plate at one time existed; however, its purported rediscovery in the middle of the last century is a much more disputed contention. Supposedly crafted in 1579, the Plate of Brass bears the assertion that Sir Francis Drake sailed to and then claimed all of California, in the name of Queen Elizabeth I. Of course, the notion that California belongs to the English is, as one might imagine, a much disputed claim. Among other issues, the Plate shows us how important claims are to original land occupation; a concern that is still expressed most evidently in the Near Middle East today, some thousands of years after the beginning of disputation. The historical record is explicit in noting that it was Drake's interactions with the indigenous peoples of that time that provided the foundation for a transfer of sovereignty to Elizabeth I. It was, of course, never made absolutely clear as to why such peoples would voluntarily give up their own sovereignty.

Readers can explore and decide on each of the specific stories presented. Alongside these individual case studies the psychology of cognitive deception is introduced. That is, I first provide the reader with specific cases and then seek to explain these through the application of the principles of cognitive psychology. This sequence is strategic, so that I can provide a scientific and theoretical framework for the subsequent examination of the respective case studies that follow. It will not escape the attention then that each story is presented in a specific sequence so as to illustrate the general principles and themes that are elaborated.

To follow on the first exploration of general principles, the third story is one that very much stirs the cultural and national patriotism of a very animated group. This concerns the Kensington Runestone. Again, this might not be an artifact well known outside the upper midwest of the United States, but in that region it is a very real emblem of Scandinavian pride. It remains a source of great contention and contemporary debate. Nominally dated 1362, the Runestone recounts the voyage, travels, and travails of a small group of explorers, some of whom were attacked and killed by the local tribes. Despite the imminent threat, the expedition somehow had the time to carve a somewhat extensive stone record of their very desperate circumstances. The exhumation of the Stone by a local farmer in the late 1800s caused a stir and debate that continues to this day. Was it a joke? Was it genuine? Farmer Ohman's find continues to intrigue the local populace as I hope the story will intrigue you.

The next story recapitulates many of the motivations seen in the account of the Kensington Runestone. This is the even more celebrated case of the Vinland Map. Based on the same issue of Viking primacy of exploration

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of North America, the Map purports to show Norse penetration into the American Northeast at around 1440. The motivations of the latter two artifacts prove fascinating, especially in light of the extensive and very real archeological investigation of the L'Anse aux Meadows site in Newfoundland, which does indeed confirm very early Norse settlement in the new world, well before Columbus's more famous journey.

Having presented four case studies and a general framework, I next tackle the processes involved in decision making and seek to explain how people decide whether to believe or disbelieve whatever specific proposition is offered to them. I present two perspectives on decision making and how each impinges on the process of deception. It is through this examination that I begin to flesh out my overall psychological framework for the exploration of cognitive deceptions. While all of the other stories in this text contain dimensions of persistent doubt, the next example, of Piltdown Man, is different. Piltdown *is* a hoax. Very few would disagree with this assessment, but the remaining question here is whodunnit? This fascinating tale shows that even purported "experts" are subject to the self-same propensities toward accepting what they wish to believe, even when contrary evidence is right in front of them. It provides the quintessential case study on how deception is promulgated, accepted, and then perpetuated. But critically, Piltdown also shows the process by which deception is eventually exposed.

The final story revolves around one of the most contentious items in the whole of the western world: the Shroud of Turin. Here we step beyond nationalistic jingoism and enter the world of religious belief. I argue that the self-same motivations are involved here and that this latter story provides striking confirmation about what persuades people to either believe or disbelieve. In the final chapters I reconsider my theoretical formulation in light of these final case studies. Here, I look to refine my eventual position on deception. My argument concludes with the assertion that cognitive deception is an intrinsic part of our human behavioral repertoire and that this capacity is also expressed, to a lesser degree, in other members of the animal kingdom. Thus, in human life as in all life, hoax springs eternal.

This book can be read in a number of ways. For those who are only interested in specific cases, each of the presented stories can be read as self-contained elements. I hope that ardent researchers of each specific artifact will find that the work provides a balanced and informative account. In contrast, readers who are focused only on the general principles of cognitive deception can omit some or even all of the case studies in favor of the more formal chapters that examine the nature of cognitive deception and its links



to contemporary cognitive theory. Alternatively, an interested reader might wish to examine one particular section with its focus on specific elements of cognitive deception and the examples thereof in the linked case studies. If I have brewed my potion appropriately, the best way to approach this work is simply to go with the flow and sequentially enjoy each of the elements as they appear. I hope this proves to be an intoxicating libation and not simply “small beer.”



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