

Becoming A Physician Bonner Thomas Neville

Iconoclast: Abraham Flexner and a Life in Learning
The Inauguration of Thomas Neville Bonner as President of Union College and Chancellor of Union University
To the Ends of the Earth
Sickness and Health in America
Wang Kuo-wei
Fictional Worlds
Prophets of Regulation
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The Woman Beneath the Skin
American Doctors and German Universities
Women and Science
Lives of a Biologist
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Mothers and Others
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Making Meaning
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Freud, Surgery, and the Surgeons
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Thomas Neville Bonner
Schenectady. Union College
Thomas Neville Bonner
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abraham flexner 1866 1959 raised in louisville kentucky in a family of poor jewish immigrants from germany attended the johns hopkins university in the first decade of its existence after graduating in 1886 he founded four years before john dewey s chicago laboratory school a progressive experimental school in louisville that won the attention of harvard president charles w eliot after a successful nineteen years as teacher and principal he turned his attention to medical education on behalf of the carnegie foundation his 1910 survey known as the flexner report stimulated much needed radical changes in american medical schools with its emphasis on full time clinical teaching it remains the most widely cited document on how doctors best learn their profession flexner s subsequent projects a book on medical education in europe and a comparative study of medical education in europe and america remain unsurpassed in range and insight for fifteen years a senior officer in the rockefeller supported general education board in new york city he helped distribute grants more than 6 billion in today s dollars for education in medicine and other subjects and started the lincoln school in 1917 his devastating critique of american higher education intellectual inquiry not job training is the purpose of the university raised important questions upsetting many educators in 1930 flexner created and led the institute for advanced study at princeton convincing albert einstein to accept the first appointment at the new institute iconoclast is a thoughtful wonderfully crafted solidly researched account of an uncommon life that far exceeds abraham flexner s association with reform in medical education bonner s labors have produced a critical insightful portrait of flexner as a brilliant tireless extraordinarily persuasive visionary in addition to detailed portraits of the man at the vortex of swiftly moving scientific educational and philanthropic currents in higher education in the united states bonner also provides an account of flexner s personal life iconoclast offers a learned portrait of the distance traveled in medical education during the past 100 years along with consideration of the curricular and pedagogical problems that persist delese wear new england journal of medicine bonner s great achievement in this scholarly and captivating book is to model flexner s critical appraisal skills in writing about him even flexner himself lacked critical awareness in his autobiography bonner on the other hand offers a gentle and thoughtful appraisal the elements that contribute to flexner s greatness perseverance vision clear thinking and fair mindedness are all balanced with his weaknesses an obstinate unwillingness to retract and clouded political insight bonner dissects flexner s contribution with meticulous scholarship avoiding all cheap adulation or debunking this is an outstanding book ed peile british medical journal the book offers historical insights about philanthropy educational reform and institutional governance and decision making in bonner s capable hands flexner emerges an interesting figure whose successes are combined with contradictions and shortcomings amy e wells academe an outstanding and thorough study of this remarkable american educator who more than anyone before or since defined what a medical school should be left indelible marks on public education and founded one of the most innovative centers of advanced study in the world bonner adroitly portrays in this masterful biography what america and the world owes to flexner for his vision creativity tenacity and advocacy of progressive education john s haller jr journal of american history few nonphysicians have had as profound and long lasting an effect on modern american medicine as abraham flexner an excellent book about a highly significant and neglected figure janet a tigue ph d jama journal of the american medical association not only fills a major void but also provides an important evaluation of an individual whose contributions to education and a variety of social problems have generally been overlooked bonner s biography restores flexner to the position of importance that he merits this biography is a major addition to american historiography gerald n grob journal of the history of medicine and allied sciences excellent deeply researched carefully presented this

thorough creative biography adjusts our view of this powerful man so engaged in an astounding array of twentieth century educational developments linda eisenmann h net thanks to thomas bonner s iconoclast we finally have the biography flexner deserves and readers seek john r thelin journal of higher education if you want to know why more than half of the nobel prizes in medicine and science since 1945 have gone to americans you must read thomas bonner s book abraham flexner was the architect of a revolution in medical education in the united states that explains how this country became the medical mecca of the world bonner brings flexner s remarkable story to life with clarity sympathy and verve james h jones author of bad blood and alfred c kinsey a public private life at last we have a life of one of the most powerful shapers of medicine science and higher education this beautifully crafted life of flexner will rescue a giant of his times from fragmentation and sometimes misunderstanding bonner has written not only a very important book but a deeply thoughtful and searching interrogation of recurrent social and moral problems that take on life and meaning in a concrete historical setting john c burnham ohio state university abraham flexner was one of the great innovators in education of the twentieth century thomas n bonner a distinguished historian as well as an educator manager is the biographer flexner deserves daniel m fox president milbank memorial fund perspectives in biology and medicine this biography is a solid well researched study of a towering figure in american biomedical research darwin stapleton rockefeller archive center this is a brilliant beautifully crafted and much needed biography of one of the legendary figures in american medicine and higher education once again thomas bonner has shown that he is one of the great medical historians of our time kenneth m ludmerer washington university though abraham flexner wrote an autobiography until now we have had no comprehensive biography fortunately thomas bonner has filled that gap with iconoclast as a former university president with significant experience working with donors bonner is well qualified to understand his subject martin morse wooster philanthropy as thomas bonner relates in his excellent biography abraham flexner initiated several significant developments in american secondary and higher education over some three quarters of a century david mitch history of education quarterly iconoclast captures the boldness as well as the sweeping impact of flexner s work in the field of american education in the first half of the twentieth century adam r nelson paedagogica historica

focusing both on international comparisons and on the personal histories of many of the pioneers bonner shows how european and american women gradually broke through the wall of resistance to women in medicine many choosing initially between inferior women only institutions at home e g pre civil war america tsarist russia victorian england and integrated medical schools in switzerland and france

adds 21 new essays and drops some that appeared in the 1984 edition first in 1978 to reflect recent scholarship and changes in orientation by historians adds entirely new clusters on sickness and health early american medicine therapeutics the art of medicine and public health and personal hygiene other discussions are updated to reflect such phenomena as the growing mortality from hiv homicide and suicide no index annotation copyrighted by book news inc portland or

in this biography of brilliant chinese scholar wang kuo wei bonner throws light on the range and course of ideas in early 20th century china she critically examines wang s essays on german philosophy and aesthetics his poetry literary criticism and aesthetic theory and his works on ancient chinese history particularly of the shang dynasty

created worlds may resemble the actual world but they can just as easily be deemed incomplete precarious or irrelevant why then does fiction continue to pull us in and more interesting perhaps how in this beautiful book pavel provides a poetics of the imaginary worlds of fiction their properties and their reason for being

there is properly no history only biography emerson remarked and in this ingenious book thomas mcgraw unfolds the history of four powerful men charles francis adams louis d brandeis james m landis and alfred e kahn the absorbing stories he tells make this a book that will appeal across a wide spectrum of academic disciplines and to all readers interested in history biography and americana

focusing on the social intellectual and political context in which medical education took place thomas neville bonner offers a detailed analysis of transformations in medical instruction in the united kingdom france germany and the united states between the enlightenment and world war ii from a unique comparative perspective this study considers how divergent approaches to medical instruction in these countries mirrored as well as impacted their particular cultural contexts the book opens with an examination of key developments in medical education during the late eighteenth century and continues by tracing the evolution of clinical teaching practices in the early 1800s it then charts the rise of laboratory based teaching in the nineteenth century and the progression toward the establishment of university standards for medical education during the early twentieth century throughout the author identifies changes in medical student populations and student life including the opportunities available for women and minorities

duden asserts that the most basic biological and medical terms that we use to describe our own bodies male and female healthy or sick are cultural constructions to illustrate this she delves into records of an 18th century german physician who documented the medical histories of 1 800 women of all ages and backgrounds often in their own words

first published in 1996 following the author s previous work women in science antiquity through the nineteenth century in 1986 an increased interest in feminism science and gender issues resulted in this subsequent title this book will be valuable to scholars working in a variety of academic areas and will be useful at different educational levels from secondary through graduate school this annotated bibliography of approximately 2700 entries also includes fields nationality periods persons institutions reference and theme indexes

beginning with the discovery of genes on chromosomes and culminating with the unmasking of the most minute genetic mysteries the twentieth century saw astounding and unprecedented progress in the science of biology in an illustrious career that spanned most of the century biologist john bonner witnessed many of these advances firsthand part autobiography part history of the extraordinary transformation of biology in his time bonner s book is truly a life in science the story of what it is to be a biologist observing the unfolding of the intricacies of life itself bonner s scientific interests are nearly as varied as the concerns of biology ranging from animal culture to evolution from life cycles to the development of slime molds and the extraordinary cast of characters he introduces is equally diverse among them julian huxley j b s haldane leon trotsky and evelyn waugh writing with a charm and freshness that bring the most subtle nuances of science to life he pursues these interests through the hundred years that gave us the discovery of embryonic induction the interpretation of evolution in terms of changes in gene frequency in a population growth in understanding of the biochemistry of the cell the beginning of molecular genetics remarkable insights into animal behavior the emergence of sociobiology and the simplification of ecological and evolutionary principles by means of mathematical models in this panoramic view we see both the sweep of world events and scientific progress and the animating details the personal observations and experiences of a career conducted in their midst in bonner s view biology is essentially the study of life cycles his book marking the cycles of a life in biology is a fitting reflection of this study with its infinite and infinitesimal permutations table of contents preface 1 the world of my elders 1900 1920 2

becoming a biologist 1920 1940 3 everything peaks 1940 1960 4 revolution and progress 1960 1980 5 coming together 1980 2000 index reviews of this book a charming memoir combining autobiography and a 20th century history of biology a gentleman and a scholar aptly describes bonner bonner s own lifecycle makes for pleasant reading and inspires a new respect for slime molds kirkus reviews reviews of this book bonner has devoted much of his imaginative and creative biological research of the intervening years to cellular slime molds which lead fascinating and before bonner s work previously largely unexplained lives his accounts of his and his graduate students thinking and experiments convey much of the scientific approach to problems lucidly and those of his travels his vacations in nova scotia over the course of 40 years and the many amusing and illuminating incidents in his life reflect a refreshing open mindedness this is one scientist s autobiography that manages to be simultaneously delightful and strikingly informative william beatty booklist reviews of this book this charming and unduly modest book is part memoir part distillation of 20th century biology as told by an eminent researcher writer and teacher who witnessed much of it firsthand bonner invokes life cycles and development his specialties to talk about the last century s gigantic steps forward in biology he covers advances in biochemistry population genetics and embryology the discovery of dna structure and the human genome project against this parade of discoveries bonner considers his own career which included everything from animal social behavior to evolution publishers weekly reviews of this book john tyler bonner had the luck to be born into a family that lived a charmed life the fortune to find a lifelong passion and the timing to live at the heyday of his favorite subject in his autobiography the lives of a biologist adventures in a century of extraordinary science bonner smoothly integrates advances in biology during the 20th century with tales from a life that now stretches into its ninth decade in simple but elegant prose he revisits some of the most important biological advances from embryology to molecular genetics sally squires washington post reviews of this book here is a man of prodigious scientific talent who emerges in lives of a biologist as the best kind of scientist a man fascinated by the things he is investigating and finding great joy in them this is a life well and fulfilling lived told with warmth and humor john r g turner new york times book review reviews of this book this memoir by the great celebrant of slime moulds offers a fascinating overview of a century of biology bonner tells of changes in biological thinking and his own pervasive influence in the study of life cycles and morphogenesis new scientist reviews of this book a gracefully written memoir bonner who began his career as an embryologist provides many insights regarding the changing fashions he and others have observed in the field of developmental biology k b sterling choice a gracious and immensely enjoyable memoir from an era in which scientists could still be gentlemen bonner s generosity of spirit shines through on almost every page evelyn fox keller mit imagine a wonderful writer who just keeps writing book after book and just keeps getting more and more readable with each one that s john bonner now he s done a memoir full of magic names from the past where his kind humor softens a keen eye for human antics including his own if you like biology biography and history of science and don t mind having fun reading it then this book is for you i would get two one to keep and one to loan mary jane west eberhard smithsonian tropical research institute surely there can be few scientists with the breadth of knowledge the puckish wit and the all round modest good humor that john bonner displays in this splendid memoir long may he write anne firor scott w k boyd professor of history emerita duke university a charming personal account of the ascendance of the life sciences to their current dominance by someone who has been there few biologists grasp their discipline at as many levels as john tyler bonner does and even fewer can claim as many firsthand encounters with the greats of the past century the result is an autobiography that is both delightful and informative frans de waal living links center at emory university this is a delightful memoir by one of the most charming and well spoken biologists on the planet john tyler bonner s career now

spans half a dozen scientific generations from each of which he has gathered friends and wisdom in looking back he illuminates both the story of his life and the story of life jonathan weiner author of the beak of the finch and time love and memory

on a spring morning in 1914 in the stark foothills of southern colorado members of the united mine workers of america clashed with guards employed by the rockefeller family and a state militia beholden to colorado s industrial barons when the dust settled nineteen men women and children among the miners families lay dead the strikers had killed at least thirty men destroyed six mines and laid waste to two company towns killing for coal offers a bold and original perspective on the 1914 ludlow massacre and the great coalfield war in a sweeping story of transformation that begins in the coal beds and culminates with the deadliest strike in american history thomas andrews illuminates the causes and consequences of the militancy that erupted in colliers strikes over the course of nearly half a century he reveals a complex world shaped by the connected forces of land labor corporate industrialization and workers resistance brilliantly conceived and written this book takes the organic world as its starting point the resulting elucidation of the coalfield wars goes far beyond traditional labor history considering issues of social and environmental justice in the context of an economy dependent on fossil fuel andrews makes a powerful case for rethinking the relationships that unite and divide workers consumers capitalists and the natural world

the authors argue that the rules and practices of corporate law mimic contractual provisions that parties would reach if they bargained about every contingency at zero cost and flawlessly enforced their agreements but bargaining and enforcement are costly and corporate law provides the rules and an enforcement mechanism that govern relations among those who commit their capital to such ventures the authors work out the reasons for supposing that this is the exclusive function of corporate law and the implications of this perspective

sarah hrday argues that if human babies were to survive in a world of scarce resources they would need to be cared for not only by their mothers but also by siblings aunts fathers friends and with any luck grandmothers out of this complicated and contingent form of childrearing says hrday came the human capacity for understanding others

he faced the dilemmas of maintaining the cohesion of the alliance especially with the french withdrawal from nato while trying to reduce tensions between eastern and western europe managing bitter conflicts over international monetary and trade policies and prosecuting an escalating war in southeast asia book jacket

david bordwell s new book is at once a history of film criticism an analysis of how critics interpret film and a proposal for an alternative program for film studies it is an anatomy of film criticism meant to reset the agenda for film scholarship as such making meaning should be a landmark book a focus for debate from which future film study will evolve bordwell systematically maps different strategies for interpreting films and making meaning illustrating his points with a vast array of examples from western film criticism following an introductory chapter that sets out the terms and scope of the argument bordwell goes on to show how critical institutions constrain and contain the very practices they promote and how the interpretation of texts has become a central preoccupation of the humanities he gives lucid accounts of the development of film criticism in france britain and the united states since world war ii analyzes this development through two important types of criticism thematic explicatory and symptomatic and shows that both types usually seen as antithetical in fact have much in common these diverse and even warring schools of criticism share conventional rhetorical and problem solving techniques a point that has broad ranging

implications for the way critics practice their art the book concludes with a survey of the alternatives to criticism based on interpretation and finally with the proposal that a historical poetics of cinema offers the most fruitful framework for film analysis

in 1895 there was not a single case of dementia praecox reported in the united states by 1912 there were tens of thousands of people with this diagnosis locked up in asylums hospitals and jails by 1927 it was fading away how could such a terrible disease be discovered affect so many lives and then turn out to be something else in vivid detail richard noll describes how the discovery of this mysterious disorder gave hope to the overworked asylum doctors that they could at last explain though they could not cure the miserable patients surrounding them the story of dementia praecox and its eventual replacement by the new concept of schizophrenia also reveals how asylum physicians fought for their own respectability if what they were observing was a disease then this biological reality was amenable to scientific research in the early twentieth century dementia praecox was psychiatry s key into an increasingly science focused medical profession but for the moment nothing could be done to help the sufferers when the concept of schizophrenia offered a fresh understanding of this disorder and hope for a cure psychiatry abandoned the old disease for the new in this dramatic story of a vanished diagnosis noll shows the co dependency between a disease and the scientific status of the profession that treats it the ghost of dementia praecox haunts today s debates about the latest generation of psychiatric disorders

if harvard can be said to have a literature all its own then few universities can equal it in scope here lies the reason for this anthology a collection of what harvard men teachers students graduates have written about harvard in the more than three centuries of its history the emphasis is upon entertainment upon readability and the selections have been arranged to show something of the many variations of harvard life for all harvard men and that part of the general public which is interested in american college life here is a rich treasury in such a harvard collection one may expect to find the giants of harvard s last 75 years eliot lowell and conant attempting a definition of what harvard means but there are many other familiar names henry dunster oliver wendell holmes james russell lowell henry adams charles m flandrau william and henry james owen wister thomas wolfe john p marquaud here is mistress eaton s confession about the bad fish served to the wretched students of harvard s early years here too is president holyoke s account of the burning of harvard hall a student s description of his trip to portsmouth with that aged and johnsonian character tutor henry flynt cleveland amory s retelling of the murder of dr george parkman mayor quiney s story of what happened in cambridge when andrew jackson came to get an honorary degree alistair cooke s commentary on the great harvard yale cricket match of 1951 there are many sorts of harvard men in this book popular fellows like hammersmith snobs like bertie and billy the sensitive and the lonely like edwin arlington robinson and thomas wolfe and independent thinkers like john reed teachers and pupils scholars and sports heroes and rogues pass across the harvard stage through the struggles and the tragedies to the moments of triumph like the bicentennial or the visit of winston churchill and speaking of visits there are the visitors too the first impressions of harvard set down by an assortment of travelers as various as dickens trollope rupert brooke harriet martineau and francisco de miranda the precursor of latin american independence for the harvard addict this volume is indispensable for the general reader it is the sort of book that goes with a good living room fire or the blissful moments of early to bed

the new england small college athletic conference has won glowing appraisals in the sporting press since its founding in 1971 established to strengthen intercollegiate sports in harmony with the high academic standards of its members 11 prestigious

liberal arts colleges the nescac is committed to equity and inclusion in athletic programs and to providing only need based financial aid the conference s reputation attracts many gifted student athletes drawing extensively on campus archives media reports and interviews this book compares the nescac s lofty strategy to reality with a focus on recruiting admissions financial aid and diversity goals

legend has it that twenty miles of volcanic rock rising through the landscape of northern bohemia was the work of the devil who separated the warring czechs and germans by building a wall the nineteenth century invention of the devil s wall was evidence of rising ethnic tensions in interwar czechoslovakia sudeten german nationalists conceived a radical mission to try to restore german influence across the region mark cornwall tells the story of heinz rutha an internationally recognized figure in his day who was the pioneer of a youth movement that emphasized male bonding in its quest to reassert german dominance over czech space through a narrative that unravels the threads of rutha s own repressed sexuality cornwall shows how czech authorities misinterpreted rutha s mission as sexual deviance and in 1937 charged him with corrupting adolescents the resulting scandal led to rutha s imprisonment suicide and excommunication from the nationalist cause he had devoted his life to furthering cornwall is the first historian to tackle the long taboo subject of how youth homosexuality and nationalism intersected in a fascist environment the devil s wall also challenges the notion that all sudeten german nationalists were nazis and supplies a fresh explanation for britain s appeasement of hitler showing why the british might justifiably have supported the 1930s sudeten german cause in this readable biography of an ardent german bohemian who participated as perpetrator witness and victim cornwall radically reassesses the czech german struggle of early twentieth century europe

in this excursion into medical and psychoanalytic history paul e stepansky charts the rise and fall of the surgical metaphor freud s view of psychoanalysis as analogous to a surgical procedure approaching freud s understanding of surgery and surgeons historically and biographically stepansky draws the reader into the world of late nineteenth century heroic surgery a world into which sigmund freud himself was drawn from publisher s description

a new york times bestseller an npr best book of the year the epic successor to one of the most important books of the century at once a retelling of global history a scathing critique of contemporary politics and a bold proposal for a new and fairer economic system thomas piketty s bestselling capital in the twenty first century galvanized global debate about inequality in this audacious follow up piketty challenges us to revolutionize how we think about politics ideology and history he exposes the ideas that have sustained inequality for the past millennium reveals why the shallow politics of right and left are failing us today and outlines the structure of a fairer economic system our economy piketty observes is not a natural fact markets profits and capital are all historical constructs that depend on choices piketty explores the material and ideological interactions of conflicting social groups that have given us slavery serfdom colonialism communism and hypercapitalism shaping the lives of billions he concludes that the great driver of human progress over the centuries has been the struggle for equality and education and not as often argued the assertion of property rights or the pursuit of stability the new era of extreme inequality that has derailed that progress since the 1980s he shows is partly a reaction against communism but it is also the fruit of ignorance intellectual specialization and our drift toward the dead end politics of identity once we understand this we can begin to envision a more balanced approach to economics and politics piketty argues for a new participatory socialism a system founded on an ideology of equality social property education and the sharing of

knowledge and power capital and ideology is destined to be one of the indispensable books of our time a work that will not only help us understand the world but that will change it

the rise and widespread acceptance of psychosurgery constitutes one of the most troubling chapters in the history of modern medicine by the late 1950s tens of thousands of americans had been lobotomized as treatment for a host of psychiatric disorders though the procedure would later be decried as devastating and grossly unscientific many patients families and physicians reported veritable improvement from the surgery some patients were even considered cured the lobotomy letters gives an account of why this controversial procedure was sanctioned by psychiatrists and doctors of modern medicine drawing from original correspondence penned by lobotomy patients and their families as well as from the professional papers of lobotomy pioneer and neurologist walter freeman the volume reconstructs how physicians patients and their families viewed lobotomy and analyzes the reasons for its overwhelming use mical raz md phd is a physician and historian of medicine

should teenagers have jobs while they re in high school doesn t working distract them from schoolwork cause long term problem behaviors and precipitate a precocious transition to adulthood this report from a remarkable longitudinal study of 1 000 students followed from the beginning of high school through their mid twenties answers resoundingly no examining a broad range of teenagers jeylan mortimer concludes that high school students who work even as much as half time are in fact better off in many ways than students who don t have jobs at all having part time jobs can increase confidence and time management skills promote vocational exploration and enhance subsequent academic success the wider social circle of adults they meet through their jobs can also buffer strains at home and some of what young people learn on the job not least responsibility and confidence gives them an advantage in later work life

an important historical account of tuskegee university s significant advances in health care which affected millions of lives worldwide alabama s celebrated historically black tuskegee university is most commonly associated with its founding president booker t washington the scientific innovator george washington carver or the renowned tuskegee airmen although the university s accomplishments and devotion to social issues are well known its work in medical research and health care has received little acknowledgment tuskegee has been fulfilling washington s vision of healthy minds and bodies since its inception in 1881 in to raise up the man farthest down dana r chandler and edith powell document tuskegee university s medical and public health history with rich archival data and never before published photographs chandler and powell especially highlight the important but largely unsung role that tuskegee university researchers played in the eradication of polio and they add new dimension and context to the fascinating story of the hela cell line that has been brought to the public s attention by popular media tuskegee university was on the forefront in providing local farmers the benefits of agrarian research the university helped create the massive agricultural extension system managed today by land grant universities throughout the united states tuskegee established the first baccalaureate nursing program in the state and was also home to alabama s first hospital for african americans washington hired alabama s first female licensed physician as a resident physician at tuskegee most notably tuskegee was the site of a remarkable development in american biochemistry history its microbiology laboratory was the only one relied upon by the national foundation for infantile paralysis the organization known today as the march of dimes to produce the hela cell cultures employed in the national field trials for the salk and sabin polio vaccines chandler and powell are also interested in correcting a long held

but false historical perception that tuskegee university was the location for the shameful and infamous us public health service study of untreated syphilis meticulously researched this book is filled with previously undocumented information taken directly from the vast tuskegee university archives readers will gain a new appreciation for how tuskegee s people and institutions have influenced community health food science and national medical life throughout the twentieth century

the essays in strange science examine marginal fringe and unconventional forms of scientific inquiry as well as their cultural representations in the victorian period although now relegated to the category of the pseudoscientific fields like mesmerism and psychical research captured the imagination of the victorian public conversely many branches of science now viewed as uncontroversial such as physics and botany were often associated with unorthodox methods of inquiry whether ultimately incorporated into mainstream scientific thought or categorized by 21st century historians as pseudo or even anti scientific these sciences generated conversation enthusiasm and controversy within victorian society to date scholarship addressing victorian pseudoscience tends to focus either on a particular popular science within its social context or on how mainstream scientific practice distinguished itself from more contested forms strange science takes a different approach by placing a range of sciences in conversation with one another and examining the similar unconventional methods of inquiry adopted by both now established scientific fields and their marginalized counterparts during the victorian period in doing so strange science reveals the degree to which scientific discourse of this period was radically speculative frequently attempting to challenge or extend the apparent boundaries of the natural world this interdisciplinary collection will appeal to scholars in the fields of victorian literature cultural studies the history of the body and the history of science

a state of the field survey of historical sociology remaking modernity assesses the field s past accomplishments and peers into the future envisioning changes to come the seventeen essays in this collection reveal the potential of historical sociology to transform understandings of social and cultural change the volume captures an exciting new conversation among historical sociologists that brings a wider interdisciplinary project to bear on the problems and prospects of modernity the contributors represent a wide variety of theoretical orientations and a broad spectrum of understandings of what constitutes historical sociology they address such topics as religion war citizenship markets professions gender and welfare colonialism ethnicity bureaucracy revolutions collective action and the modernist social sciences themselves remaking modernity includes a significant introduction in which the editors consider prior orientations in historical sociology in order to analyze the field s resurgence they show how current research is building on and challenging previous work through attention to institutionalism rational choice the cultural turn feminist theories and approaches and colonialism and the racial formations of empire contributors julia adams justin baer richard biernacki bruce carruthers elisabeth clemens rebecca jean emigh russell faeges philip gorski roger gould meyer kestnbaum edgar kiser ming cheng lo zine magubane ann shola orloff nader sohrabi margaret somers lyn spillman george steinmetz

this book examines the history of medicine as a sub discipline within the medical humanities and its possible contributions to dealing with medical uncertainty it investigates how the history of medicine reduced intolerance for ambiguity among medical students in the past and can continue to do so today using several case studies the second part of this volume illustrates the long term and varied nature of questions of uncertainty in the history of medical practice starting with concrete examples it explores the extent to which physicians have openly discussed such issues

or alternatively attempted to hide them under a cloak of expertise contributors are sari aalto rolf ahlzén niels de nutte pieter dhondt jolien gijbels rachel irwin saara maija kontturi virginia langum måns lindén suvi rytty petr svobodný evelina wilson and jonatan wistrand

foundations play an essential part in the philanthropic activity that defines so much of american life no other nation provides its foundations with so much autonomy and freedom of action as does the united states liberated both from the daily discipline of the market and from direct control by government american foundations understandably attract great attention as david hammack and helmut anheier note in this volume americans have criticized foundations for their alleged conservatism liberalism elitism radicalism devotion to religious tradition hostility to religion in short for commitments to causes whose significance can be measured in part by the controversies they provoke americans have also criticized foundations for ineffectiveness and even foolishness their size alone conveys some sense of the significance of american foundations whose assets amounted to over 530 billion in 2008 despite a dramatic decline of almost 22 percent in the previous year and in 2008 foundation grants totaled over 45 billion but what roles have foundations actually played over time and what distinctive roles do they fill today how have they shaped american society how much difference do they make what roles are foundations likely to play in the future this comprehensive volume the product of a three year project supported by the aspen institute s program on the nonprofit sector and philanthropy provides the most thorough effort ever to assess the impact and significance of the nation s large foundations in it leading researchers explore how foundations have shaped or failed to shape each of the key fields of foundation work american foundations takes the reader on a wide ranging tour evaluating foundation efforts in education scientific and medical research health care social welfare international relations arts and culture religion and social change

first multi year cumulation covers six years 1965 70

the 2010 affordable care act is a sweeping reform to the us health care system hoffman offers an engaging and in depth look at america s long tradition of unequal access to health care she argues that two main features have characterized the us health system a refusal to adopt a right to care and a particularly american type of rationing unlike rationing in most countries which is intended to keep costs down rationing in the united states has actually led to increased costs resulting in the most expensive health care system in the world

handling the sick is the story of 838 women who entered st luke s hospital training school for nurses st paul minnesota from 1892 1937 their story addresses a fundamental question about nursing that has yet to be answered is nursing a craft or a profession it also addresses the colliding visions of nursing factions that for more than a century have disagreed on the inherent traits and formal preparation a nurse has needed the women of st luke s were engaged in the most practical of all occupations open to women a rare one in which their strength experience and skill were prized above all else they firmly believed that the key to success in nursing was apprenticeship training apprenticeship not schooling was the cornerstone on which all else rested this study unites the opposing visions of those who led nursing toward professional status and those who saw it as a craft physicality strength of will an abiding emphasis on practicality and a hierarchy based on a deep pride in craft skills have been essential elements of nursing nursing can look to its complex history to develop an integrated model of nursing one drawing on both academic training and the immediate realities involved in handling the sick book jacket title summary field provided by blackwell north america inc all rights reserved

taking us to the cutting edge of the new frontier of medicine a visionary biotechnologist and a pathbreaking researcher show how we can optimize our health in ways that were previously unimaginable we are on the cusp of a major transformation in healthcare yet few people know it at top hospitals and a few innovative health tech startups scientists are working closely with patients to dramatically extend their healthspan the number of healthy years before disease sets in in the age of scientific wellness two visionary leaders of this revolution in health take us on a thrilling journey to this new frontier of medicine today most doctors wait for clinical symptoms to appear before they act and the ten most commonly prescribed medications confer little or no benefit to most people taking them leroy hood and nathan price argue that we must move beyond this reactive hit or miss approach to usher in real precision health a form of highly personalized care they call scientific wellness using information gleaned from our blood and genes and tapping into the data revolution made possible by ai doctors can catch the onset of disease years before symptoms arise revolutionizing prevention current applications have shown startling results diabetes reversed cancers eliminated alzheimer s avoided autoimmune conditions kept at bay this is not a future fantasy it is already happening but only for a few patients and at high cost it s time to make this gold standard of care more widely available inspiring in its possibilities radical in its conclusions the age of scientific wellness shares actionable insights to help you chart a course to a longer healthier and more fulfilling life

when early christians began to study the bible and to write their own history and that of the jews whom they claimed to supersede they used scholarly methods invented by the librarians and literary critics of hellenistic alexandria but origen and eusebius two scholars of late roman caesarea did far more both produced new kinds of books in which parallel columns made possible critical comparisons previously unenvisioned whether between biblical texts or between national histories eusebius went even farther creating new research tools new forms of history and polemic and a new kind of library to support both research and book production christianity and the transformation of the book combines broad gauged synthesis and close textual analysis to reconstruct the kinds of books and the ways of organizing scholarly inquiry and collaboration among the christians of caesarea on the coast of roman palestine the book explores the dialectical relationship between intellectual history and the history of the book even as it expands our understanding of early christian scholarship christianity and the transformation of the book attends to the social religious intellectual and institutional contexts within which origen and eusebius worked as well as the details of their scholarly practices practices that the authors argue continued to define major sectors of christian learning for almost two millennia and are in many ways still with us today

this reissue offers an opportunity to consider the state of the american health care system the text chronicles the development of the medical profession and shows how increasing emphasis on specialization has influenced medical education and public policy it details specialization s effects on health care costs and on health care providers as well as the implications of technology and the resulting ethical dilemmas the issues of insurance and many people s limited access to care

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Commutator Angular Momentum: A Deep Dive into Quantum Mechanics

This article delves into the concept of commutator angular momentum, a crucial aspect of quantum mechanics that governs the simultaneous measurability of different angular momentum components. Understanding the commutator relations between angular momentum operators is fundamental to grasping the inherent limitations in simultaneously knowing certain properties of a quantum system, a cornerstone of quantum theory's probabilistic nature. We will explore the mathematical formalism, physical implications, and practical examples to elucidate this important concept.

1. Angular Momentum Operators and their Commutation Relations

In quantum mechanics, angular momentum is not a simple vector like in classical mechanics. Instead, it's represented by three Hermitian operators: J_x , J_y , and J_z , corresponding to the x, y, and z components of the angular momentum vector, respectively. These operators do not commute, meaning the order of operations matters. Their commutation relations are defined as: $[J_x, J_y] = i\hbar J_z$, $[J_y, J_z] = i\hbar J_x$, and $[J_z, J_x] = i\hbar J_y$ where $[A, B] = AB - BA$ is the commutator, \hbar is the reduced Planck constant ($h/2\pi$), and 'i' is the imaginary unit. These relations are the fundamental building blocks of angular momentum algebra. They tell us that we cannot simultaneously measure J_x and J_y (or any other pair) with arbitrary precision.

2. The Uncertainty Principle and Angular Momentum

The non-commutation of angular momentum operators directly relates to the Heisenberg uncertainty principle. The uncertainty principle states that for any two non-commuting observables A and B, the product of their uncertainties (ΔA and ΔB) is bounded from below: $\Delta A \Delta B \geq \frac{1}{2} |\langle [A, B] \rangle|$. Applying this to angular momentum, we find: $\Delta J_x \Delta J_y \geq \frac{1}{2} \hbar |\langle J_z \rangle|$. This implies that the more precisely we know J_x , the less precisely we know J_y , and vice versa. This is a fundamental limitation imposed by the quantum nature of angular momentum.

3. Simultaneous Eigenstates and Quantum Numbers

Despite the uncertainties, we can find simultaneous eigenstates for one component of angular momentum and the total angular momentum squared (J^2). J^2 commutes with each component of J (e.g., $[J^2, J_z] = 0$). This allows us to simultaneously measure J^2 and one component (conventionally J_z). The eigenvalues of J^2 are $\hbar^2 j(j+1)$, where j is the total angular momentum quantum number ($j = 0, \frac{1}{2}, 1, \frac{3}{2}, 2, \dots$), and the eigenvalues of J_z are $m\hbar$, where m is the magnetic

quantum number ($m = -j, -j+1, \dots, j-1, j$). These quantum numbers completely specify the angular momentum state of a system.

4. Practical Examples

Consider an electron orbiting a nucleus. Its orbital angular momentum is quantized, meaning it can only take on specific discrete values. We cannot simultaneously know the exact values of the x and y components of its orbital angular momentum; only one component (often chosen to be J_z) and the total magnitude are precisely defined. The same applies to the electron's intrinsic angular momentum (spin), which is also quantized and described by similar operators and quantum numbers. Another example lies in the Stern-Gerlach experiment, which demonstrates the quantization of angular momentum. By passing a beam of silver atoms through an inhomogeneous magnetic field, the experiment reveals the quantization of the z-component of the atomic magnetic moment, directly linked to the electron's spin angular momentum. The non-commuting nature of the angular momentum components is crucial to understanding the splitting of the beam observed in the experiment.

5. Conclusion

The commutation relations of angular momentum operators are a cornerstone of quantum mechanics. They reveal the inherent uncertainty in simultaneously measuring different components of angular momentum, a direct consequence of the Heisenberg uncertainty principle. Understanding these relations is essential for interpreting the behaviour of quantum systems, from atomic orbitals to the spin of elementary particles. The quantization of angular momentum, as evidenced by quantum numbers and exemplified in experiments like the Stern-Gerlach experiment, confirms the validity of this fundamental aspect of quantum theory.

FAQs

1. What is the significance of the imaginary unit 'i' in the commutation relations? The 'i' indicates the non-commutativity and highlights the fundamentally different nature of quantum angular momentum compared to its classical counterpart. 2. Can we ever precisely know all three components of angular momentum simultaneously? No, the uncertainty principle, derived directly from the non-commuting nature of the operators, prevents this. 3. What is the physical meaning of the total angular momentum quantum number 'j'? 'j' represents the total angular momentum magnitude, determining the possible values of the z-component. 4. How are the commutation relations related to rotations in space? The commutation relations are a mathematical expression of the non-commutative nature of rotations in three-dimensional space at the quantum level. 5. Are these commutation relations only applicable to orbital angular momentum? No, these relations apply to all forms of angular momentum, including orbital, spin, and total angular momentum.

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