

bruno latour science in action

Bruno Latour Science in Action: Unveiling the Dynamics of Scientific Knowledge

bruno latour science in action is a pivotal concept in the sociology of science, offering a fresh perspective on how scientific knowledge is constructed, validated, and disseminated. Bruno Latour, a renowned French philosopher and sociologist, revolutionized the way we understand science by moving beyond the traditional view of science as a mere collection of facts. Instead, he introduced a dynamic framework that highlights the intricate processes, negotiations, and networks involved in scientific practice. If you've ever wondered how scientific discoveries really come to life, Latour's groundbreaking work provides an eye-opening roadmap.

The Core of Bruno Latour's Science in Action

At its heart, Bruno Latour's "Science in Action" challenges the notion that scientific facts exist independently of human activity. He argues that science is not just about uncovering universal truths but is deeply embedded in social, political, and technical contexts. The title itself captures this essence: science is something that happens, an ongoing action rather than a fixed body of knowledge.

Science as a Constructed Process

Latour invites us to look behind the polished results of scientific research and observe the messy, often contentious process that leads to those results. He emphasizes that scientific facts are constructed through a series of interactions involving researchers, instruments, experiments, and even non-human actors like machines and technologies. This approach demystifies science and presents it as a vibrant, ever-evolving practice.

Actor-Network Theory (ANT): The Backbone of Science in Action

One of Latour's significant contributions is the development of Actor-Network Theory, which is closely tied to the ideas in Science in Action. ANT views both human and non-human entities—scientists, laboratories, instruments, texts—as "actors" in a network that co-produce scientific knowledge. This theory breaks down the traditional hierarchy that places humans at the center, showing how objects and technologies actively participate in shaping scientific outcomes.

Exploring the Laboratory: Where Science Comes to Life

Latour's ethnographic studies of scientific laboratories provide vivid

examples of Science in Action. By spending time inside labs, he revealed the daily routines, negotiations, and problem-solving activities that underpin scientific progress.

From Hypothesis to Fact

In the lab, hypotheses are tested through experiments, but this process is far from straightforward. Instruments may malfunction, data can be ambiguous, and interpretations often vary among researchers. According to Latour, the journey from hypothesis to established fact involves convincing others—peers, funders, and the broader scientific community—that the evidence is reliable. This social dimension is critical to understanding how scientific knowledge gains legitimacy.

The Role of Controversies

Latour also highlights that scientific controversies are not signs of weakness but essential moments in Science in Action. Disputes over data, methods, or interpretations push scientists to refine their work and strengthen the credibility of their findings. These debates showcase science as a dynamic dialogue rather than a static set of truths.

Why Bruno Latour's Perspective Matters Today

In an era where science plays a crucial role in addressing global challenges—from climate change to public health—understanding the complexities behind scientific knowledge is more important than ever. Bruno Latour's Science in Action offers valuable insights that help bridge the gap between scientific communities and the public.

Enhancing Science Communication

One practical takeaway from Latour's work is the importance of transparent science communication. Recognizing that scientific facts are the result of complex processes encourages communicators to share not only findings but also the uncertainties and debates involved. This approach fosters trust and helps combat misinformation.

Implications for Science Policy

Policy-makers benefit from appreciating the networked nature of science. Decisions based on scientific advice should consider the social and technical contexts in which that advice is generated. Latour's framework encourages policies that support collaborative research environments, robust peer review, and the integration of diverse expertise.

Applying Science in Action Beyond Academia

While Bruno Latour's theories originated within the sociology of science, their applications extend far beyond academic circles.

Technology Development and Innovation

In technology sectors, understanding Science in Action can improve innovation processes. By acknowledging the interplay between human actors and technological artifacts, organizations can foster environments where experimentation, feedback, and iterative design lead to more effective outcomes.

Environmental and Social Movements

Latour's insights also resonate with environmental activism and social justice movements. They reveal how scientific knowledge is intertwined with power relations and societal values, encouraging activists to engage critically with science and technology.

Key Concepts to Remember from Bruno Latour's Science in Action

To better grasp the depth of Latour's work, consider these essential concepts:

- **Black Boxing:** The process by which scientific facts become accepted and taken for granted, hiding the messy work behind the scenes.
- **Translation:** The negotiation process through which actors align their interests to produce shared knowledge.
- **Inscription Devices:** Tools and technologies that record and represent scientific data, shaping how information is perceived.
- **Networks:** The interconnected web of humans and non-humans collaborating to produce scientific outcomes.

Understanding these ideas enriches our appreciation of how science functions in practice.

Bruno Latour's Science in Action opens a window into the lively, complex world of scientific work, transforming our view from seeing science as a collection of immutable truths to recognizing it as a vibrant, negotiated, and socially embedded activity. This perspective not only deepens our understanding of scientific knowledge but also empowers us to engage more thoughtfully with the science shaping our world.

Frequently Asked Questions

What is the main focus of Bruno Latour's book 'Science in Action'?

Bruno Latour's 'Science in Action' focuses on the processes and practices involved in the production of scientific knowledge, emphasizing that science is a dynamic and social activity rather than a linear accumulation of facts.

How does Bruno Latour describe the role of scientists in 'Science in Action'?

In 'Science in Action,' Latour portrays scientists as actors engaged in a network of social, technical, and political negotiations, where they must persuade others and build alliances to establish scientific facts.

What is the concept of 'black boxing' in Bruno Latour's 'Science in Action'?

The concept of 'black boxing' in 'Science in Action' refers to the process by which scientific facts and technologies become accepted and taken for granted, hiding the complex work and controversies behind their production.

How does 'Science in Action' challenge traditional views of scientific knowledge?

'Science in Action' challenges the traditional view that scientific knowledge is objective and purely rational by highlighting the contingent, negotiated, and socially constructed nature of scientific facts.

What methodological approach does Bruno Latour use in 'Science in Action'?

Latour employs a sociological and ethnographic approach in 'Science in Action,' following scientists in their daily work to reveal how scientific knowledge is constructed through networks of human and non-human actors.

Why is 'Science in Action' considered influential in Science and Technology Studies (STS)?

'Science in Action' is influential in STS because it provides a detailed analysis of the construction of scientific knowledge, introducing key concepts like actor-network theory and emphasizing the performative aspects of science.

Additional Resources

Bruno Latour *Science in Action: Exploring the Dynamics of Scientific Practice*

bruno latour science in action represents a seminal contribution to the sociology of science, profoundly reshaping how scholars and practitioners

understand the processes behind scientific knowledge production. This influential work, authored by the French philosopher and sociologist Bruno Latour, challenges traditional notions of science as a purely objective and linear pursuit, instead revealing the complex, negotiated, and socially embedded nature of scientific work. By dissecting the day-to-day activities and interactions within laboratories, Latour offers an intricate portrayal of how scientific facts are constructed, stabilized, and maintained in the face of skepticism and competing interests.

Bruno Latour's approach diverges from conventional epistemology by emphasizing the "action" behind science—the networks of human and non-human actors, instruments, texts, and social contexts that collectively shape scientific outcomes. His insights have become foundational in Science and Technology Studies (STS), making "Science in Action" a critical text not only for sociologists but also for historians, philosophers, and scientists keen to explore the realities of scientific practice beyond idealized narratives.

Understanding the Core Concepts of Science in Action

At the heart of Bruno Latour's "Science in Action" lies the idea that scientific knowledge is not simply discovered but actively constructed. This construction involves a dynamic process where facts are not self-evident truths but outcomes of negotiations, trials, and validations within a network. Latour introduces the metaphor of "black boxing" to explain how once scientific facts become accepted, their origins and the complexity of their development are obscured, making the knowledge appear stable and unquestionable.

Latour's ethnographic studies focus on laboratory environments where scientific work unfolds in real-time. He highlights the importance of instruments, experiments, and communication practices, showing that these are not passive tools but active participants in shaping scientific results. By tracing how controversies and uncertainties are managed, "Science in Action" illustrates that science is contingent, involving persuasion, alliances, and sometimes power struggles.

The Actor-Network Theory and Its Role in Science in Action

One of the pivotal frameworks underpinning Latour's analysis is Actor-Network Theory (ANT), co-developed by Latour himself. ANT posits that both human and non-human entities—scientists, instruments, institutions, texts—are actors within a network influencing the production of knowledge. In "Science in Action," this theory is applied to uncover how these actors interact symbiotically.

This perspective differs from traditional sociological theories that often prioritize human agency exclusively. Instead, ANT acknowledges the agency of technological artifacts and scientific apparatuses, viewing them as integral to the network's stability and function. For example, a laboratory instrument is not merely a passive device but an active agent that shapes what can be observed and validated.

Demystifying the Scientific Process: From “Black Box” to Open Debate

Latour’s concept of the “black box” is crucial for understanding how scientific facts gain credibility. When a scientific claim becomes widely accepted, the detailed process of its production becomes hidden inside this black box, allowing others to use the knowledge without questioning its foundation. This process of black boxing transforms provisional knowledge into seemingly immutable facts.

However, Latour emphasizes that before black boxing occurs, science is a contentious, open-ended enterprise. Scientists engage in rigorous debate, experimentation, and negotiation to establish the legitimacy of their claims. “Science in Action” captures this fluid phase, illustrating that scientific certainty is contingent on social validation and continuous testing.

Bruno Latour Science in Action in Contemporary Contexts

The relevance of “Science in Action” extends far beyond its original publication in 1987. In today’s era of rapid technological advancement and complex global challenges, Latour’s insights into the social dimensions of science provide valuable tools for critical analysis. Whether in climate science, biomedical research, or artificial intelligence, the recognition that scientific knowledge is produced through networks of actors helps to better understand controversies, public skepticism, and policy implications.

Applications in Science Communication and Public Engagement

One of the practical implications of Latour’s work lies in science communication. Traditional models that present science as a monolithic body of facts fail to account for the messy realities of scientific practice. By acknowledging the “action” inherent in science, communicators can foster more transparent dialogues about uncertainty, the role of expertise, and the social processes behind scientific claims.

This approach is especially pertinent in addressing misinformation and distrust in science. Understanding that scientific knowledge is provisional and socially negotiated can encourage more nuanced public engagement strategies that respect diverse perspectives while maintaining rigorous standards of evidence.

Challenges and Critiques of Latour’s Framework

While “Science in Action” has been widely influential, it has also faced critiques. Some scholars argue that Latour’s emphasis on networks and symmetry between human and non-human actors risks downplaying the material realities and power imbalances present in scientific institutions. Others contend that the relativistic tone in some interpretations of ANT could

undermine the authority of scientific facts in policy debates.

Nevertheless, these critiques often serve to refine rather than reject Latour's contributions. The ongoing dialogue highlights the complexity of balancing a descriptive account of scientific practice with normative concerns about truth, objectivity, and societal impact.

Key Features and Contributions of Science in Action

- **Ethnographic Insight:** Latour's detailed observations in laboratories reveal the nuanced activities that constitute scientific work.
- **Actor-Network Theory:** The framework integrates both human and non-human actors as essential participants in knowledge production.
- **Black Boxing Concept:** Explains how scientific facts become stabilized and taken for granted over time.
- **Focus on Controversy:** Highlights the provisional and negotiated nature of scientific claims before they are accepted.
- **Interdisciplinary Impact:** Influences fields ranging from sociology and philosophy to science communication and policy studies.

Bruno Latour's "Science in Action" remains a cornerstone in understanding the complexities of scientific practice. By peeling back the layers of what is often perceived as straightforward discovery, Latour invites us to appreciate the social, technical, and political dimensions embedded in the making of scientific knowledge. This perspective continues to resonate in a world where science plays a pivotal role in shaping public life and addressing urgent global issues.

Bruno Latour Science In Action

bruno latour science in action: Science in Action Bruno Latour, 1987 From weaker to stronger rhetoric : literature - Laboratories - From weak points to strongholds : machines - Insiders out - From short to longer networks : tribunals of reason - Centres of calculation.

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problem-solving activity. An innovative contribution to the literature on technological change, this ambitious book will also be valuable for those interested in such practical applications as understanding the process of technology transfer.

bruno latour science in action: *Reinventing Biology* Lynda I. A. Birke, Ruth Hubbard, 1995
Much more than a book about animal welfare, it explores how the scientific questions and answers would be different if biology operated from a paradigm of respect for the objects of study. Thirteen contributions are arranged in four distinct sections; individual topics vary extensively but each is first-rate. --Choice Ruth Hubbard and Lynda Birke have asked an important question: how would the practices of biology change if organisms were considered subjects with agency? They have gathered an array of excellent scholars and a broad spectrum of perspectives.... this is a fresh and important question. --Londa Schiebinger *Essays* explore how the practice of biology could change if scientists treated the organisms they use in their experiments respectfully: what it means to raise animals or plants as experimental resources; what guides decisions about which animals to breed for experimental purposes.

bruno latour science in action: *Science in Action* Bruno Latour, 2003

bruno latour science in action: *Geography and Revolution* David N. Livingstone, Charles W. J. Withers, 2010-08-15 A term with myriad associations, revolution is commonly understood in its intellectual, historical, and sociopolitical contexts. Until now, almost no attention has been paid to revolution and questions of geography. *Geography and Revolution* examines the ways that place and space matter in a variety of revolutionary situations. David N. Livingstone and Charles W. J. Withers assemble a set of essays that are themselves revolutionary in uncovering not only the geography of revolutions but the role of geography in revolutions. Here, scientific revolutions—Copernican, Newtonian, and Darwinian—ordinarily thought of as placeless, are revealed to be rooted in specific sites and spaces. Technical revolutions—the advent of print, time-keeping, and photography—emerge as inventions that transformed the world's order without homogenizing it. Political revolutions—in France, England, Germany, and the United States—are notable for their debates on the nature of political institutions and national identity. Gathering insight from geographers, historians, and historians of science, *Geography and Revolution* is an invitation to take the where as seriously as the who and the when in examining the nature, shape, and location of revolutions.

bruno latour science in action: *Literary Culture in a World Transformed* William Paulson, 2018-08-06 Literary studies are in danger of being left behind in the twenty-first century. Print culture risks becoming a thing of the past in the multimedia age; meanwhile, human life and society are undergoing rapid changes as a result of new technologies, the intensification of global capitalism, and the effects of human actions on the environment. In this transformed world, William Paulson argues for a radical renewal of literary studies. Modern literary culture has defined itself, in opposition to science, politics, and commerce, as a protected sphere of democratic and free inquiry, but today that autonomy may lead to isolation from the real dynamics of cultural and global change. Paulson clearly and convincingly demonstrates the need for literary studies to embrace both the unfashionable literary past and the technologically saturated future, and to train not a countersociety of cultural critics but citizens of the world who can communicate the irreducible strangeness and multiplicity of literature to a society on hyperdrive. His series of concrete proposals, ranging from a closer connection between literature and everyday language to the restructuring of undergraduate and graduate education, will immeasurably enrich current discussions of the humanities' role in the life of the world.

bruno latour science in action: *On the Frontiers of History* Tessa Morris-Suzuki, 2020-08-17 Why is it that we so readily accept the boundary lines drawn around nations or around regions like 'Asia' as though they were natural and self-evident, when in fact they are so mutable and often so very arbitrary? What happens to people not only when the borders they seek to cross become heavily guarded, but also when new borders are drawn straight through the middle of their lives? The essays in this book address these questions by starting from small places on the

borderlands of East Asia and looking outwards from the small towards the large, asking what these 'minor pasts' tell us about the grand narratives of history. In the process, it takes the reader on a journey from Renaissance European visions of 'Tartary', through nineteenth-century racial theorising, imperial cartography and indigenous experiences of modernity, to contemporary debates about Big History in an age of environmental crisis.

bruno latour science in action: Science in Action Bruno Latour, 1994

bruno latour science in action: Social Science and Historical Perspectives Jack David Eller, 2016-10-04 This accessible book introduces the story of 'social science', with coverage of history, politics, economics, sociology, psychology, anthropology, and geography. Key questions include: How and why did the social sciences originate and differentiate? How are they related to older traditions that have defined Western civilization? What is the unique perspective or 'way of knowing' of each social science? What are the challenges—and alternatives—to the social sciences as they stand in the twenty-first century? Eller explains the origin, evolution, methods, and the main figures, literature, concepts, and theories in each discipline. The chapters also feature a range of contemporary examples, with consideration given to how the disciplines address present-day issues.

bruno latour science in action: Re-inventing the Ship Don Leggett, 2016-04-08 Ships have histories that are interwoven with the human fabric of the maritime world. In the long nineteenth century these histories revolved around the re-invention of these once familiar objects in a period in which Britain became a major maritime power. This multi-disciplinary volume deploys different historical, geographical, cultural and literary perspectives to examine this transformation and to offer a series of interconnected considerations of maritime technology and culture in a period of significant and lasting change. Its ten authors reveal the processes involved through the eyes and hands of a range of actors, including naval architects, dockyard workers, commercial shipowners and Navy officers. By locating the ship's re-invention within the contexts of builders, owners and users, they illustrate the ways in which material elements, as well as scientific, artisan and seafaring ideas and practices, were bound together in the construction of ships' complex identities.

bruno latour science in action: The Andean Wonder Drug Matthew James Crawford, 2016-09-07 In the eighteenth century, malaria was a prevalent and deadly disease, and the only effective treatment was found in the Andean forests of Spanish America: a medicinal bark harvested from cinchona trees that would later give rise to the antimalarial drug quinine. In 1751, the Spanish Crown asserted control over the production and distribution of this medicament by establishing a royal reserve of fever trees in Quito. Through this pilot project, the Crown pursued a new vision of imperialism informed by science and invigorated through commerce. But ultimately this project failed, much like the broader imperial reforms that it represented. Drawing on extensive archival research, Matthew Crawford explains why, showing how indigenous healers, laborers, merchants, colonial officials, and creole elites contested European science and thwarted imperial reform by asserting their authority to speak for the natural world. The Andean Wonder Drug uses the story of cinchona bark to demonstrate how the imperial politics of knowledge in the Spanish Atlantic ultimately undermined efforts to transform European science into a tool of empire.

bruno latour science in action: After Taste. Critique of insufficient reason Slavko Kacunko, 2021-06-02 After Taste is an inquiry into a field of study dedicated to the reconsideration, reconstruction and rehabilitation of the concept of Taste. Taste is the category, whose systematic, historical and actual dimensions have traditionally been located in a variety of disciplines. The actuality and potential of the study is based on a variety of collected facts from readings and experiences, which materialize in the following features: One concept (figurative Taste), two thinking traditions (analytic and synthetic/continental) and three interrelated dimensions (systematic, historic and actual) are presented in three volumes. As such, the study presents a salient comprehensive companion for wider readership of humanities approaching conceptions of Taste for the first time. Moreover, After Taste is intended for anyone who hopes to make a further contribution to the subject. Since its appearance and apparently short triumph some 250 years ago, the concept of non-literary Taste remained the linchpin of aesthetic theory and practice, but also a

category outreaching aesthetics. Taste as the personal unity of the production, theory and criticism of art and literature, which was still largely taken as a given in the eighteenth century, has meanwhile given way to a highly-differentiated art world, in which aesthetic discourse is placed in such a way that it can seemingly no longer have a conceptual or linguistic effect on general opinion making. The critical role of "Taste judges", ratings and rankings in the *feuilleton*, politics and social media on the one hand and the responding search for new canons on the other have had a huge impact on the academic and popular discourse today. However, Taste's impact on society is in fact all-encompassing and yet, without getting even close to the "magnetic North" of the academic compass. After Taste fills the gaps of systematic research by a comprehensive tracing of the emergence of the doctrines, discourses and disciplinary dimensions of Taste up to the peak of its systematic and historical trajectory in the eighteenth century and onwards into the present day. The guiding goal is a post-disciplinary rehabilitation of the contested category as a preparation for its productive usage in emerging academic and popular contexts. Three intertwined research hypotheses form the guiding goal of an overall study of the agencies of Taste, its institutionalizations and expert cultures: The (1) first part provides a missing systematic perspective on the concept of Taste as a key factor for understanding the human faculties, value theories and practices of valuating. The (2) second part traces the events at the peak of Taste's systematic and historical trajectories up until the late eighteenth century and verifies the historiographical hypothesis about the instrumentality of Taste for the production, reception and distribution of culture. The (3) third part reconstructs the major moments in which the contested concept of Taste experiences its post-disciplinary rehabilitation, in preparation for its future productive usage in the academic and popular discourses and practices. It shows how the category of Taste became the foundation, legitimation and the catalyst for the emerging division of labour, faculties and disciplines, confirming the hypothesis of the immense impact and actuality of Taste in the contemporary world.

bruno latour science in action: Animal Pragmatism Erin McKenna, Andrew Light, 2004-09-07 What does American pragmatism contribute to contemporary debates about human-animal relationships? Does it acknowledge our connections to all living things? Does it bring us closer to an ethical treatment of all animals? What about hunting, vegetarianism, animal experimentation, and the welfare of farm animals? While questions about human relations with animals have been with us for millennia, there has been a marked rise in public awareness about animal issues—even McDonald's advertises that they use humanely treated animals as food sources. In *Animal Pragmatism*, 12 lively and provocative essays address concerns at the intersection of pragmatist philosophy and animal welfare. Topics cover a broad range of issues, including moral consideration of animals, the ethics of animal experimentation, institutional animal care, environmental protection of animal habitat, farm animal welfare, animal communication, and animal morals. Readers who interact with animals, whether as pets or on a plate, will find a robust and fascinating exploration of human-nonhuman relationships. Contributors are James M. Albrecht, Douglas R. Anderson, Steven Fesmire, Glenn Kuehn, Todd Lekan, Andrew Light, John J. McDermott, Erin McKenna, Phillip McReynolds, Ben Minter, Matthew Pamentel, Paul Thompson, and Jennifer Welchman.

bruno latour science in action: Utopia's Garden E. C. Spary, 2010-12-15 The royal Parisian botanical garden, the *Jardin du Roi*, was a jewel in the crown of the French Old Regime, praised by both rulers and scientific practitioners. Yet unlike many such institutions, the *Jardin* not only survived the French Revolution but by 1800 had become the world's leading public establishment of natural history: the *Muséum d'Histoire Naturelle*. E. C. Spary traces the scientific, administrative, and political strategies that enabled the foundation of the *Muséum*, arguing that agriculture and animal breeding rank alongside classification and collections in explaining why natural history was important for French rulers. But the *Muséum*'s success was also a consequence of its employees' Revolutionary rhetoric: by displaying the natural order, they suggested, the institution could assist in fashioning a self-educating, self-policing Republican people. Natural history was presented as an indispensable source of national prosperity and individual virtue. Spary's fascinating account opens

a new chapter in the history of France, science, and the Enlightenment.

bruno latour science in action: Brainmedia Flora Lysen, 2022-07-28 Will we ever be able to see the brain at work? Could it be possible to observe thinking and feeling as if watching a live broadcast from within the human head? Brainmedia uncovers past and present examples of scientists and science educators who conceptualize and demonstrate the active human brain guided by new media technologies: from exhibitions of giant illuminated brain models and staged projections of brainwave recordings to live televised brain broadcasts, brains hooked up to computers and experiments with “brain-to-brain” synchronization. Drawing on archival material, Brainmedia outlines a new history of “live brains,” arguing that practices of-and ideas about-mediation impacted the imagination of seeing the brain at work. By combining accounts of scientists examining brains in laboratories with examples of public demonstrations and exhibitions of brain research, Brainmedia casts new light on popularization practices, placing them at the heart of scientific work.

bruno latour science in action: Pyrotechnic Cities Liam Ross, 2022-06-24 This book explores the relationship between architecture, government and fire. It posits that, through the question of fire-safety standardisation, building design comes to be both a problem for, and a tool of, government. Through a close study of fire-safety standards it demonstrates the shaping effect that architecture and the city have on the way we think about governing. Opening with an investigation into the Grenfell Tower fire and the political actors who sought to enrol it in programmes of governmental reform before contextualising the research in current literature, the book takes four city studies, each beginning with a specific historic fire: The 1654 Great Fire of Meirecki, Edo; the 1877 town fire of Lagos; the 1911 Empire Palace Theatre fire, Edinburgh; and the 2001 World Trade Centre attack, New York. Each study identifies the governmental response to the fire, safety standards and codes designed in its wake and how these new processes spread and change. Drawing on the work of sociologists John Law and Anne Marie Mol and their concept of ‘Fire Space’, it describes the way that architectural design, through the medium of fire, is an instrument of political agency. Pyrotechnic Cities is a critical investigation into these political implications, written for academics, researchers and students in architectural history and theory, infrastructure studies and governance.

bruno latour science in action: Joint Fact-Finding in Urban Planning and Environmental Disputes Masahiro Matsuura, Todd Schenk, 2016-10-04 The days of rationalist scientific management and deference to official data are behind us. The credibility of experts and the information they provide are regularly challenged; officials are routinely provided with conflicting sets of facts as they plan and make decisions; and decision makers and stakeholders alike are largely skeptical that technical information will adequately account for the various interests and concerns and lead to the right outcomes. They struggle to reconcile technical information with other forms of knowledge, and differing interests, priorities and perspectives. Issues like climate change are complicating matters even further, as scientists and technicians must increasingly acknowledge the uncertainty and potential fallibility of their findings, and highlight the dynamic nature of the systems they are explaining. This book examines how groups looking to plan and make decisions in any number of areas can wade through the imperfect and often contradictory information they have to make fair, efficient, wise and well-informed choices. It introduces an emerging and very promising approach called joint fact-finding (JFF). Rather than each stakeholder group marshaling the set of facts that best advance their respective interests and perspectives while discrediting the contradictory facts others provide, groups are challenged to collaboratively generate shared sets of facts that all parties accept. This book introduces readers to the theory of JFF, the value it can provide, and how they can adopt this approach in practice. It brings together writings from leading practitioners and scholars from around the world that are at the forefront of the JFF approach to science intensive policymaking, urban planning, and environmental dispute resolution. The first set of chapters outlines the concept of JFF, and situates it within other bodies of theory and practice. The second set of case-based chapters elucidates how JFF is being applied in practice. This book

delivers a new perspective to scholars in the field of public policy, urban planning, environmental studies, and science and technology studies, as well as public officials, technical experts, policy consultants, and professional facilitators.

bruno latour science in action: Ocean Science and the British Cold War State Samuel A. Robinson, 2018-05-03 This book focuses on the activities of the scientific staff of the British National Institute of Oceanography during the Cold War. Revealing how issues such as intelligence gathering, environmental surveillance, the identification of 'enemy science', along with administrative practice informed and influenced the Institute's Cold War program. In turn, this program helped shape decisions taken by Government, military and the civil service towards science in post-war Britain. This was not simply a case of government ministers choosing to patronize particular scientists, but a relationship between politics and science that profoundly impacted on the future of ocean science in Britain.

bruno latour science in action: Strange Sounds Timothy D Taylor, 2014-01-02 In Strange Sounds, Timothy D. Taylor explains the wonder and anxiety provoked by a technological revolution that began in the 1940s and gathers steam daily. Taylor discusses the cultural role of technology, its use in making music, and the inevitable concerns about authenticity that arise from electronic music. Informative and highly entertaining for both music fans and scholars, Strange Sounds is a provocative look at how we perform, listen to, and understand music today.

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