1: Limit of a function - Wikipedia

"For Constantine Fasolt, the limits of history can be found not by a customary analysis of historical methodology but only by the study of history's foundational event, the historical revolution in the period between the Renaissance and the Enlightenment.

The most basic concept of modern Calculus, that of limit, was never invoked by I. Leibniz, the creators of Calculus, even though it was implicit already in the works of Eudoxus and Archimedes. It is interesting to follow the evolution of the concept of limit. But the first reasonably formal definition and consistent employment are due to Augustin-Louis Cauchy When the value successively attributed to a variable approach indefinitely to a fixed value, in a manner so as to end by differing from it by as little as one wishes, this last is called the limit of all the others. However, the expressions like "tends to" or "grows without bound" reflecting on change and motion are still very much in use even today. However, the idea of limit is rather topological than metric. A sequence that does not have a limit is said to diverge or be divergent. For an average Liberal Arts student and their teachers, the definition is a stumbling block to be rather avoided. This is really a staggering problem: From the definition, one first derives a few fundamental properties of limits: These and a few other properties allow finding and testing limits incrementally or inductively combining the limits of simple functions into the limits of more complex ones. What we just proved is the continuity of the linear function. From this the continuity of rational functions, which are the ratios of polynomials, is automatic at all points where the denominator does not vanish. For example, it is meaningful even in more than one sense to consider limit of a sequence of functions or curves. In this context, it is also meaningful to inquire which attributes of functions or curves commute with the symbol of limit. The answer is, Not necessarily! The limits must be approached judiciously. A frequent example where the limit of lengths does converge to the length of the limit curve, is the approximation of the circumference of a circle by the lengths of inscribed or circumscribed, or both broken lines, i. The limit of the lengths exists and the limit curve has the length but the two are different. In a third example, each of the curves in a sequence has the length and the curves converge to a well-defined limit curve. Although it does possess a property expressed numerically by a different measure. It is worth noting that in all three examples a curve has been approximated by a sequences of broken lines. Norton, [an error occurred while processing this directive].

2: The History of The Limits to Growth - The Solutions Journal

History casts a spell on our minds more powerful than science or religion. It does not root us in the past at all. It rather flatters us with the belief in our ability to recreate the world in our image. It is a form of self-assertion that brooks no opposition or dissent and shelters us from the.

Their concerns about the consequences of unrestrained growth in global population, resource consumption, and pollution led them to contact Jay W. Forrester, a professor in management at MIT, who had developed a method for analyzing the behavior of complex systems by means of simple simulation models. Forrester accepted the challenge and assembled a team of young experts, headed by Dennis Meadows. The authors remained involved with the issues raised by LtG in the following decades, and Donella Meadows in particular was highly engaged, as well as being the most optimistic of the original authors, until her death in Over the ensuing decades, however, a cohort of critics managed to derail the debate, apparently because they simply could not imagine that two centuries of impressive growth in Western economic production and consumption could ever run into any limits. The renewed interest in problems such as global warming and economic crisis suggests that it is time to revive the derailed discussion about economic growth and the environment and to reconsider future development. In re-examining the analysis and central arguments of LtG, we have found that its approach remains useful and that its conclusions are still surprisingly valid. Most environmentalists are familiar with the arguments made in LtG, but unfortunately the report has been largely dismissed by critics as a doomsday prophecy that has not held up to scrutiny. To his surprise he discovered that the criticisms had little to do with the content of the book. The most probable result will be a rather sudden and uncontrollable decline in both population and industrial capacity. For example, many critics argued that the book did not give enough credence to human ingenuity and adaptability, which could prevent the collapse forecast in its model. The state of global equilibrium could be designed so that the basic material needs of each person on earth are satisfied and each person has an equal opportunity to realize his individual human potential. Usually, research on the future consists of attempts to predict what will actually happen. Hence, the scenario methodology used in LtG of presenting various future options from which societies could choose appeared incomprehensible to many readers, who therefore paid attention only to the disastrous growth scenario. The message of the book is to point out the importance of changing course before causing irreversible damage to the environment and its life-support systems for billions of people. Today we see, for example, how our fast depletion of fossil fuel resources is directly contributing to climate change problems. Derailing the Debate How was it possible to derail the LtG debate to the extent that the book and its message were essentially ignored or, arguably, covered up for decades? One reason is that a book that hints at the necessity of curbing economic growth is very unwelcome to those who have a large stake in the status quo. This applies at the financial level, where LtG challenges many commercial interests in growth; at the political level, where governments fear dwindling tax revenue for public spending; and among professional mainstream economists, who instinctively resist a change in the paradigm of eternal growth and who have rarely addressed the question of how to plan for a steady-state economy in an orderly way. But there are many holes in their argument. Secondly, out of all of the possibilities described in LtG, the actual global development trends observed so far have been in generally good agreement with the growth scenario, which assumed no major changes in the physical, economic, or social relationships until the model later indicates collapse. So do many other environmental problems that we face today, including the increased levels of toxic substances in the oceans and in groundwater, the depletion of ocean fish stocks, and deforestation. A different reason why LtG has been shelved for so long could be that the temporary peak in international oil prices that occurred after the OPEC-induced crises of the s was soon followed by lower prices, suggesting that the outcomes outlined by LtG were easily corrected after a few years, courtesy of the marketplace. It was therefore tempting for those so inclined to conclude that apparently there were no physical limits to anything of relevance to economic growth. Hence the report was judged to be untrustworthy, although its modelling approach did not even consider this sort of short-term primarily political oscillation. The fact that a relatively small part of the world has for a couple of centuries experienced

exponential growth in material production and consumption is often used to argue that this trend can continue globally forever. Similarly, a society can continue to develop after growth stops. What have Western societies been doing in the thirty-five years since the appearance of LtG and similar warnings from the same period? On the other factors, such as population, consumption, and production, the political steps taken have generally been in the opposite direction from sustainability, and they have more than offset any benefits of technical progress. And there are few signs of significant action toward changing this trend. Better Global Distribution Even though World3, the system-dynamics computer model behind the LtG assessment, handles the world as a whole, poor as well as rich, the authors explicitly stressed that the distribution of wealth and consumption plays a crucial role in real development. Until now, growth has not, as often promised, been used to reduce inequalities but rather to sustain a substantial gap between rich and poor, without having to deal with too much social unrest. By arguing that the economic cake cannot grow infinitely, LtG added moral legitimacy to those demanding more equality, both within nations and globally. Globally, demand for more equality will imply that the slowdown or reduction in material consumption, which LtG recommends, has to start in the affluent countries. Halving the global environmental pressure would, for instance, require that affluent countries reduce their level of resource exploitation to only about one-tenth of the present level. It is the other way around. The affluent countries must hold back in order to ensure environmental space for those that need growth. The obvious solution to ensuring jobs for all those capable of working would be to reduce work time by, for example, 20 percent instead of firing one-fifth of the work force. In the philosopher Bertrand Russell described the practice of firing employees to solve the problem of excess workers in the following manner: Can anything more insane be imagined? The Limits to Growth as Part of a Solution It would be unjust to describe all economists as unconditional supporters of eternal economic expansion. Throughout history economists have commonly considered growth as a temporary phase in the development of society. Apart from a few ecologically oriented economic thinkers, 25,26 the majority of postwar economists viewed themselves as the prime and indispensable technicians of GDP maximization. The recent renewed interest in the environment and economic development gives hope for a solution. Although it has not yet led to new action, this shift in thinking has triggered a few analyses that recognize possible limits to growth and hence point toward solutions along the lines suggested in LtG. The following examples illustrate this hope. Finally, as a sign of renewed recognition of the limits to growth, 28 scientists have identified nine planetary boundaries within which human activities can operate safely. The scientists estimate that humanity has already transgressed three of these boundaries, namely those for climate change, biodiversity loss, and changes to the global nitrogen cycle. She shared the prize with Oliver A. Williamson, who was lauded for his analysis of economic governance, especially in regard to the boundaries of the modern corporation. The need for this has been reinforced by the recent financial crisis. Governments wanting to undertake serious preparations for a transition toward a sustainable steady-state economy can, fortunately, draw on the many economists already experienced in the field. And it would be a pity in the process to discard the wisdom in the LtG and its later versions. Acknowledgments We are grateful for the comments and constructive suggestions of Solutions editors Frank Zelko and Christina Asquith. The Limits to Growth. Universe Books, New York, Meadows, DL et al. Dynamics of Growth in a Finite World.

3: History at the Limit of World-history - Ranajit Guha - Google Books

Published: Mon, 5 Dec Carl Becker, along with Charles Beard, started a controversy over the purpose of historical writing and the limits of the historians objectivity that continues to agitate American historians and philosophers.

She excels at finding untold stories and new archival tidbits. There was a time, back in college, when the only reason I would pick up a copy of the New Yorker was to check whether it contained a new Lepore essay. I was therefore delighted when I found out that Lepore had written an entire one-volume history of the United States. There could be no better tour guide. My problem with most histories is that they focus on big sweeping economic and political changes, macro trends rather than ordinary people. Lepore is the perfect antidote: She gets past the usual narrative and focuses on scraps and snippets. She weaves together history through the voices of those who actually lived it, through newspaper headlines, memoirs, advertisements, and ephemera. So when These Truths: A History of the United States showed up, I devoured it. But something began to feel odd. Lepore writes with her usual verve, apart from a few tortured metaphors e. It would fall to a new generation of Americansâ€l to fathom the depths of the doom-black seaâ€l they would need to fell the most majestic pine in a deer-haunted forest and raise a new mast that could pierce the clouded sky. She pays special attention to the lives of women and African Americans, telling us about Jane Franklin as well as Benjamin, Harry Washington as well as George. She digs up marvelous quotes. Cotton Mather fumes at James Franklin: Do not put such unlimited power into the hands of the Husbands. Remember all Men would be tyrants if they could. Diverse and kaleidsocopic as the book was, it seemed to be missing something critical. I got up to about page before I realized what it was: The history of American labor is almost completely absent from the book. So no Bread and Roses strike. You cannot possibly tell me that a 21st century American ought to know more about Ann Coulter than Helen Keller. That becomes even more disturbing when we see how many pages are given to: A relatively obscure individual named Leone Baxter, whose mercenary public relations work is said to have revolutionized contemporary politics, is mentioned on pages,,,,,,,,,, and Or when the Black Panthers are written about solely for toting shotguns and terrifying legislators, instead of providing free breakfasts to poor children. But the index is missing entries for: James Weldon Johnson is quoted to condemn Woodrow Wilson, but without any explanation as to who he was or what he did. The Harlem Renaissance gets mentioned once, offhandedly. Ella Baker is described as an independent-minded activist who co-founded SNCC, but this only begins to touch on her extraordinary career. Again, excluding important parts of history from any history book is inevitable. Reading These Truths, I kept trying to figure out why Lepore was going so wrong. How could she just miss so many critical parts of it? It is a land of complication and paradox, where excluded groups are constantly pushing the country to live up to its promise. We can see, in this conception of America, why labor history gets downplayed. But Lepore wants a good liberal sense of balance: She laments racism and sexism and exclusion, but she is still a Harvard professor, and sees the world accordingly. Middle-class suffragettes and civil rights activists are an important part of history, then, but miners, janitors, longshoremen, and weavers are in the background. You hear the same story, but with an entirely different cast of characters. Most of us are not wealthy and will never be wealthy. We are workers, laboring for a few rich and powerful people, mostly white men who are the sons and grandsons of other rich white men. We have a hierarchical society that has used propaganda to get Americans to believe everyone is equal. We are not equal. The law routinely favors the rich, the white, and the male. The standard narrative, the enlightened liberal narrative of Harvard and the New Yorker, erases worker struggles. The anthracite strike, the Lordstown strike , Justice for Janitors: If workers are not taught about the way their predecessors fought back against exploitation, if they do not see how the same tactics have been wielded again and again to keep the working class from claiming its deserved share of the economic pie, then they are more likely to hopelessly resign themselves to an unjust contemporary reality. Loomis reminds readers that for the majority of Americans, American history has been a history of very hard work, under trying conditions. People lived short and difficult lives, and when they complained they were fired, threatened, or even shot. Loomis describes the horrendous working conditions that people experienced, such as a hop farm in the West where workers lived

outdoors on pallets, and 2, people shared eight toilets in degree heat. Workers burned to death or froze to death, they were mangled, their lives then ruined as their income disappeared. They would travel across the country, their children dying along the way, in search of work, only to be exploited and abused when they finally found employment. It is mostly about hard lives lived by tough people: This does not mean that all of history is one bleak tale of oppression and woe. I do not mean to be too hard on Lepore. At various points in her book, she pays stirring tribute to the lives of ordinary people, and she includes many of the neglected figures who have long been kept out of mainstream histories. It shows us why radical history is important: Current Affairs is not for profit and carries no outside advertising. We are an independent media institution funded entirely by subscribers and small donors, and we depend on you in order to continue to produce high-quality work. Subscribe today to Current Affairs magazine.

4: Limit (mathematics) - Wikipedia

Get this from a library! The limits of history. [Constantin Fasolt] -- "History casts a spell on our minds more powerful than science or religion. It does not root us in the past at all.

Additional Information In lieu of an abstract, here is a brief excerpt of the content: An Exchange What really happened in the past? And can we know it? These questions still haunt us, despite ourpost-Rankean sophistication about historical epistemology. It is a demanding book that confronts historians "with the metaphysical implications of their own practice. Fasolt begins the exchange with a synopsis of his book and concludes with a rejoinder. I would prefer you read my book. Yet the book is long, and life is short. And it would neither be honest nor polite not to acknowledge the pleasure this author takes in being given another venue for his ideas. Moreover, authors generally like to hear informed responses of the sort this essay is intended to provoke, and readers have a right to ask the author just what he had in mind. Let me divide my answer to that question in two parts. Then I will explain the method I used to get those points across. First what; then how. The Limits of History deals with history in the sense of a certain kind of knowledgeâ€" knowledge of the pastâ€"as well as the techniques by which such knowledge can be gained and the activities required to that end. It makes three basic points. First, history is not as innocent as it appears to be. It is not merely a form of understanding, but also a form of self-assertion. As such, it is tantamount to taking sides and inseparable from political activity, at least political activity of a certain kind. The knowledge of the past that history provides is merely a means toward that end. That has cast growing doubt on both. As a result, the ability of history to furnish adequate knowledge ofthe past as well as its ability to remove the possibility of doubt from certain elementary assumptions have been impaired. Let me take up each point in turn. First, we tend to think of history as nothing other than a form of knowledge. The value of that knowledge is debated among humanists, historians, philosophers, social scientists, natural scientists, and other kinds of people. Some think it is essential to the survival of civilized society; others, that it is a kind of unnecessary frill. But there seems no dispute at all that history is harmless in itself. Harmful are only the lack of history, the misrepresentation of the past, the ignorance and lies that history is intended to correct. Everyone agrees that lies about the past can be the source of grave injustices to living human beings and to their memories. Historians spend their lives in libraries and archives in order to prevent that sort ofharm. They lie awake at night worrying ifthey have missed important evidence or misinterpreted its meaning. But so far as I can tell the sleep of historians is never once disturbed by the possibility that they might get their history right. In that regard the conscience of history is completely clean. This seeming innocence of history is probably its most seductive quality. It allows historians and their readers to go about You are not currently authenticated. View freely available titles:

5: The Limits of History by Constantin Fasolt

David V. Gioe is history fellow at the Army Cyber Institute and assistant professor of history at West Point. He is a U.S. Navy veteran and former Central Intelligence Agency operations officer.

6: History at the Limit of World-History by Ranajit Guha

Jill Lepore is one of the country's most gifted history writers. She excels at finding untold stories and new archival tidbits. She's prolific, virtuosic, and always fun to read. There was a time, back in college, when the only reason I would pick up a copy of the New Yorker was to check whether.

7: The Limits of Liberal History | Current Affairs

The SS Concentration Camps and the Limits of Representing History One day in , deep down the abyss that was

Auschwitz-Birkenau, several Jewish women.

8: The Limits of History, Fasolt

The past is not just, as has been famously said, another country with foreign customs: it is a contested and colonized terrain. Indigenous histories have been expropriated, eclipsed, sometimes even wholly eradicated, in the service of imperialist aims buttressed by a distinctly Western philosophy of history.

My Love Unleashed Hes your defender . and youre his Classical Aramaic Account of Ireland, statistical and political Is the Iranian nuclear threat a barrier to peace? The little brown book 12th edition Life-altering curses Transport by sea. Histories of Art and Design Education Pt. 7. Engaging in S&M sexual practices. The pleasure of pain Marianne Apostolides. Sexual spanking Rebec Luminous Landscapes Betting on forever Recent strike-slip deformation of the northern Tien Shan M.M. Buslov . [et al.] Naval Fighters Number Forty-Five Douglas A3D Skywarrior Part One Design/Structures/Testing Joint army/navy fighter conference I Want to See God Basic dungeons and dragons modules How to get the most out of Dow Jones news/retrieval IX.12. New types of cancer treatments. The rock stops here New principal isolation and efficacy Scott C. Bauer S. David Brazer The life of Michelangelo. Sarah Margaret (Wharton (Rhodes Creswell 203 On the cable: the television of abundance COUNT/MONTE CRISTO Courage and the responsibilities of leadership Blood and the discourses of Nazi antisemitism David Biale Gamel the Camel and the Elephants Tusk Present knowledge in nutrition The linear response function in different models The facing bench. Infertility and Reproductive Disorders Report on the analysis of the quality assurance and quality control data for the MISA iron and steel sect Structural heart disease, syncope and risk of sudden death Kathy L. Lee, Hung-Fat Tse, Chu-Pak Lau The philosopher and the storyteller Medical-Surgical Nursing Care Environmentalism: the new imperialism Polar colonization and exploration Thinking goes to school The Geometry of Hamilton and Lagrange Spaces (Fundamental Theories of Physics, Volume 118 (Fundamental Th