

Agnotology The Making And Unmaking Of Ignorance

The prominent scholars featured in *Gendered Innovations in Science and Engineering* explore how gender analysis can profoundly enhance human knowledge in the areas of science, medicine, and engineering. Where possible, they provide concrete examples of how taking gender into account has yielded new research results and sparked creativity, opening new avenues for future research. Several government granting agencies, such as the National Institutes of Health and the European Commission, now require that requests for funding address whether, and in what sense, sex and gender are relevant to the objectives and methodologies of the research proposed, yet few research scientists or engineers know how to do gender analysis. This book begins to rectify the situation by shedding light on the how and the why.

Examines the cultural authority of science

A former government regulator reveals how the tobacco industry's duplicitous tactics created a multimillion-dollar industry that is dismantling public health safeguards, in an exposé of how the regulatory system has been further undermined by the Bush administration to favor polluters, the manufacturers of dangerous products, and unscrupulous corporate interests.

Psychologists, economists, historians, computer scientists, sociologists, philosophers, and legal scholars explore the conscious choice not to seek information. The history of intellectual thought abounds with claims that knowledge is valued and sought, yet individuals and groups often choose not to know. We call the conscious choice not to seek or use knowledge (or information) deliberate ignorance. When is this a virtue, when is it a vice, and what can be learned from formally modeling the underlying motives? On which normative grounds can it be judged? Which institutional interventions can promote or prevent it? In this book, psychologists, economists, historians, computer scientists, sociologists, philosophers, and legal scholars explore the scope of deliberate ignorance.

Knowledge is a big subject, says Stuart Firestein, but ignorance is a bigger one. And it is ignorance--not knowledge--that is the true engine of science. Most of us have a false impression of science as a surefire, deliberate, step-by-step method for finding things out and getting things done. In fact, says Firestein, more often than not, science is like looking for a black cat in a dark room, and there may not be a cat in the room. The process is more hit-or-miss than you might imagine, with much stumbling and groping after phantoms. But it is exactly this "not knowing," this puzzling over thorny questions or inexplicable data, that gets researchers into the lab early and keeps them there late, the thing that propels them, the very driving force of science. Firestein shows how scientists use ignorance to program their work, to identify what should be done, what the next steps are, and where they should concentrate their energies. And he includes a catalog of how scientists use ignorance, consciously or unconsciously--a remarkable range of approaches that includes looking for connections to other research, revisiting apparently settled questions, using small questions to get at big ones, and tackling a problem simply out of curiosity. The book concludes with four case histories--in cognitive psychology, theoretical physics, astronomy, and neuroscience--that provide a feel for the nuts and bolts of ignorance, the day-to-day battle that goes on in scientific laboratories and in scientific minds with questions that range from the quotidian to the profound. Turning the conventional idea about science on its head, *Ignorance* opens a new window on the true nature of research. It is a must-read for anyone curious about science.

Plants seldom figure in the grand narratives of war, peace, or even everyday life yet they are often at the center of high intrigue. In the eighteenth century, epic scientific voyages were sponsored by European imperial powers to explore the natural riches of the New World, and uncover the botanical secrets of its people. Bioprospectors brought back medicines, luxuries, and staples for their king and country. Risking their lives to discover exotic plants, these daredevil explorers joined with their sponsors to create a global culture of botany. But some secrets were unearthed only to be lost again. In this moving account of the abuses of indigenous Caribbean people and African slaves, Schiebinger describes how slave women brewed the "peacock flower" into an abortifacient, to ensure that they would bear no children into oppression. Yet, impeded by trade winds of prevailing opinion, knowledge of West Indian abortifacients never flowed into Europe. A rich history of discovery and loss, *Plants and Empire* explores the movement, triumph, and extinction of knowledge in the course of encounters between Europeans and the Caribbean populations.

Ignorance and Moral Obligation concerns whether and how our ignorance about ourselves and our circumstances affects what our moral obligations and moral rights are. Michael J. Zimmerman begins by distinguishing three well-established views about the nature of moral obligation: the Objective, Subjective, and Prospective Views. Some philosophers have attempted to reconcile the three views in question, but these attempts are shown to fail. The question thus arises: which of the three views ought to be accepted and which rejected? Zimmerman argues that, in light of the ignorance that besets us, the Objective and Subjective Views should be rejected and the Prospective View accepted. The argument is based on close consideration of a kind of case provided by Frank Jackson, one in which an agent has deficient evidence regarding the outcomes of his options. Many objections to this argument are entertained and rebutted, by means of which the Prospective View is itself elaborated and defended. Among those who accept the Prospective View, the primary motivation for doing so has often been that of finding a useful guide to action, but Zimmerman argues that the Prospective View can be only of strictly limited help in providing such a guide. Finally, he addresses some implications that the Prospective View has regarding the nature of moral rights. Our possession of moral rights is precarious, being dependent on the evidence possessed by others. Once again, several objections are entertained and rebutted. The distinction between rights and desert is stressed, and the relevance of risk to rights is explored.

By investigating how laws, myths, national aspirations, and global relations have recast and, at times, distorted the key purposes of education, this pathbreaking book sheds light on the role of ignorance in shaping ideas, public opinion, and policy.

Peter Burke follows up his magisterial *Social History of Knowledge*, picking up where the first volume left off around 1750 at the publication of the French *Encyclopédie* and following the story through to Wikipedia. Like the previous volume, it offers a social history (or a retrospective sociology of knowledge) in the sense that it focuses not on individuals but on groups, institutions, collective practices and general trends. The book is divided into 3 parts. The first argues that activities which appear to be timeless - gathering knowledge, analysing, disseminating and employing it - are in fact time-bound and take different forms in different periods and places. The second part tries to counter the tendency to write a triumphalist history of the 'growth' of knowledge by discussing losses of knowledge and the price of specialization. The third part offers geographical, sociological and chronological overviews, contrasting the experience of centres and peripheries and arguing that each of the main trends of the period - professionalization, secularization, nationalization, democratization, etc, coexisted and interacted with its opposite. As ever, Peter Burke presents a breath-taking range of scholarship in prose of exemplary clarity and accessibility. This highly anticipated second volume will be essential reading across the humanities and social sciences.

Proctor lucidly demonstrates how value-neutrality is a reaction to larger political developments, including the use of science by government and industry, the specialization of professional disciplines, and the efforts to stifle intellectual freedoms or to politicize the world of the academy.

John Burnham studies the history of changing patterns in the dissemination, or "popularization," of scientific findings to the general public since 1830. Focusing on three different areas of science -- health, psychology, and the natural sciences -- Burnham explores the ways in which this process of popularization has deteriorated. He draws on evidence ranging from early lyceum lecturers to the new math and argues that today popular science is the functional equivalent of superstition.

An original and provocative exploration of our capacity to ignore what is inconvenient or traumatic Ignorance, whether passive or active, conscious or unconscious, has always been a part of the human condition, Renata Salecl argues. What has changed in our post-truth, postindustrial world is that we often feel overwhelmed by the constant flood of information and misinformation. It sometimes seems impossible to differentiate between truth and falsehood and, as a result, there has been a backlash against the idea of expertise, and a rise in the number of people actively choosing not to know. The dangers of this are obvious, but Salecl challenges our assumptions, arguing that there may also be a positive side to ignorance, and that by addressing the role of ignorance in society, we may also be able to reclaim the role of knowledge. Drawing on philosophy, social and psychoanalytic theory, popular culture, and her own experience, Salecl explores how the passion for ignorance plays out in many different aspects of life today, from love, illness, trauma, and the fear of failure to genetics, forensic science, big data, and the incel movement—and she concludes that ignorance is a complex phenomenon that can, on occasion, benefit individuals and society as a whole. The result is a fascinating investigation of how the knowledge economy became an ignorance economy, what it means for us, and what it tells us about the world today.

From the candy bar to the cigarette, records to roller coasters, a technological revolution during the last quarter of the nineteenth century precipitated a colossal shift in human consumption and sensual experience. Food, drink, and many other consumer goods came to be mass-produced, bottled, canned, condensed, and distilled, unleashing new and intensified surges of pleasure, delight, thrill—and addiction. In *Packaged Pleasures*, Gary S. Cross and Robert N. Proctor delve into an uncharted chapter of American history, shedding new light on the origins of modern consumer culture and how technologies have transformed human sensory experience. In the space of only a few decades, junk foods, cigarettes, movies, recorded sound, and thrill rides brought about a revolution in what it means to taste, smell, see, hear, and touch. New techniques of boxing, labeling, and tubing gave consumers virtually unlimited access to pleasures they could simply unwrap and enjoy. Manufacturers generated a seemingly endless stream of sugar-filled, high-fat foods that were delicious but detrimental to health. Mechanically rolled cigarettes entered the market and quickly addicted millions. And many other packaged pleasures dulled or displaced natural and social delights. Yet many of these same new technologies also offered convenient and effective medicines, unprecedented opportunities to enjoy music and the visual arts, and more hygienic, varied, and nutritious food and drink. For better or for worse, sensation became mechanized, commercialized, and, to a large extent, democratized by being made cheap and accessible. Cross and Proctor have delivered an ingeniously constructed history of consumerism and consumer technology that will make us all rethink some of our favorite things.

An introduction to the new area of ignorance studies that examines how science produces ignorance—both actively and passively, intentionally and unintentionally. We may think of science as our foremost producer of knowledge, but for the past decade, science has also been studied as an important source of ignorance. The historian of science Robert Proctor has coined the term agnotology to refer to the study of ignorance, and much of the ignorance studied in this new area is produced by science. Whether an active or passive construct, intended or unintended, this ignorance is, in Proctor's words, "made, maintained, and manipulated" by science. This volume examines forms of scientific ignorance and their consequences. A dialogue between Proctor and Peter Galison offers historical context, presenting the concerns and motivations of pioneers in the field. Essays by leading historians and philosophers of science examine the active construction of ignorance by biased design and interpretation of experiments and empirical studies, as seen in the "false advertising" by climate change deniers; the "virtuous" construction of ignorance—for example, by curtailing research on race- and gender-related cognitive differences; and ignorance as the unintended by-product of choices made in the research process, when rules, incentives, and methods encourage an emphasis on the beneficial

and commercial effects of industrial chemicals, and when certain concepts and even certain groups' interests are inaccessible in a given conceptual framework. Contributors Martin Carrier, Carl F. Cranor, Peter Galison, Paul Hoyningen-Huene, Philip Kitcher, Janet Kourany, Hugh Lacey, Robert Proctor, Londa Schiebinger, Miriam Solomon, Torsten Wilholt

Tampa Tribune columnist Derek Maul speaks from the heart about his own journey to become a true "Jesus-follower" in a post-Christian world. "This life is far too important not to embrace it with absolutely every ounce of enthusiasm we can muster," writes Maul in the introduction. Our walk with Christ is best experienced as an ongoing journey, he says. We can't expect to have a meaningful life if we're living only as part-time Christians. Maul challenges you to forget about being a part-time Christian. Following Jesus is a full-time, day-to-day process, and it's much more about the expedition rather than the final destination. So "no more part-time Christian. No more clocking in and out of this life. Living in the kingdom must challenge our perspective," Maul says. What's stopping you from jumping in feet first and giving your all to follow Jesus?

Over the last half century scholars from a range of disciplines have attempted to theorise silence. Naively we tend to think of silence negatively, as a lack, an emptiness. Yet silence studies shows that silence is more than mere absence. All speech incorporates silence, not only in the gaps between words or the pauses that facilitate turn taking, but in the omissions that result from the necessary selectivity of communicative acts. Thus silence is significant in and of itself; it is a sign that has socially-constructed (albeit context-dependent and ambiguous) meanings. To date, studies of science communication have focussed on what is said rather than what is not said. They have highlighted the content of communication rather than its form, and have largely ignored the gaps, pauses and lacunae that are an essential, and meaningful, part of any communicative act. Both the sociology of science and the history of science have also failed to highlight the varied functions of silence in the practice of science, despite interests in tacit knowledge and cultures of secrecy. Through a range of case studies from historical and contemporary situations, this volume draws attention to the significance of silence, its different qualities and uses, and the nature, function and meaning of silence for science and technology studies.

Concerns about people's resistance to facts and knowledge are becoming increasingly serious. This book draws on the social, economic and evolutionary sciences to provide an integrated understanding of the phenomenon.

In the natural course of events, humans fall sick and die. The history of medicine bristles with attempts to find new and miraculous remedies, to work with and against nature to restore humans to health and well-being. In this book, Londa Schiebinger examines medicine and human experimentation in the Atlantic World, exploring the circulation of people, disease, plants, and knowledge between Europe, Africa, and the Americas. She traces the development of a colonial medical complex from the 1760s, when a robust experimental culture emerged in the British and French West Indies, to the early 1800s, when debates raged about banning the slave trade and, eventually, slavery itself. Massive mortality among enslaved Africans and European planters, soldiers, and sailors fueled the search for new healing techniques. Amerindian, African, and European knowledges competed to cure diseases emerging from the collision of peoples on newly established, often poorly supplied, plantations. But not all knowledge was equal. Highlighting the violence and fear endemic to colonial struggles, Schiebinger explores aspects of African medicine that were not put to the test, such as Obeah and vodou. This book analyzes how and why specific knowledges were blocked, discredited, or held secret.

Henry A. Giroux argues that education holds a crucial role in shaping politics at a time when ignorance, lies and fake news have empowered right-wing groups and created deep divisions in society. Education, with its increasingly corporate and conservative-based technologies, is partly responsible for creating these division. It contributes to the pitting of people against each other through the lens of class, race, and any other differences that don't embrace White nationalism. Giroux's analysis ranges from the pandemic and the inequality it has revealed, to the rise of Trumpism and its afterlife, and to the work of Paulo Freire and how his book Pedagogy of Hope can guide us in these dark times and help us produce critical and informed citizens. He argues that underlying the current climate of inequity, isolation, and social atomization (all exacerbated by the pandemic) is a crisis of education. Out of this comes the need for a pedagogy of resistance that is accessible to everyone, built around a vision of hope for an alternative society rooted in the ideals of justice, equality, and freedom.

Written by a highly regarded historian of science, this meticulously researched, eminently fair, and very provocative book attempts to answer the question: Why, given all the time and money spent on cancer research, can't we get consistent answers to the most fundamental questions about prevention and treatment?

Offering a wide variety of philosophical approaches to the neglected philosophical problem of ignorance, this groundbreaking collection builds on Charles Mills's claim that racism involves an inverted epistemology, an epistemology of ignorance. Contributors, explore how different forms of ignorance linked to race are produced and sustained and what role they play in promoting racism and white privilege. They argue that the ignorance that underpins racism is not a simple gap in knowledge, the accidental result of an epistemological oversight. In the case of racial oppression, ignorance often is actively produced for purposes of domination and exploitation. But as these essays demonstrate, ignorance is not simply a tool of oppression wielded by the powerful. It can also be a strategy for survival, an important tool for people of color to wield against white privilege and white supremacy. The book concludes that understanding ignorance and the politics of such ignorance should be a key element of epistemological and social/political analyses, for it has the potential to reveal the role of power in the construction of what is known and provide a lens for the political values at work in knowledge practices. Book jacket.

This book explores the epistemic side of racial and sexual oppression. It elucidates how social insensitivities and imposed silences prevent members of different groups from

listening to each other.

The lack of public support for climate change policies and refusals to vaccinate children are just two alarming illustrations of the impacts of dissent about scientific claims. Dissent can lead to confusion, false beliefs, and widespread public doubt about highly justified scientific evidence. Even more dangerously, it has begun to corrode the very authority of scientific consensus and knowledge. Deployed aggressively and to political ends, some dissent can intimidate scientists, stymie research, and lead both the public and policymakers to oppose important public policies firmly rooted in science. To criticize dissent is, however, a fraught exercise. Skepticism and fearless debate are key to the scientific process, making it both vital and incredibly difficult to characterize and identify dissent that is problematic in its approach and consequences. Indeed, as de Melo-Martín and Intemann show, the criteria commonly proposed as means of identifying inappropriate dissent are flawed and the strategies generally recommended to tackle such dissent are not only ineffective but could even make the situation worse. The Fight Against Doubt proposes that progress on this front can best be achieved by enhancing the trustworthiness of the scientific community and by being more realistic about the limits of science when it comes to policymaking. It shows that a richer understanding of the context in which science operates is needed to disarm problematic dissent and those who deploy it. This, the authors argue, is the best way forward, rather than diagnosing the many instances of wrong-headed dissent.

"Somewhere between Sex and the City, Sharon Olds and Spalding Grey lies the poetry of Denise Duhamel, who in six volumes during the 1990s (all from small independent or small university presses) established herself as a vivacious, sarcastic, uninhibited and sometimes sex-obsessed observer of contemporary culture. Long fascinated by downtown New York, Duhamel got poetic mileage from her once-rough neighborhoods. Now she lives and teaches in Miami: this new-and-selected sums up her NYC years . . . Its humor, anger and forceful personality could make the book a genuine popular hit." --Publishers Weekly "Duhamel is an entertainer, as her new, retrospective collection confirms. . . . Throughout the book, each poem is utterly engaging, as hard to abandon as a chapter in a taut thriller." --Booklist Celebrates ideas and topics that aren't often the subject of bards and poets. Her playful, inventive way of string together ideas is evident. . . . Despite the frolicsome nature of much of her work, Duhamel writes incisively about serious themes and issues. The clash between high and low art never seems abraisive in Duhamel's work." --Pittsburgh Tribune- Review "Duhamel writes about Garcia-Lorca's Deli, Georgia O'Keefe's pelvis, a Barbie Doll in a Twelve-Step Program, Barbie as a Bisexual, Barbie's GYN appointment, and the difference between Pepsi and the Pope. . . . If you like knee-slapping, quasi-existential poetry, go out and pick up a Queen for a Day." --RALPH: The Review of Arts, Literature, Philosophy, and the Humanities "Engagingly charts her evolution as a fictionist-from ribald, bemused poems about body parts and coming of age dramas to increasingly sophisticated mock-narratives. Her work is tremendous fun, but often there's an underpinning of sadness in it as well, which keeps the poems from being mere play. You'll want to read parts of this book aloud to your smart friends. Or to give it as a gift." --Stephen Dunn "Denise Duhamel is a red-headed, red-lipped wild woman, a human and humane poet who isn't afraid to tackle any subject: violence, racism, A.I.D.S., bulimia, childishness, the myth of Bluebeard, the phenomenon of Barbie. It's been a singular joy to read this "selected" and see Duhamel's work grow and develop over the years. Queen for a Day is exuberant, brazen, bold, honest as hell, audaciously unpretentious and outrageously self-referential, a Frank O'Hara meets Lucille Ball meets Sandra Bernhard of a book: sin verguenza!" --Dorianne Laux Denise Duhamel's Queen for a Day includes poems from her five previous full-length books (The Star-Spangled Banner, Kinky, Girl Soldier, The Woman with Two Vaginas, and Smile!) as well as her chapbook, How the Sky Fell. Her poems have been anthologized widely, including four editions of The Best American Poetry. Her work has been featured on NPR's "All Things Considered," MPR's "The Writers' Almanac," and PBS's "Fooling with Words." She has collaborated with the poet Maureen Seaton in two volumes: Oyl and Exquisite Politics. Duhamel is assistant professor at Florida International University in Miami.

An exploration of what we can know about what we don't know: why ignorance is more than simply a lack of knowledge. Ignorance is trending. Politicians boast, "I'm not a scientist." Angry citizens object to a proposed state motto because it is in Latin, and "This is America, not Mexico or Latin America." Lack of experience, not expertise, becomes a credential. Fake news and repeated falsehoods are accepted and shape firm belief. Ignorance about American government and history is so alarming that the ideal of an informed citizenry now seems quaint. Conspiracy theories and false knowledge thrive. This may be the Information Age, but we do not seem to be well informed. In this book, philosopher Daniel DeNicola explores ignorance—its abundance, its endurance, and its consequences. DeNicola aims to understand ignorance, which seems at first paradoxical. How can the unknown become known—and still be unknown? But he argues that ignorance is more than a lack or a void, and that it has dynamic and complex interactions with knowledge. Taking a broadly philosophical approach, DeNicola examines many forms of ignorance, using the metaphors of ignorance as place, boundary, limit, and horizon. He treats willful ignorance and describes the culture in which ignorance becomes an ideological stance. He discusses the ethics of ignorance, including the right not to know, considers the supposed virtues of ignorance, and concludes that there are situations in which ignorance is morally good. Ignorance is neither pure nor simple. It is both an accusation and a defense ("You are ignorant!" "Yes, but I didn't know!"). Its practical effects range from the inconsequential to the momentous. It is a scourge, but, DeNicola argues daringly, it may also be a refuge, a value, even an accompaniment to virtue.

Collaboration in the Holocaust. Murderous and torturous medical experiments. The "euthanasia" of hundreds of thousands of people with mental or physical disabilities. Widespread sterilization of "the unfit." Nazi doctors committed these and countless other atrocities as part of Hitler's warped quest to create a German master race. Robert Proctor recently made the explosive discovery, however, that Nazi Germany was also decades ahead of other countries in promoting health reforms that we today regard as progressive and socially responsible. Most startling, Nazi scientists were the first to definitively link lung cancer and cigarette smoking. Proctor explores the controversial and troubling questions that such findings raise: Were the Nazis more complex morally than we thought? Can good science come from an evil regime? What might this reveal about health activism in our own society? Proctor argues that we must view

Hitler's Germany more subtly than we have in the past. But he also concludes that the Nazis' forward-looking health activism ultimately came from the same twisted root as their medical crimes: the ideal of a sanitary racial utopia reserved exclusively for pure and healthy Germans. Author of an earlier groundbreaking work on Nazi medical horrors, Proctor began this book after discovering documents showing that the Nazis conducted the most aggressive antismoking campaign in modern history. Further research revealed that Hitler's government passed a wide range of public health measures, including restrictions on asbestos, radiation, pesticides, and food dyes. Nazi health officials introduced strict occupational health and safety standards, and promoted such foods as whole-grain bread and soybeans. These policies went hand in hand with health propaganda that, for example, idealized the Führer's body and his nonsmoking, vegetarian lifestyle. Proctor shows that cancer also became an important social metaphor, as the Nazis portrayed Jews and other "enemies of the Volk" as tumors that must be eliminated from the German body politic. This is a disturbing and profoundly important book. It is only by appreciating the connections between the "normal" and the "monstrous" aspects of Nazi science and policy, Proctor reveals, that we can fully understand not just the horror of fascism, but also its deep and seductive appeal even to otherwise right-thinking Germans.

In recent political debates there has been a significant change in the valence of the word "experts" from a superlative to a near pejorative, typically accompanied by a recitation of experts' many failures and misdeeds. In topics as varied as Brexit, climate change and vaccinations there is a palpable mistrust of experts and a tendency to dismiss their advice. Are we witnessing, therefore, the "death of expertise," or is the handwringing about an "assault on science" merely the hysterical reaction of threatened elites? In this new book, Gil Eyal argues that what needs to be explained is not a one-sided "mistrust of experts" but the two-headed pushmi-pullyu of unprecedented reliance on science and expertise, on the one hand, coupled with increased suspicion, skepticism and dismissal of scientific findings, expert opinion or even whole branches of investigation, on the other. The current mistrust of experts, Eyal argues, is best understood as one more spiral in an on-going, recursive crisis of legitimacy. The "scientization of politics," of which critics warned in the 1960s, has brought about a politicization of science, specifically of regulatory and policy science, and the two processes reinforce one another in an unstable, crisis-prone mixture. Eyal demonstrates that the strategies designed to respond to the crisis - from an increased emphasis on inclusion of laypeople and stakeholders in scientific research and regulatory decision-making to approaches seeking to generate trust by relying on objective procedures such as randomized controlled trials (RCTs) - end up exacerbating the crisis, while undermining and contradicting one another. This timely book will be of great interest to students and scholars in the social sciences and to anyone concerned about the political uses of, and attacks on, scientific knowledge and expertise.

Winner of the Ludwik Fleck Book Prize, Society for Social Studies of Science, 1995 "Schiebinger lays bare the cultural narratives that mix so easily with science. They are at the same time hilarious and eerie, silly and profoundly disturbing. Schiebinger is brilliant in showing how tales of gender and race are told in other guises."--Thomas Laqueur, author of *Making Sex: Body and Gender from the Greeks to Freud* "[Nature's Body] is so wonderfully humorous and is done with such careful attention to detail, the reader cannot help but see the profound implications of the history of science for modern science. Indispensable for all anthropologists, historians, philosophers, and practitioners of science."--Emily Martin, author of *The Woman in the Body* Eighteenth-century natural historians created a peculiar, and peculiarly durable, vision of nature--one that embodied the sexual and racial tensions of that era. When plants were found to reproduce sexually, eighteenth-century botanists ascribed to them passionate relations, polyandrous marriages, and suicidal incest, and accounts of steamy plant sex began to infiltrate the botanical literature of the day. Naturalists also turned their attention to the great apes just becoming known to eighteenth-century Europeans, clothing the females in silk vestments and training them to sip tea with the modest demeanor of English matrons, while imagining the males of the species fully capable of ravishing women. Written with humor and meticulous detail, *Nature's Body* draws on these and other examples to uncover the ways in which assumptions about gender, sex, and race have shaped scientific explanations of nature. Schiebinger offers a rich cultural history of science and a timely and passionate argument that science must be restructured in order to get it right.

Sums up the many fields of study where ignorance can undermine our understanding, while showing how an awareness of ignorance can lead to exploration and the discovery of new knowledge. The flip side of knowledge is ignorance. This book explores the vast scope of ignorance, even in an age when we think we know more than ever before. By marking off this ocean of ignorance into manageable categories, the author provides a kind of navigational chart to the unknown, and a series of red flags to all those who claim certitude. The book first lays out the many branches of ignorance--in education, the media, politics, religion, science, and other major institutions. It then assesses the costs and consequences of that ignorance. World conflicts, endemic poverty, environmental damage, waste, racism, and the manipulative forces of industry and politics that use propaganda to manipulate the public may all be seen as rooted in ignorance. But there are positive aspects of ignorance as well. Scientists and artists, by recognizing what they don't know, are spurred on to new creative approaches and discoveries, which would never be found by those too comfortable with the tried and true. The author cites Socrates, whom the Delphic Oracle declared to be the wisest of all people simply because he realized how much he didn't know. This book gives you ways to follow in the path that Socrates forged, to counter the closed minds whose false sense of certainty cannot help but distort reality, and to be better prepared to take on even the most serious challenges of today.

The cigarette is the deadliest artifact in the history of human civilization. It is also one of the most beguiling, thanks to more than a century of manipulation at the hands of tobacco industry chemists. In *Golden Holocaust*, Robert N. Proctor draws on reams of formerly-secret industry documents to explore how the cigarette came to be the most widely-used drug on the planet, with six trillion sticks sold per year. He paints a harrowing picture of tobacco manufacturers conspiring to block the recognition of tobacco-cancer hazards, even as they ensnare legions of scientists and politicians in a web of denial. Proctor tells heretofore untold stories of fraud and subterfuge, and he makes the strongest case to date for a simple yet ambitious remedy: a ban on the manufacture and sale of cigarettes.

The question of ignorance occupies a central place in anthropological theory and practice. This volume argues that the concept of ignorance has largely been pursued as the opposite of knowledge or even its obverse. Though they cover wide empirical ground - from clients of a fertility treatment center in New York to families grappling with suicide in Greenland - contributors share a commitment to understanding the concept as a productive, social practice. Ultimately, *The Anthropology of Ignorance* asks whether an academic commitment to knowledge can be squared with lived significance of ignorance and how taking it seriously might alter anthropological research practices.

Information is crucial when it comes to the management of resources. But what if knowledge is incomplete, or biased, or otherwise deficient? How did people define patterns of proper use in the absence of cognitive certainty? Discussing this challenge for a diverse set of resources from fish to rubber, these essays show that deficient knowledge is a far more pervasive challenge in resource history than conventional readings suggest. Furthermore, environmental ignorance does not inevitably shrink with the march of scientific progress: these essays suggest more of a dialectical relationship between knowledge and ignorance that has different shapes and trajectories. With its combination of empirical case studies and theoretical reflection, the essays make a significant contribution to the interdisciplinary debate on the production and resilience of ignorance. At the same time, this volume combines insights from different continents as well as the seas in between and thus sketches outlines of an emerging global resource history.

Deliberate ignorance has been known as the 'Ostrich Instruction' in law courts since the 1860s. It illustrates a recurring pattern in history in which figureheads for major companies, political leaders and industry bigwigs plead ignorance to avoid culpability. So why do so many figures at the top still get away with it when disasters on their watch damage so many people's lives? Does the idea that knowledge is power still apply in today's post-truth world? A bold, wide-ranging exploration of the relationship between ignorance and power in the modern age, from debates over colonial power and economic rent-seeking in the 18th and 19th centuries to the legal defences of today, *The Unknowers* shows that strategic ignorance has not only long been an inherent part of modern power and big business, but also that true power lies in the ability to convince others of where the boundary between ignorance and knowledge lies.

In the first comprehensive exploration of the history and practice of folk medicine in the Appalachian region, Anthony Cavender melds folklore, medical anthropology, and Appalachian history and draws extensively on oral histories and archival sources from the nineteenth century to the present. He provides a complete tour of ailments and folk treatments organized by body systems, as well as information on medicinal plants, patent medicines, and magico-religious beliefs and practices. He investigates folk healers and their methods, profiling three living practitioners: an herbalist, a faith healer, and a Native American healer. The book also includes an appendix of botanicals and a glossary of folk medical terms. Demonstrating the ongoing interplay between mainstream scientific medicine and folk medicine, Cavender challenges the conventional view of southern Appalachia as an exceptional region isolated from outside contact. His thorough and accessible study reveals how Appalachian folk medicine encompasses such diverse and important influences as European and Native American culture and America's changing medical and health-care environment. In doing so, he offers a compelling representation of the cultural history of the region as seen through its health practices.

Agnotology The Making and Unmaking of Ignorance

The first edition of Nel Noddings' *Philosophy of Education* was acclaimed as the 'best overview in the field' by the journal *Teaching Philosophy* and predicted to 'become the standard textbook in philosophy of education' by *Educational Theory*. This classic text, originally designed to give the education student a comprehensive look at philosophical thought in relation to teaching, learning, research, and educational policy, has now been updated to reflect the most current thinking in the field. A revised chapter on Logic and Critical Thinking makes the topic more accessible to students and examines how critical thinking plays a role in light of the new Common Core standards. *Philosophy of Education* introduces students to the evolution of educational thought, from the founding fathers to contemporary theorists, with consideration of both analytic and continental traditions. This is an essential text not only for teachers and future teachers, but also for anyone needing a survey of contemporary trends in philosophy of education.

Historically, there has been great deliberation about the limits of human knowledge. Isaac Newton, recognizing his own shortcomings, once described himself as "a boy standing on the seashore . . . whilst the great ocean of truth lay all underscored before me." In *Ignorance*, Nicholas Rescher presents a broad-ranging study that examines the manifestations, consequences, and occasional benefits of ignorance in areas of philosophy, scientific endeavor, and ordinary life. Citing philosophers, theologians, and scientists from Socrates to Steven Hawking, Rescher seeks to uncover the factors that hinder our cognition. Rescher categorizes ignorance as ontologically grounded (rooted in acts of nature-erasure, chaos, and chance-that prevent fact determination), or epistemically grounded (the inadequacy of our information-securing resources). He then defines the basis of ignorance: inaccessible data; statistical fogs; secreted information; past data that have left no trace; future discoveries; future contingencies; vagrant predicates; and superior intelligences. Such impediments set limits to inquiry and mean that while we can always extend our existing knowledge-variability here is infinite-there are things that we will never know. Cognitive finitude also hinders our ability to assimilate more than a certain number of facts. We may acquire additional information, but lack the facility to interpret it. More information does not always increase knowledge; it may point us further down the path toward an erroneous conclusion. In light of these deficiencies, Rescher looks to the role of computers in solving problems and expanding our knowledge base, but finds limits to their reasoning capacity. As Rescher's comprehensive study concludes, ignorance itself is a fertile topic for knowledge, and recognizing the boundaries of our comprehension is where wisdom begins.

"This volume emerged from workshops held at Pennsylvania State University in 2003 and Stanford University in 2005"--P. vii.

The online version of *Keywords in Radical Geography: Antipode* at 50 is free to download here. Alternatively, print copies can be purchased for just GB£7 / US\$10 here.

***** To celebrate *Antipode's* 50th anniversary, we've brought together 50 short keyword essays by a range of scholars at varying career stages who all, in some way, have some kind of affinity with *Antipode's* radical geographical project. The entries in this volume are diverse, eclectic, and to an extent random, however they all speak to our discipline's past, present and future in exciting and suggestive ways Contributors have taken unusual or novel terms, concepts or sets of ideas important to their research, and their essays discuss them in relation to radical and critical geography's histories, current condition and possible future directions This fractal, playful and provocative intervention in the field stands as a fitting testimony to the role that *Antipode* has played in the generation of radical geographical engagement with the world

Once treated as the absence of knowledge, ignorance today has become a highly influential topic in its own right, commanding growing attention across the natural and social sciences where a wide range of scholars have begun to explore the social life and political issues involved in the distribution and strategic use of not knowing. The field is growing fast and this handbook reflects this interdisciplinary field of study by drawing contributions from economics, sociology, history, philosophy, cultural studies, anthropology, feminist studies, and related fields in order to serve as a seminal guide to the political, legal and social uses of ignorance in social and political life. Chapter 33 of this book is freely available as a downloadable Open Access PDF under a Creative Commons Attribution-Non Commercial-No Derivatives 4.0 license available here: https://tandfbis.s3-us-west-2.amazonaws.com/rt-files/docs/Open+Access+Chapters/9780415718967_oachapter33.pdf

[Copyright: 286dd469e7ef39ad23bccb715887088f](https://doi.org/10.1080/286dd469e7ef39ad23bccb715887088f)