

Foreword

I returned to my undergraduate alma mater, Georgia Southern University, in 2000 to develop programs in biostatistics and to establish a school of public health. Subsequently, I met Wen-Ran Zhang—the author of this book—and soon learned that he was highly regarded both as a teacher and a researcher. Some colleagues remarked: “Wen-Ran is a very hard worker and a prolific contributor to the literature, but few, if any, understand his research.”

Over the next few years Wen-Ran and I often met to discuss each other’s research interests and some common research interests. I must say that I was taken aback when I once asked him to tell me what his research was about in a few words. He said: “Multiagent Brain Modeling and YinYang Bipolar Logic.” Somewhere in my undergraduate studies I learned logic and having had many Chinese friends over the years, I had a layman’s understanding of Yin and Yang. Further, having designed and analyzed clinical trials in the development of drugs to treat bipolar disorder, I had some understanding of the word bipolar. But how these concepts could be brought together in a unifying theory was indeed puzzling.

But that is what the author has done in this book. YinYang Bipolar Relativity presents a logical unification of the two complementary opposites – the negative and positive energies of nature. By bringing the two sides together the book claims to provide an equilibrium-based computing paradigm for applications in physical, social, and life sciences especially in quantum computing.

It is well said by someone that “*Real innovation has no peers.*” Therefore, I will not try to judge the book as a peer. On the other hand, as a colleague and friend, I am determined to stay impartial. So I asked the author to pass me the anonymous review comments on an earlier draft of his book from a double-blind review process sponsored by the publisher together with his response. In the following I provide a summary of both the negative and the positive review comments using direct quotes. Interestingly, the negative and positive sides themselves together present, to a certain extent, a vindication of YinYang bipolar relativity in a balanced and impartial manner.

THE POSITIVE SIDE WROTE

“The strengths of this book perhaps are best described in its contribution to understanding of YinYang bipolar relativity as ‘an equilibrium based unifying computing paradigm that (1) logically defines causality, (2) logically unifies gravity with quantum theory, (3) brings relativity and quantum theory to the real-world for scientific computation and exploratory knowledge discovery in microscopic and macroscopic agent interaction, coordination, decision, and global regulation in physical, social, and life sciences especially in quantum computing and communication.’ The objective defined by the author(s) was clearly met in the book.”

“The author(s) have perhaps under-emphasized the importance of conceptualizing the concept of the YinYang and the power of the symbol as continual movement of two energies, etc. to better explain and lead into YinYang bipolar relativity. Such emphasis is given in the manuscript for Aristotelian science and logic and also to Einstein’s theories of relativity. Yet, as the author(s) state, ‘the word ‘YinYang’ indicates that the main idea is philosophically rooted in the ancient Chinese YinYang cosmology.’ Since the manuscript establishes the bipolar theory and the importance of the opposite poles, the theory is different from Einstein’s theory of relativity.”

“Yes, the information in this manuscript does illustrate the issues, problems, and trends related to the theme or argument according to the author(s) is ‘that equilibrium or non-equilibrium, as a physical state of any dynamic agent or universe at the system, molecular, genomic, particle, or sub-atomic level, forms a philosophical chicken and egg paradox with the universe because no one knows which one created the other in the very beginning.’ This analogy serves as a guide to understanding the major point or argument in the manuscript. This analogy is further expanded in the YinYang concept when the author(s) argue that ‘it is undoubtedly necessary to bridge the gap between the Western positivist thinking and the Eastern balanced thinking for solving unsolved scientific problems.’ It is strongly supported in the literature (Ebrey, 1993, et al) in that the symbol YinYang represents an understanding of how things work in the universe. In fact, Ebrey noted in Chinese Civilization: A Sourcebook, 2nd ed. (New York: Free Press, 1993, pp. 77-79) that the concepts of Yin and Yang and the Five Agents ‘provided intellectual framework of much of Chinese scientific thinking especially in the fields of biology and medicine.’ This adds further credence to the argument made in the manuscript. In addition, it supports the contention that YinYang bipolar relativity has, in fact, opened an eastern road toward quantum gravity which, as noted, is Einstein’s unfinished scientific unification of general relativity and quantum mechanics.”

“As I have noted earlier, the target audience was defined in the Preface of the text. ... Given the nature of the subject, it might be a valuable research in other areas particularly in medicine and biology.”

“The organization and/or flow of the book is a strength of this text. The chapters are well-illustrated for better understanding of major concepts. The chapters contain both a summary of important ideas and separate references for each chapter. Finally and perhaps most importantly, the chapters follow a logical sequence of ideas in the manuscript.”

THE NEGATIVE SIDE WROTE

“The book is easy to read, except for extensive logic derivations and proofs which are too great for the reviewer to validate during a short review process and are considered by the reviewer to be secondary for this review purpose.”

“The strength of this book is the mathematic work for bipolar logic. The reviewer believes that some models (not all though) might be useful for cases where bipolar agents do exist.”

“As a researcher in the areas of information sciences, management science, and computer science, the reviewer would like to comment on modeling which is actually the theme of the book.”

“The fatal mistake of this book is over-claiming. In reviewer’s view, the bipolar theory proposed by the author(s) is nothing more than a modeling technique. The reviewer does not want to argue whether bipolar agents exist in the real world which is not important at all, but want to see the evidence to support your claims.”

“This book over-emphasizes the following issues which do not add values to the research community.

- 1 Debate on philosophies. YinYang or not does not really matter - bipolar matters.*
- 2 Unifying theory. Do not over-claim your theory for the fields you do not really know much.*
- 3 Parallel with Einstein. ‘Relativity’ for your book is unnecessary.”*

“This book under-emphasizes the following problems which are important to the research community.

- 1 Practical problem solving.*
- 2 Objective evidences beyond ideas and mathematics derivations.*
- 3 Comparison of your models and other existing commonly used models in the fields.”*

“A sustainable theory must be supported by evidences of problem solving. Subjective modeling and interpretation of phenomena or events are not good enough. People do not really mind whether YinYang is in their body, but they do care whether the theory helps medical doctors cure the patients.”

“‘The author(s)’ term ‘application’ means ‘to apply the bipolar theory to explain the world.’ To the reviewer, ‘application’ means ‘to apply the model to solve a real problem.’”

“The book over-claims the target audience in the Preface.”

“The reviewer does (not) find any problem with the organization of the book. The presentation flow is quite smooth, and easy to follow, except for lengthy mathematical derivations and proofs. Literally, the manuscript is well written.”

After I finished reading the last draft of the book and the anonymous reviews with the author’s response, it is quite clear to me which side of the above review comments is more objective. But, as I promised earlier, I shall not divulge in order to stay impartial. Instead, I leave it to readers of the book to make their own judgment. Of course, reviewer concerns have helped the author to improve his book.

In any case, I can positively say that the author is an outstanding research scientist. The breadth and depth of his knowledge in many areas, particularly in the computer, mathematical and physical sciences, and his capacity for original thinking and advancing knowledge are awe-inspiring. He is to be commended for his efforts in writing this book and his efforts to venture into uncharted, if not controversial scientific territories.

I am honored and flattered to have the opportunity to write the foreword of this remarkable book.

Karl E. Peace

Karl E. Peace is the Georgia Cancer Coalition (GCC) Distinguished Cancer Scholar, Senior Research Scientist and Professor of Biostatistics in the Jiann-Ping Hsu College of Public Health (JPHCOPH) at Georgia Southern University. He is the architect of the MPH in Biostatistics and Founding Director of the Karl E. Peace Center for Biostatistics in the JPHCOPH. Dr. Peace holds the Ph.D. in Biostatistics from the Medical College of Virginia, the M.S. in Mathematics from Clemson University, the B.S. in Chemistry from Georgia Southern College, and a Health Science Certificate from Vanderbilt University. Dr. Peace's first career was academic teaching and research. He previously taught Mathematics at Georgia Southern College, Clemson University, Virginia Commonwealth University, and Randolph-Macon College, where he was a tenured professor. He also holds or has held numerous adjunct professorships at the Medical College of Virginia, the University of Michigan, Temple University, the University of North Carolina, and Duke University. Dr. Peace's second career was in research, technical support and management in the pharmaceutical industry. He held the positions of Senior Statistician at Burroughs-Wellcome, Manager of Clinical Statistics at A.H. Robins, Director of Research Statistics at SmithKline and French Labs, Senior Director of GI Clinical Studies, Data Management and Analysis at G.D. Searle, and Vice President of World-Wide Technical Operations at Warner Lambert/Parke-Davis. He then founded Biopharmaceutical Research Consultants, Inc. (BRCI), where he held the positions of President, Chief Executive Officer, and Chief Scientific Officer. Dr. Peace has made pivotal contributions in the development and approval of drugs to treat Alzheimer's disease, to prevent and treat gastrointestinal ulcers, to reduce the risk of myocardial infarction, to treat anxiety, depression and panic attacks, to treat hypertension and arthritis, and several antibiotics. Dr. Peace is or has been a member of several professional and honorary societies, including the Drug Information Association (DIA), the Biometric Society, Technometrics, the American Society for Quality Control (ASQC), the American Statistical Association (ASA), and Kappa Phi Kappa (KPK). He is a past member of the Committee on Applied and Theoretical Statistics, National Research Council, National Academy of Science. He is the recipient of numerous citations and awards: (1) Georgia Cancer Coalition Distinguished Cancer Scholar, (2) Fellow of the ASA, (3) the Distinguished Service Award of the DIA, (4) Star and Featured Alumnus, School of Basic Sciences, and Founder's Society Medal from the Medical College of Virginia, (5) College of Science and Technology Alumnus of the year, Alumnus of the year in private enterprise, Presidential Fellowship Award, Researcher of the year awards, and the First Recipient of the prestigious President's Medal for outstanding service and extraordinary contributions, all from Georgia Southern University, (6) 2007 APHA Statistics Section Award, (7) 2008 Shining Star and HR #2118 recognition by GA House of Representatives, (8) US Congress Citation for contributions to drug research and development and to Public Health, (9) the Tito Mijares Lifetime Achievement Award, (10) the Deen Day Smith Humanitarian Award and (11) several meritorious service awards from the ASQC, BASS and the Georgia Cancer Coalition. He is or has been Chair of: the Biostatistics Subsection of the Pharmaceutical Manufacturers Association (BSPMA), the Training Committee of the BSPMA, the Biopharmaceutical Section of the ASA, the Statistics Section of the APHA, and is Founder of the Biopharmaceutical Applied Statistics Symposium (BASS) in 1994. Dr. Peace is the author or editor of nine books and the author or co-author of 200 articles. His primary research interests are in drug research and development, clinical trial methodology, time-to-event methodology, and public health applications of biostatistics. Dr. Peace is a renowned philanthropist. He has created 21 scholarship endowments across 5 educational and public health institutions. Further details of Dr. Peace's accomplishments and contributions may be found in his autobiography entitled *Paid In Full* available at www.plowboy-press.com.