

Chapter 1 : Genetically Modified Crops: Science, Sociology and Statistics - Statistics Views

Definition of scientize transitive verb: to treat with a scientific approach the attempt to scientize reality, to name it and classify it " John Fowles.

Definitions[edit] Reviewing the references to scientism in the works of contemporary scholars, Gregory R. Peterson [23] detects two main broad themes: It is used to criticize a totalizing view of science as if it were capable of describing all reality and knowledge , or as if it were the only true way to acquire knowledge about reality and the nature of things; It is used, often pejoratively, [24] [25] [26] to denote a border-crossing violation in which the theories and methods of one scientific discipline are inappropriately applied to another scientific or non-scientific discipline and its domain. An example of this second usage is to label as scientism any attempt to claim science as the only or primary source of human values a traditional domain of ethics or as the source of meaning and purpose a traditional domain of religion and related worldviews. The term scientism was popularized by the Nobel Prize winner F. Hayek , who defined it as the "slavish imitation of the method and language of Science". Schumacher , in his *A Guide for the Perplexed* , criticized scientism as an impoverished world view confined solely to what can be counted, measured and weighed. Precise measurement and rigorous calculation, in this view, are the basis for finally settling enduring metaphysical and moral controversies. Gray and Thomas Nagel have leveled similar criticisms against popular works by moral psychologist Jonathan Haidt , neuroscientist Sam Harris , and writer Malcolm Gladwell. Hughes wrote in conservative journal *The New Atlantis* that scientism has much in common with superstition: Individuals associated with New Atheism have garnered this label from both religious and non-religious scholars. Religion as a Natural Phenomenon by saying that accusations of scientism "[are] an all-purpose, wild-card smear But when it comes to facts , and explanations of facts, science is the only game in town". Atheist philosopher Thomas Nagel argues that neuroscientist Sam Harris conflates all empirical knowledge with that of scientific knowledge. He defines scientism as a worldview that encompasses natural explanations, eschews supernatural and paranormal speculations, and embraces empiricism and reason. Peterson writes that "for many theologians and philosophers, scientism is among the greatest of intellectual sins". Philosophy of science In his essay *Against Method*, Paul Feyerabend characterizes science as "an essentially anarchic enterprise" [48] and argues emphatically that science merits no exclusive monopoly over "dealing in knowledge" and that scientists have never operated within a distinct and narrowly self-defined tradition. Science must be protected from ideologies; and societies, especially democratic societies, must be protected from science In a democracy scientific institutions, research programmes, and suggestions must therefore be subjected to public control, there must be a separation of state and science just as there is a separation between state and religious institutions, and science should be taught as one view among many and not as the one and only road to truth and reality. Rhetoric of science Thomas M. Lessl argues that religious themes persist in what he calls scientism, the public rhetoric of science. One is the epistemological approach, the assumption that the scientific method trumps other ways of knowing and the ontological approach, that the rational mind reflects the world and both operate in knowable ways. According to Lessl, the ontological approach is an attempt to "resolve the conflict between rationalism and skepticism". Lessl also argues that without scientism, there would not be a scientific culture. Rationalization sociology In the introduction to his collected oeuvre on the sociology of religion , Max Weber asks why "the scientific, the artistic, the political, or the economic development [elsewhere] did not enter upon that path of rationalization which is peculiar to the Occident? It dissociates "modernity" from its modern European origins and stylizes it into a spatio-temporally neutral model for processes of social development in general. Furthermore, it breaks the internal connections between modernity and the historical context of Western rationalism , so that processes of modernization [are] no longer burdened with the idea of a completion of modernity, that is to say, of a goal state after which " postmodern " developments would have to set in.

Chapter 2 : Words that start with Sci | Words starting with Sci

Scientize definition, to apply or attempt to apply scientific principles to: to scientize art criticism. See more.

To understand this instability, we have to begin with the legitimate primary purposes of the financial markets. One is to provide capital, as equity and debt, to the goods and services economy to allow it to thrive and grow. A second is to provide a stable repository for our collective savings. And a third is to responsibly provide appropriate credit to individuals. These legitimate functions have been hijacked by speculative behavior that was unchecked by regulatory structures. The consequences of this threaten to disrupt the productive efforts of millions of ordinary people who go to work every day to make stuff and provide services to one another. In the decades leading to this crisis, the shift in our economic thinking from the long-term view on Main Street to short-term speculation and gratification on Wall Street have not only brought us to the brink of economic collapse, but have also compromised a sufficient flow of capital to important long-term initiatives—economic sustainability, renewal of infrastructure, abatement of climate change, and development of alternative energy sources—all important to a vibrant and sustainable economy. This has happened before in history—in Rome, in Spain, Holland and England. More recently, in America, there were smaller crises before to the present one, perhaps early warnings—Black Monday, Long Term Capital Management, the dotcom bomb, and others. Rather, we can only hope that these governments are collectively up to the task this time. There is honor and service to society in inventing and building companies and products that make life better for people, which should be justly rewarded. There is honor in architecting balanced financial regulation, to which we should dedicate careful attention. There is honor for the important financial sector when it functions as it should for the collective good, and this too should also be justly rewarded. Reasoned risk-taking by knowledgeable investors plays an important role in capital markets in providing support for initially risk innovations. But there is no honor in abusing our regulatory and financial systems for reckless speculation. Nonetheless, blame will not get us out of this situation. We need to understand how and why the crisis happened and why warnings over the last years were not understood or heeded. We need to use this knowledge to stop this crisis and get the economy functioning again. In the longer term, we need to redesign and reregulate the financial system so that it performs its necessary functions without leading to periodic crises of global scale. Two basic assumptions must guide any thinking as we undertake these tasks. First, economies, financial institutions and markets cannot function without a context of rules and laws, which regulate them. In a market, each participant tries to do the best they can for themselves. In a properly architected and regulated market this contributes to the public good. There is simply no place for an ideological discussion about regulation. Stable systems in nature such as individual organisms and ecosystems are regulated. So must ours be. The only relevant question is do the regulations work or not, where work means that stable markets allow an orderly flow of capital to and from the goods and services economy and the people who comprise it. Second, mathematics, physics and computers already play a major and necessary role in our economic affairs. People with training in mathematical sciences play a big role on Wall Street designing and valuing complex investment instruments, and running sophisticated trading strategies. There is no going back to the era before banks and funds depended on quantitative analysis and big computer programs, and the scientifically trained people to run them. Along with economists with whom they work, other scientists and computer scientists now have a profound responsibility to see that their skills, the principles which they have found effective, and the tools they have wrought, are all used well and wisely. In recent decades, a vast risk management and pricing system has evolved, combining the best insights of mathematicians and finance experts supported by major advances in computer and communications technology. A Nobel Prize was awarded for the discovery of the pricing model that underpins much of the advance in derivatives markets. This modern risk management paradigm held sway for decades. The whole intellectual edifice, however, collapsed in the summer of last year because the data inputted into the risk management models generally covered only the past two decades, a period of euphoria. Alan Greenspan, US House of Representatives Committee on Government Oversight and Reform, October 23, When economists and other scientists study a complex system they begin by asking

about what assumptions have been used previously in understanding it, and how well they have done compared to data. So if we approach the crisis in this way, we have to begin by asking about the principles and assumptions that have been used to construct and justify the complex financial instruments whose use contributed to the present instability. We want to know how these theoretical ideas have been tested, and whether or not the present crisis is evidence that the ideas that the financial system have been built on may need to be improved. In fact, there is an economic theory that shapes much of our thinking, as well as the practices of investment banks and the decisions of economic policy makers. This is called neoclassical economics. It is based on the following assumptions: Most of the time markets are in or close to stable equilibrium. Participants in markets act rationally to maximize fixed and known preferences described by definite and time independent utility functions. Participants in markets have perfect knowledge of the information driving the markets as well as all other participants. Prices are set by a deterministic process of joint maximization of the preferences of all involved in a trade. Fluctuations in prices are small, random and uncorrelated. There is perfect liquidity so all prices are well defined, and all markets clear. There is no important difference between markets comprising a few individuals and those comprising millions, so simple models suffice to elucidate the principles that govern markets. The neoclassical paradigm based on these ideas has had some undisputed successes. At the same time, it appears to have led to the adoption of practices and recommendations, which are at least partly at the root of the present crisis. These included the ideas that, i. Regulation is limited or unnecessary because markets find and stay close to stable equilibrium where they operate most efficiently, leading to maximally stable economic growth, whereas regulation only leads to slower growth. But we face a potentially precipitous decline in economic growth and prosperity in the wake of some deregulation. Everything has a value or price, at all times, that can be uniquely determined by some definite objective process. This includes contracts that refer to prices of fluctuating variables at future times. There is experience with futures contracts, which have prices which are set daily by their being actively traded. But we are now seeing these values evaporate. This trading experience may be generalized to a claim that complex financial instruments which oblige actions to be taken at future times based on conditions not known till then, still have definite values and prices even if they are never or rarely traded. But part of the crisis is due to the fact that the balance sheets of banks and companies holding these contracts cannot be computed because they include instruments whose prices have been revealed as simply hypothetical and are now proving to be indeterminate [1]. Stability can be increased by inventing and trading abstract complex financial instruments rather than principal contracts like stocks and mortgages. Although these predate the birth of Christ and have been a factor in every economy of scale since, our markets have recently been flooded with a host of new ones which cleverly combine functions of different prices at different times into financial instruments whose values are purported to fluctuate less than the values of stocks making them up. The theory behind the possibility of combining fluctuating variables into variables that fluctuate less is critically dependent on the above assumptions, especially that the fluctuations are small, random and uncorrelated. But these assumptions have been shown to be false. It has been argued that these innovative instruments should not be regulated even as much as stock trading because they function as insurance to increase stability. This was based on another false assumption that any mathematical function of the values of stocks at different times has a fixed and determinate value at any time. Because price determination is a definite process of maximization of known preferences in an environment of perfect knowledge, and because all values are definite, it can be in some instances automated and carried out by computers programmed to trade under specified conditions. But some markets thus operated have failed to function or clear trades. Before we look more deeply into possible difficulties with the neoclassical paradigm, we have to also emphasize that it has been so influential because it does give important insight into how markets work in some circumstances. Nor has it ignored the possibility that markets can have instabilities. For example, there is a long list of well known market failures principal agent problems, moral hazard, public goods, menu costs, lemon markets, adverse selection, rent-seeking behavior, incomplete knowledge, incomplete markets, multiple equilibria etc. But we also want to ask if there are alternative ideas, principles and methods of modeling economic systems which might also provide the basis for wise advice and policy. As a result, in part, at least of belief in the neoclassical

paradigm, a very technical approach to trading has come to dominate markets based on complex financial instruments and strategies that require mathematical scientists and computers to carry out. Beginning as small speculative efforts, these now dominate markets. In most markets including equities and credit, the value of derivative contracts now exceeds by an order of magnitude the total value of underlying contracts, which must be traded to fulfill those derived from them. When physicists made the atomic bomb they realized what they had conceived and immediately felt a sober responsibility to help make the world safe from their invention. At this time there is a responsibility for those with the knowledge and skills to understand the financial instruments involved in this crisis to help first to resolve this crisis and to next turn their attention to the design and regulation of a stable market system. This will involve economists, mathematicians, physicists, biologists, computer scientists and others working together to make a more stable economic system. In our view, the current crisis does suggest there are weakness in the paradigm of neoclassical economics. The big markets in the economy appear not to be in equilibrium. Not now, and perhaps also not normally. The fluctuations in the values of stocks, currencies, and commodities are often not random and uncorrelated and, as we have seen recently, they need not be small. Some other paradigm is needed to describe the workings of real markets. More generally, the theory of competitive general equilibrium is based on assumptions that appear to be too idealized. These include the assumption that at equilibrium prices are set so that all markets will clear no matter how the future unfolds and the assumption that each agent has a view on the value of all possible dated contingent goods [2]. Participants in markets do not have fixed preferences, but the theory of competitive general equilibrium assumes that they do. Preferences change in time unpredictably due to changing tastes and circumstances as well as in response to innovations which introduce new products and eliminate the needs for old products, and we should acknowledge this. The unforeseeable aspects of innovations renders risk assessments problematic. There has been an unjustified extrapolation from simple models of markets with two participants and two goods or something similar to real markets with millions of participants and thousands of goods, a mistake we should not repeat. Participants in markets do not have perfect knowledge, indeed their knowledge and beliefs about the market conditions are sometimes false or unreliable and different participants have different knowledge and beliefs. We should acknowledge this freedom because it is not the case, as sometimes assumed, that the lack of perfect knowledge by traders averages out as noise. This has the effect that swings in belief can crash markets and hurt people even when much of the machinery of the goods and services economy is healthy and prepared to function well with an orderly availability of capital. Increasing returns can lead to path dependence in the economy so that the evolution of an economy will depend on historical contingencies. This makes prediction and risk assessment difficult. There appears to be a basic lack of appreciation of the importance of relative scales. This is because of the misapplication of the neoclassical paradigm that the markets operate near equilibrium. Financial instruments such as derivatives indeed can do little harm except to those who use them, so long as they represent only a fraction of a market. However, an extremely dangerous situation emerges when their use grows to the point where so much equity is pledged in the resulting contracts that a movement in the markets in a non-random direction can introduce an instability in which the contracts are called but cannot possibly be fulfilled. Any meaningful discussion about whether a novel financial instrument requires regulation must involve the scale of its use. The answer is yes.

Chapter 3 : List words starting with sci

Scientism, for lack of a better word, is today's intellectual zeitgeist. The popular "intellectuals" of the day, the ones doing the most harm, masquerade as simple arbiters of objectivity. The Sam HARRISES and Jordan Petersons of the world offer their watered down versions of "race realism" and Social Darwinism to the internet, and.

Science, Sociology and Statistics Features Date: Image appears courtesy of iStock Photo The use of genetically modified crops has become one of those touchstone issues that seems to divide people into two mutually uncomprehending camps. One of the contributions sociology has made is in finding meta levels of analysis that can reveal the hidden work of persuasion done by the concepts and metaphors people use in their disputes. Sociological concepts of ideology can assist us here, and so can statistical analyses which reveal it quantitatively. One of the first people to provide a systematic account of ideology was Francis Bacon in his pioneering efforts to formulate the modern scientific method. But sociologists typically see all truth claims, including scientific ones, as inherently ideological in the sense that they frame the object of enquiry in particular ways, which are never the only ones possible. The power of the scientific method does not rest principally in the fact that scientific claims are non-ideological in this latter sense, but in the fact that they are subjected to rigorous and continual trial by falsification. This power, however, can easily be objectified into the notion that science establishes meta-ideological truth claims, and this in turn makes it ripe for appropriation for more clearly partisan ends. So much for sociology – what about statistics? The paper was criticised on various grounds, including the inferences it made from its statistical analysis. Food and Chemical Toxicology subsequently undertook a review process, itself criticised for its opacity and inconsistency, as a result of which it retracted the paper. Later, the paper was republished in another journal, Environmental Sciences Europe [7]. Both proponents and opponents of GM technology are wont to impute various orders of disrepute to their antagonists, such as cherry-picking data and forming shadowy conspiracies of influence [8]. In sociological terms, a peer reviewed paper is a status good whose high standing accrues because it cannot be bought, traded or otherwise traduced. This is the more so because academic funding and academic research agendas are increasingly bound up with public policy and private enterprise, as Dick Russell argued some years ago, A university scientist with direct or indirect commercial interests simultaneously may be serving on government granting panels, testifying at Congressional hearings, publicly discussing the risks and benefits of new products. Institutions become overdependent on money from a single large corporation, and professors distracted from their proper duties [9] It is here that social statistics applied as meta-analysis to the research process itself can be of help. More generally, a study by Diels et al reports statistically significant correlations between author affiliation to the GM industry and study results favourable to GM crops [11]. And on the other as ideologies of specific and human-centred orientations to self-realisation in which science and technology at best can only ever serve these primary goals, and in some cases actively hinder them. When it comes to the practical deployment of GM technologies, doubtless one can adopt various intermediate positions that are neither wholly in favour nor against this crop, for these people, in this situation. My argument here is simply that there seem to be deep ideological roots to the debate. It seems an inappropriate borrowing. Nobody is denying the scientific basis of GM technologies: But sociologists can contribute to the GM debate by elucidating the ideological basis of those views, and statisticians can contribute by subjecting claims concerning the scientific and evidential basis emerging from them to quantitative scrutiny. Agriculture and Human Values, See, for example, Philpott, T. Quoted in Kloppenburg, J.

Chapter 4 : Master's Research: Theoretical Foundations, Part 5 – The Ramblings of T.W. Dondanville

What does the word scientised mean? Find synonyms, antonyms and the meaning of the word scientised in our free online dictionary! Find words starting with scientised and anagrams of scientised.

We are between stories. Never has humankind faced simultaneous crises on so many fronts: It seems utterly naive to suggest, as does eco-theologian Thomas Berry, that our woes stem from an inadequate "story. On second thought, what could be more vital than getting this story right? In the West, our prevailing mythology is woefully flawed. From time immemorial, religion informed our guiding myths. Mainstream religious traditions -- in contrast to indigenous ones -- have long taught that humans arose by divine fiat, were made in the image of God, occupy the center of a static cosmos, and exist on an earth created expressly to satisfy our needs. The religious worldview went largely unchallenged until, when Nicolaus Copernicus -- a Polish astronomer, mathematician, and cleric -- upset the mythological apple cart. By shifting from a geocentric cosmological perspective to a heliocentric one, Copernicus literally made the earth move. All hell broke loose. Moreover, Copernicanism -- in the skilled hands of Galileo, Kepler, and Newton -- gave rise to modern science. The Age of Reason, the industrial age, the nuclear age, the space age, and the information age all followed in rapid succession. The back-to-back punches thrown by Copernicus and Darwin disfigured the human face in the mirror of self-perception. Are we not what we thought we were: The message from science is oddly dissonant to that of religion, which yet proclaims our divine origins and exalted status. Which story are we to believe? The scientific story speaks to our rationalism, but is devoid of meaning. The religious story speaks to our intuition, but denies the facts. The tragedy of dichotomous worldviews is compounded by the current myopia of conventional science and traditional religion, each convinced it has cornered the market on truth. Literalism has two factions that often oppose each other while secretly conspiring. One side champions positivism and a tyranny of scientism that obsesses over facts and figures and relies solely upon a statistical worldview. The opposite extreme insists upon fundamental religious beliefs that reject facts or alter them to conform to literalized stories. Each side gains some surety at the cost of a tragic loss of imagination and a dramatic reduction in the sense of wonder of the immediate world. Following Galileo, science and religion separated. After Darwin, they divorced. Perhaps divorce was necessary for science to escape the heel of religious authority and thrive. But humans, the children of that divorce, have experienced what cultural historians term "disenchantment of the universe. Philosophical materialism lies at the core of our economic and ecological woes. Fundamentally, science and religion are soulmates, each grounded in the experience of awe. And in reflecting upon his life, he concluded, "The most beautiful emotion we can experience is the mystical. It is the source of all true art and science. On the one hand, the materialistic paradigm is crumbling. Following the revelations of quantum theory, "The world begins to look more like a great thought than a great machine," in the words of Sir James Jeans, the late English astronomer. On the other hand, official pronouncements from the Church herself herald a new era of dialogue. In his recent encyclical, Pope Francis devotes an entire section to "Religions in Dialogue with Science. The Church is convinced that there can be no real contradiction between science and faith. It is certain that science and faith represent two different orders of knowledge, autonomous in their processes, but finally converging upon the discovery of reality in all its aspects. Around the globe, individuals and organizations labor to articulate a holistic "new story" that is faithful both to modern science and to spiritual wisdom. Noteworthy pioneers among these individuals are the Jesuit paleontologist-priest Teilhard de Chardin and Thomas Berry, whose quote begins this essay. Among the organizations are the Institute of Noetic Sciences, Metanexus Institute, and Science and Nonduality, which seek to foster the integration of objective and subjective modes of knowing, to tell "the whole story of the whole cosmos for the whole person," and "to forge a new paradigm. Given the tight race between catastrophe and awakening, the future is hard to predict. Some see transformation around the bend; others only Armageddon. From a lifetime of studying the mythologies of world cultures, American mythologist Joseph Campbell caught a glimpse of the future that is simultaneously sobering and hopeful: The world, as we know it, is coming to an end. The world as the center of the universe, the world divided from the heavens, the world

bound by horizons in which love is reserved for the members of the in group: Apocalypse does not point to a fiery Armageddon but to the fact that our ignorance and our complacency are coming to an end. If indeed we rise to the challenge of our time, it will be by living up to the name science has bestowed upon our subspecies: Homo sapiens sapiens -- "doubly wise human. This essay is adapted from the introduction of the paperback edition of Reason and Wonder The author is grateful to Bill Painter for inspiration.

Chapter 5 : scientific - English-Kurdish Kurmanji Dictionary - Glosbe

In lieu of an abstract, here is a brief excerpt of the content: Scientism Scientized 7 Every human society has some form of verbal culture, in which fictions, or stories, have a prominent place. Some of these stories may seem more important than others: they illustrate what primarily.

For my part, I would be inclined to add: While these subject headings may sound somewhat old-fashioned to certain people, I would not hesitate to endorse them as a return to our sources. Deprived, like them, of a true formalization, psychoanalysis became organized, like them, into a body of privileged problems, each one promoted by some felicitous relation of man to his own measure, taking on a charm and a humanity owing to this particularity that in our eyes might well make up for their somewhat recreational appearance. Before we follow up on this important observation, let me relate an incredibly interesting finding, one which I will write an entire article about. There is a function on Google dictionary where one can look up any word, and see immediately below the graph of its usage over time. Now I challenge you, the reader: In my experiment, I could not find a single complex word that went up over time- there was always a decline in the later part of the 20th century. Some words, if you look them up, chart exactly as one would expect: Even so, we see general trends of decline for these literary words. It represents the poverty of our current intellectual culture, or rather, the takeover of intellectual and literary culture by rapacious scientism. It is a cliché to say that television and movies have replaced book reading, but the process is accelerating at an alarming rate: The connections are already made, the same ones Adorno made: The remake is overtaking the original production, the copy more successful than the original. But the cracks are starting to show: What does all of this have to do with scientism? The 50s fascination for new technology has not dwindled, in fact it has only gotten worse with the advent of the computer age. No one is immune to it, but the obvious commodity fetishism and consumerism it generates is unprecedented. It would be elitist to assume that Shakespeare is only for the elite! Am I being a kind of cultural grouch? Who among them will be trained to be the next authors, the next Shakespeares? Will anyone care if they are? One can take postmodern relativism too far in this case, saying that because Shakespeare and the Tale of Genji are equivalent, we should therefore teach neither. In fact, both are equivalent to Saturday morning cartoons! This is the road we are going down, and its not a pretty one. It would be great if we had any oral traditions to fall back on. The internet should be a tool to expand our access to the archive of classics: Project Gutenberg is a great resource to access all of the great works of literature which no longer have any kind of copyright. But as Marx stated, along with the alienation of the individual from the means of production, there is also a more fundamental alienation which accompanies capitalist material poverty that results in spiritual and intellectual poverty. These problems are just as real in our era of mass consumption.

Chapter 6 : Rhetorical Darwinism : Thomas M. Lessl :

*A quote from Jacques Lacan's *Œcrits*, from the essay "The Function and Field of Speech and Language in Psychoanalysis: "The list of disciplines Freud considered important sister sciences for an ideal Department of Psychoanalysis is well known.*

Chapter 7 : List words containing sci

§4 Science, Scientism, Ways of Knowing and Epistemic Scientism The dictionary definition (B1a) expresses the epistemic thesis that scientific knowledge is the only kind of knowledge.

Chapter 8 : Scientism - Wikipedia

Science and Mysticism. 01/25/ pm ET Updated Dec 06, One side champions positivism and a tyranny of scientism that

obsesses over facts and figures and relies solely upon a statistical.

Chapter 9 : Project MUSE - Rhetorical Darwinism

New York.S. Turner www.nxgvision.com *ism and the Medicalization of Existential Distress* Szasz T. () *The Myth of Mental Illness: Foundations of a Theory of Personal Conduct.* () *The Medicalization of Everyday Life.*