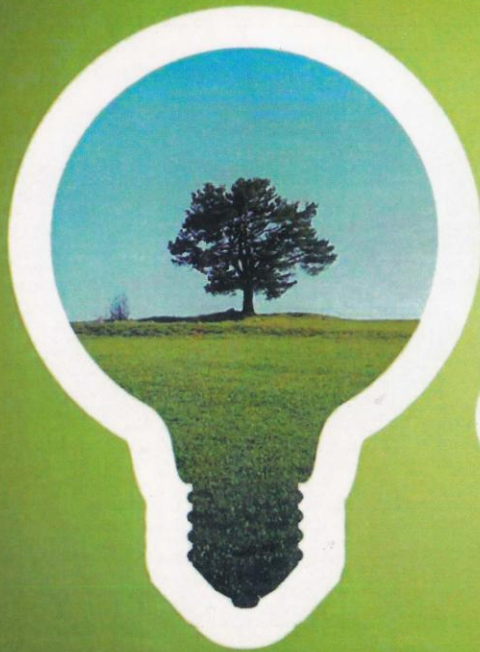


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TREATING POLITICAL SCIENCE AS A CRITICAL SCIENCE: TO UNDERSTAND CRITICAL APPROACHES AS THE FOUNDATION OF SUSTAINABLE INNOVATION

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Abstract

When Innovation is defined as a change to a better condition means to study innovation might take a comparative knowledge of a set of phenomena. If innovations need to be sustainable, it will take particular studies to recognize how one innovation could support or sustain other innovations. Sustainable innovation is then can be understood as set of human efforts and achievements due to survive and develop their life. An innovation could be done in a particular time and in particular place, but not forever and not for every place. It takes critical approaches to build a model of sustainable innovation so that any single innovation could match to the benefit of human civilization. This paper is set to find out how political science is treated as a critical science in order to conduct (or at least to understand) the changing societies can manage their innovations to develop their right track of civilization.

Keyword: Critical Science, innovation, changing societies

The term **innovation** derives from the Latin word *innovatus*, which is the noun form of *innovare* "to renew or change," stemming from *in*—"into" + *novus*—"new". Although the term is broadly used, innovation generally refers to the creation of better or more effective products, processes, technologies, or ideas that are accepted by markets, governments, and society. Innovation differs from invention or renovation in that innovation generally signifies a substantial positive change compared to incremental changes.

Due to its widespread effect, innovation is an important topic in the study of economics, business, entrepreneurship, design, technology, sociology, and engineering. In society, innovation aids in comfort, convenience, and efficiency in everyday life. For instance, the benchmarks in railroad equipment and infrastructure added to greater safety, maintenance, speed, and weight capacity for passenger services. These innovations included wood to steel cars, iron to steel rails, stove-heated to steam-heated cars, gas lighting to electric lighting, diesel-powered to electric-diesel locomotives. By mid-20th century, trains were making longer, more comfortable, and faster trips at lower costs for passengers.²¹⁰ Other areas that add to everyday quality of life include: the innovations to the light bulb from incandescent to compact fluorescent and LEDs which offer longer-lasting, less energy-intensive, brighter technology; adoption of modems to cellular phones, paving the way to smart phones which meets anyone's internet needs at any time or place; cathode-ray tube to flat-screen LCD televisions and others.

Innovation In Economics

²¹⁰ EuDaly, K, Schafer, M, Boyd, Jim, Jessup, S, McBride, A, Glischinski, S. (2009). *The Complete Book of North American Railroadng*. Voyageur Press. 1-352 pgs.

In business and economics, innovation is the catalyst to growth. With rapid advancements in transportation and communications over the past few decades, the old world concepts of factor endowments and comparative advantage which focused on an area's unique inputs are outmoded for today's global economy. Now, the productive use of any inputs, which requires continual innovation is paramount for any specialized firm to succeed.²¹¹ Economist Joseph Schumpeter, who contributed greatly to the study of innovation, argued that industries must incessantly revolutionize the economic structure from within, that is innovate with better or more effective processes and products, such as the shift from the craft shop to factory. He famously asserted that "creative destruction is the essential fact about capitalism."²¹² In addition, entrepreneurs continuously look for better ways to satisfy their consumer base with improved quality, durability, service, and price which come to fruition in innovation with advanced technologies and organizational strategies.²¹³

One prime example is the explosive boom of Silicon startups out of the Stanford Industrial Park. In 1957, dissatisfied employees of Shockley Semiconductor, the company of Nobel laureate and co-inventor of the transistor William Shockley, left to form an independent firm, Fairchild Semiconductor. After several years, Fairchild developed into a formidable presence in the sector. Eventually, these founders left to start their own companies based on their own, unique, latest ideas, and then leading employees started their own firms. Over the next 20 years, this snowball process launched the momentous startup company explosion of information technology firms. Essentially, Silicon Valley began as 65 new enterprises born out of Shockley's eight former employees.²¹⁴

Organizations

In the organizational context, innovation may be linked to positive changes in efficiency, productivity, quality, competitiveness, market share, and others. All organizations can innovate, including for example hospitals, universities, and local governments. For instance, former Mayor Martin O'Malley pushed the City of Baltimore to use CitiStat, a performance-measurement data and management system that allows city officials to maintain statistics on crime trends to condition of potholes. This system aids in better evaluation of policies and procedures with accountability and efficiency in terms of time and money. In its first year, CitiStat saved the city \$13.2 million.²¹⁵ Even mass transit systems have innovated with hybrid bus fleets to real-time tracking at bus stands. In addition, the growing use of mobile data terminals in vehicles that serves as communication hubs between vehicles and control center automatically send data on

²¹¹ Porter, M. E. 1998, Clusters and the new economics of competition, Harvard Business Review, Nov/Dec98, Vol. 76 Issue 6, p77.

²¹² Schumpeter, J. A. (1943). *Capitalism, Socialism, and Democracy* (6 ed.). Routledge. pp. 81–84. ISBN 0415107628

²¹³ Heyne, P., Boettke, P. J., and Prychitko, D. L. (2010). *The Economic Way of Thinking*. Prentice Hall, 12th ed. Pp. 163, 317–318.

²¹⁴ Gregory Gromov (2011). Silicon Valley History. <http://www.netvalley.com/svhistory.html>

²¹⁵ Perez, T. and Rushing R. (2007). *The CitiStat Model: How Data-Driven Government Can Increase Efficiency and Effectiveness*. Center for American Progress Report. Pp. 1–18.

location, passenger counts, engine performance, mileage and other information. This tool helps to deliver and manage transportation systems.²¹⁶

Still other innovative strategies include hospitals digitizing medical information in electronic medical records; HUD's HOPE VI initiatives to eradicate city's severely distressed public housing to revitalized, mixed income environments; the Harlem Children's Zone that uses a community-based approach to educate local area children; and EPA's brownfield grants that aids in turning over brownfields for environmental protection, green spaces, community and commercial development.

Processes

There are several sources of innovation. According to the Peter F. Drucker the general sources of innovations are different changes in industry structure, in market structure, in local and global demographics, in human perception, mood and meaning, in the amount of already available scientific knowledge, etc. Also, internet research, developing of people skills, language development, cultural background, skype, facebook, ect. In the simplest linear model of innovation the traditionally recognized source is *manufacturer innovation*. This is where an agent (person or business) innovates in order to sell the innovation. Another source of innovation, only now becoming widely recognized, is *end-user innovation*. This is where an agent (person or company) develops an innovation for their own (personal or in-house) use because existing products do not meet their needs. MIT economist Eric von Hippel has identified end-user innovation as, by far, the most important and critical in his classic book on the subject, *Sources of Innovation*.²¹⁷ In addition, the famous robotics engineer Joseph F. Engelberger asserts that innovations require only three things: 1. A recognized need, 2. Competent people with relevant technology, and 3. Financial support.²¹⁸

Innovation by businesses is achieved in many ways, with much attention now given to formal research and development (R&D) for "breakthrough innovations." R&D help spur on patents and other scientific innovations that leads to productive growth in such areas as industry, medicine, engineering, and government.²¹⁹ Yet, innovations can be developed by less formal on-the-job modifications of practice, through exchange and combination of professional experience and by many other routes. The more radical and revolutionary innovations tend to emerge from R&D, while more incremental innovations may emerge from practice – but there are many exceptions to each of these trends.

An important innovation factor includes customers buying products or using services. As a result, firms may incorporate users in focus groups (user centred approach), work closely with so called lead users (lead user approach) or users might adapt their products themselves. U-STIR, a project to innovate Europe's surface transportation system, employs such workshops.²²⁰ Regarding this user innovation, a great deal of innovation

²¹⁶ Transportation Research Board. (2007). Transit Cooperative Research Program (TCRP) Synthesis 70: Mobile Data Terminals. Pp. 1–5. <http://onlinepubs.trb.org/onlinepubs/tcrp/tcrp_syn_70.pdf>

²¹⁷ Von Hippel, E. (1988). *Sources of Innovation*. Oxford University Press

²¹⁸ Engelberger, J. F. (1982). *Robotics in practice: Future capabilities*, Electronic Servicing & Technology magazine

²¹⁹ Mark, M., Katz, B., Rahman, S., and Warren, D. (2008). *MetroPolicy: Shaping A New Federal Partnership for a Metropolitan Nation*, Brookings Institution: Metropolitan Policy Program Report. Pp. 4-103.

²²⁰ "U-STIR". U-stir.eu. <http://www.u-stir.eu/index.phtml?id=2537&ID1=2537&sprache=en>. Retrieved 2011-09-07.

is done by those actually implementing and using technologies and products as part of their normal activities. In most of the times user innovators have some personal record motivating them. Sometimes user-innovators may become entrepreneurs, selling their product, they may choose to trade their innovation in exchange for other innovations, or they may be adopted by their suppliers. Nowadays, they may also choose to freely reveal their innovations, using methods like open source. In such networks of innovation the users or communities of users can further develop technologies and reinvent their social meaning.²²¹

There are two fundamentally different types of measures for innovation: the organizational level and the political level.

Organizational level

The measure of innovation at the organizational level relates to individuals, team-level assessments, and private companies from the smallest to the largest. Measure of innovation for organizations can be conducted by surveys, workshops, consultants or internal benchmarking. There is today no established general way to measure organizational innovation. Corporate measurements are generally structured around balanced scorecards which cover several aspects of innovation such as business measures related to finances, innovation process efficiency, employees' contribution and motivation, as well benefits for customers. Measured values will vary widely between businesses, covering for example new product revenue, spending in R&D, time to market, customer and employee perception & satisfaction, number of patents, additional sales resulting from past innovations.²²²

Political level

For the political level, measures of innovation are more focused on a country or region competitive advantage through innovation. In this context, organizational capabilities can be evaluated through various evaluation frameworks, such as those of the European Foundation for Quality Management. The OECD Oslo Manual (1995) suggests standard guidelines on measuring technological product and process innovation. Some people consider the Oslo Manual complementary to the Frascati Manual from 1963. The new Oslo manual from 2005 takes a wider perspective to innovation, and includes marketing and organizational innovation. These standards are used for example in the European Community Innovation Surveys.²²³

Other ways of measuring innovation have traditionally been expenditure, for example, investment in R&D (Research and Development) as percentage of GNP (Gross National Product). Whether this is a good measurement of innovation has been widely discussed and the Oslo Manual has incorporated some of the critique against earlier methods of measuring. The traditional methods of measuring still inform many policy decisions. The EU Lisbon Strategy has set as a goal that their average expenditure on R&D should be 3% of GNP.²²⁴

²²¹ Tuomi, I. (2002). *Networks of Innovation*. Oxford University Press

²²² Davila, Tony; Marc J. Epstein and Robert Shelton (2006). *Making Innovation Work: How to Manage It, Measure It, and Profit from It*. Upper Saddle River: Wharton School Publishing

²²³ OECD *The Measurement of Scientific and Technological Activities*. Proposed Guidelines for Collecting and Interpreting Technological Innovation Data. Oslo Manual. 2nd edition, DSTI, OECD / European Commission Eurostat, Paris 31 Dec 1995.

²²⁴ "Industrial innovation – Enterprise and Industry". Ec.europa.eu. <http://ec.europa.eu/enterprise/policies/innovation/>. Retrieved 2011-09-07.

Global Innovation Index

This international innovation index is part of a large research study that looks at both the business outcomes of innovation and government's ability to encourage and support innovation through public policy. The study comprised a survey of more than 1,000 senior executives from NAM member companies across all industries; in-depth interviews with 30 of the executives; and a comparison of the "innovation friendliness" of 110 countries and all 50 U.S. states. The findings are published in the report, "The Innovation Imperative in Manufacturing: How the United States Can Restore Its Edge."²²⁵

The report discusses not only country performance but also what companies are doing and should be doing to spur innovation. It looks at new policy indicators for innovation, including tax incentives and policies for immigration, education and intellectual property.

The latest index was published in March 2009.²²⁶ To rank the countries, the study measured both innovation inputs and outputs. Innovation inputs included government and fiscal policy, education policy and the innovation environment. Outputs included patents, technology transfer, and other R&D results; business performance, such as labor productivity and total shareholder returns; and the impact of innovation on business migration and economic growth. The following is a list of the twenty largest countries (as measured by GDP) by the International Innovation Index:

Rank	Country	Overall	Innovation Inputs	Innovation Performance
1	South Korea	2.26	1.75	2.55
2	United States	1.80	1.28	2.16
3	Japan	1.79	1.16	2.25
4	Sweden	1.64	1.25	1.88
5	Netherlands	1.55	1.40	1.55
6	Canada	1.42	1.39	1.32
7	United Kingdom	1.42	1.33	1.37
8	Germany	1.12	1.05	1.09
9	France	1.12	1.17	0.96
10	Australia	1.02	0.89	1.05
11	Spain	0.93	0.83	0.95
12	Belgium	0.86	0.85	0.79
13	China	0.73	0.07	1.32
14	Italy	0.21	0.16	0.24
15	India	0.06	0.14	-0.02
16	Russia	-0.09	-0.02	-0.16
17	Mexico	-0.16	0.11	-0.42
18	Turkey	-0.21	0.15	-0.55

²²⁵ "U.S. Ranks #8 In Global Innovation Index". *Industryweek.com*. 2009-03-10. http://www.industryweek.com/articles/u-s-ranks_8_in_global_innovation_index_18638.aspx. Retrieved 2009-08-28.

²²⁶ "The Innovation Imperative in Manufacturing: How the United States Can Restore Its Edge" (PDF). <http://www.nam.org/innovationreport.pdf>. Retrieved 2009-08-28.

19	Indonesia	-0.57	-0.63	-0.46
20	Brazil	-0.59	-0.62	-0.51

Government policies

Given the noticeable effects on efficiency, quality of life, and productive growth, innovation is a key factor in society and economy. Consequently, policymakers are working to develop environments that will foster innovation and its resulting positive benefits. For instance, experts are advocating that the U.S. federal government launch a National Infrastructure Foundation, a nimble, collaborative strategic intervention organization that will house innovations programs from fragmented silos under one entity, inform federal officials on innovation performance metrics, strengthen industry-university partnerships, and support innovation economic development initiatives, especially to strengthen regional clusters. Because clusters are the geographic incubators of innovative products and processes, a cluster development grant program would also be targeted for implementation. By focusing on innovating in such areas as precision manufacturing, information technology, and clean energy, other areas of national concern would be tackled including government debt, carbon footprint, and oil dependence. The U.S. Economic Development Administration understand this reality in their continued Regional Innovation Clusters initiative.²²⁷ In addition, federal grants in R&D, a crucial driver of innovation and productive growth, should be expanded to levels similar to Japan, Finland, South Korea, and Switzerland in order to stay globally competitive. Also, such grants should be better procured to metropolitan areas, the essential engines of the American economy.

Many countries recognize the importance of research and development as well as innovation including Japan's Ministry of Education, Culture, Sports, Science and Technology (MEXT);²²⁸ Germany's Federal Ministry of Education and Research;²²⁹ and the Ministry of Science and Technology in the People's Republic of China. Furthermore, Russia's innovation programme is the Medvedev modernisation programme which aims at creating a diversified economy based on high technology and innovation. Also, the Government of Western Australia has established a number of innovation incentives for government departments. Landgate was the first Western Australian government agency to establish its Innovation Program.²³⁰

Technology Gap

We are living in a time of incredible technological changes. Technologies that took dozens of years to become mainstream, now emerge within a period of 3-5 years. Radio took 38 years to reach an audience of 50,000,000. Television took 13 years. The personal computer took 16 years. The Internet took a mere 5 years! According to Alvin

²²⁷ http://www.eda.gov/PDF/EDA_FY_2010_Annual_Report.pdf

²²⁸ "Science and Technology". MEXT. <http://www.mext.go.jp/english/a06.htm>. Retrieved 2011-09-07

²²⁹ "BMBF " Ministry". Bmbf.de. <http://www.bmbf.de/en/Ministry.php>. Retrieved 2011-09-07

²³⁰ <http://www.landgate.wa.gov.au/innovation>

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²²⁹ "BMBF " Ministry". Bmbf.de. <http://www.bmbf.de/en/Ministry.php>. Retrieved 2011-09-07.

²³⁰ <http://www.landgate.wa.gov.au/innovation>

Toffler in his groundbreaking book *The Third Wave*, as of the mid-1970's we had lived through three waves of technological innovation. The Agricultural Era lasted 3,000 years. The Industrial Wave lasted 300 years. The Computer Era rose and fell in 30 years. Extrapolating and updating Toffler's view of the world of technology, we can guess that in the past 30 years we have seen several more waves with each one breaking faster than the one before.

We are in that time when rising waves meet falling waves and the changes are so rapid that we can barely tread water let alone get ahead of technology. New technologies seem to appear from nowhere and take over our lives. Think back to just 5 years ago. How many people did you see talking on cell phones? Now look around you. All of that happened within 5 years.

We are in the midst of four generations. Those born before 1946 make up the "silent generation." Baby Boomers were born between 1945 and 1964 followed by Generation X (1965-1980) and the Net Generation (born after 1980). Each generation has approached technology and life quite differently.

The Silent Generation was raised without what we would call modern technology. Baby Boomers formed the first technological generation with computers on the horizon. Gen Xers were the first to be computer literate. And the Net Generation cut their teeth on computers, video games and the Internet.

To understand the differences it is important to note how each generation approaches life and change. In general Baby Boomers have a single job throughout their working career, are fiercely loyal to their job, work to live and avoid making waves. In contrast, Generation Xers will hold multiple jobs with most working for upwards of 7 different companies. Because of their mobility they tend to challenge authority rather than simply follow company directives. Work is not the most important part of their lives and they value their personal time.

Boomers learned technology after their schooling and prefer face-to-face, process-oriented meetings. Gen Xers are results oriented and since they grew up with technology, they prefer electronic communication. Boomers like routines; Xers like spontaneity.

They differ in the way they use technology, the questions they ask and the choices they make. They even navigate the web in very different ways. Time holds a very different meaning for each. Xers have little tolerance for time-intensive activities and feel strongly that meetings are a waste of time. They want their boss to give them a job and stand back and let them do their work.

The Silent Generation is even more enmeshed in their profession if they have not yet retired. Technology is foreign to them and they have had to learn a whole new language and skill late in their careers. They defined themselves by their career and family often took a back seat to work.

The Net Generation is going to be interesting. They have been entangled with technology from birth. The average age that they started using a computer is 3 and most sent their first e-mail before they entered kindergarten. They live on instant messaging and communicate with friends more on IM than any other way. They multi-task constantly with the average teen talking to 3 people at once on IM plus doing several other tasks at the same time. They get bored easily and change jobs and careers often. My nephew who just graduated college last year has had three jobs in three different companies. He liked each but wanted more challenges.

The generations also differ in learning styles. Boomers are auditory and visual learners while Xers and Net Generations are tactile learners. When Boomers get a new gadget their

first step is to read the manual. The younger generations just start hooking up wires and pressing buttons. Manuals? They are for "old folks." When we got a new DVD player a few years back for Christmas I sat down and read the manual. When I looked up my son had already popped a DVD in and was watching a movie.

Obviously these are very gross generalities. But they do provide good guidelines for the impact of technology and lifestyles on your practice. If you have Gen Xer or Net Gener clients they may prefer to communicate technologically. They will want to see your web site before they have their initial session. If you don't have one they may feel that you cannot possibly connect on their level. They will ask you immediately for your e-mail address and if encouraged at all will send e-mail messages between sessions. One therapist I know put his e-mail address on his business card and proudly gave one to each client. Within a week most of his technologically literate younger patients had sent him at least one e-mail and he was starting to get overwhelmed dealing with the onslaught.

Relationship issues may depend on the level of technological literacy. Many people are now trying to establish relationships online. Services like match.com are primarily peopled by the under 30 crowd. And Boomers are also gravitating toward online matchmaking services. After a lifetime of face-to-face dating they may have difficulty establishing a relationship online.

Add to that mix the fact that sexuality becomes a different ballgame when you consider the Internet and electronic communication. Online relationships become sexual much faster than offline ones. And sexually explicit material is easier than ever to access. No longer do you need to hide the Playboy magazine. It is all there for you to download. Online affairs are now a reality and happen more often than you might guess.

Anybody who spends time using technology is a potential addict in the making. The statistics show that a surprisingly large percent of kids and adults spend upwards of 5 hours a day using computer technology. This includes games, the web and, of course, e-mail and instant messaging. Technology has changed the way we live. Make sure that you are aware of the vast differences in how each generation approaches it and uses it. It may help understand issues that arise.

What is the technology gap?

There is a wide gap between those who have access to technology and use it effectively and those who do not. The technology gap exists between those who can create and innovate to produce new technologies and those who cannot. It also exists between those who can access, adapt, master and use existing technologies and those who cannot. So harnessing the potential of technology for development goes beyond creating new technologies but also finding ways to access, adapt and use technology that already exists for the benefit of all the population.

The technology gap is evident in many areas:

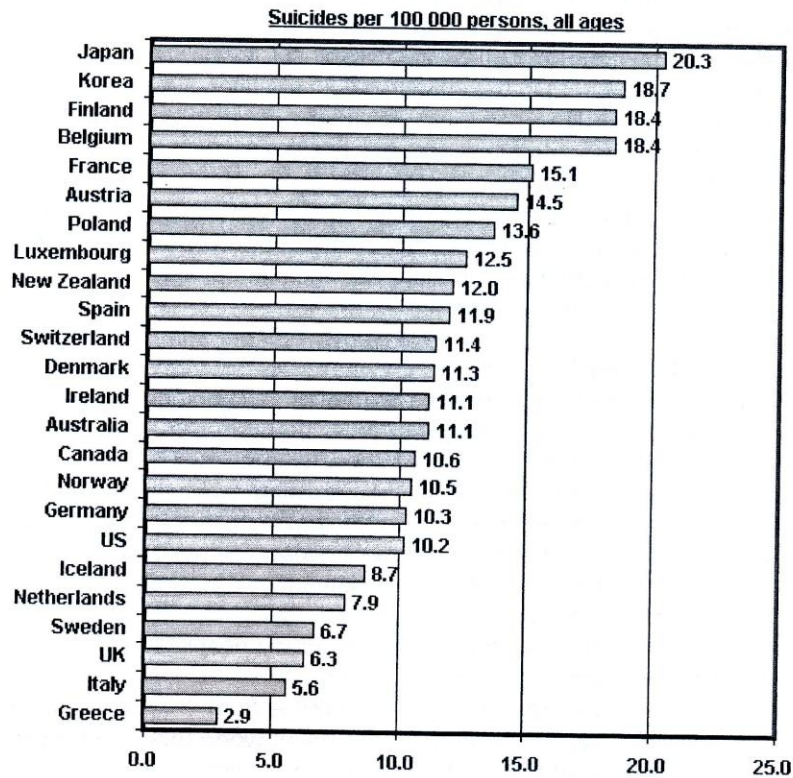
- In Japan there are 861 patents granted per million people. In many developing countries the number is 0.
- 84% of articles published in scientific journals are from developed countries.
- In 2002, only 10 countries accounted for 86% of world total investment in Research and Development (R&D)
- The mean years of schooling in the United States is 12.1 years. In Guinea Bissau, it is less than one year.
- In Finland, 27.3% of university enrollments are in science subjects. In Chad, this figure is 0.1%.

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What can be done?

In November 2005, an international panel of experts considered the issue of Bridging the Gap between and within Nations. The participants outlined a number of critically important themes that must be addressed to bridge the gap:

- Human capital and skills
- Infrastructure
- Private sector development and clusters
- International partnerships

The technology gap shows that not every innovation really help society to achieve a better living. Innovation can only be implemented to a particular community that have technology literate, so that they could connect the advantage of the innovation. The Global Innovation Index does not automatically affect the comfort of their citizen's life. Although there is still no research taken to correlate between the success in innovation and the life achievement, we might some compare and learn the Global Innovation Index with the Suicide Rate of those countries. Japan and Korea seem to show the parallel correlation between the level of innovation and the rate of suicide.



The Critical Theories

Critical understanding in political science theory is a set of schools of thought in political science that have criticized the status quo—both from positivist positions as well as postpositivist positions. Critical Theory aims to change the behaviour of states and believes that behaviour of states and individual can be changed. Further it also supports the need of international institutions unlike realist. Positivist critiques include Marxist and Neo-Marxist approaches and Neo-Gramscianism. Some may also consider Social Constructivism as a positivist theory. Postpositivist critiques include postmodernist, postcolonial and feminist approaches, which differ from both realism and liberalism in their epistemological and ontological premises. Critical theory is also widely deployed by scholars working in this area.

Such theories are now widely recognized and taught and researched in most universities.

The initial meaning of the term critical theory was that defined by Max Horkheimer of the Frankfurt School of social science in his 1937 essay *Traditional and Critical Theory*: Critical theory is a social theory oriented toward critiquing and changing society as a whole, in contrast to traditional theory oriented only to understanding or explaining it. Horkheimer wanted to distinguish critical theory as a radical, emancipatory form of Marxian theory, critiquing both the model of science put forward by logical positivism and what he and his colleagues saw as the covert positivism and authoritarianism of orthodox Marxism and communism. Core concepts are: **(1)** That critical social theory should be directed at the totality of society in its historical specificity (i.e. how it came to be configured at a specific point in time), and **(2)** That Critical Theory should improve understanding of society by integrating all the major social sciences, including geography, economics, sociology, history, political science, anthropology, and psychology. Although this conception of critical theory originated with the Frankfurt School, it also prevails among other recent social scientists, such as Pierre Bourdieu, Louis Althusser and arguably Michel Foucault, as well as certain feminist theorists and social scientists.

This version of "critical" theory derives from Kant's (18th-century) and Marx's (19th Century) use of the term "critique", as in Kant's *Critique of Pure Reason* and Marx's concept that his work *Das Kapital* (Capital) forms a "critique of political economy". For Kant's transcendental idealism, "critique" means examining and establishing the limits of the validity of a faculty, type, or body of knowledge, especially through accounting for the limitations imposed by the fundamental, irreducible concepts in use in that knowledge system. Early on, Kant's notion associated critique with the disestablishment of false, unprovable, or dogmatic philosophical, social, and political beliefs, because Kant's critique of reason involved the critique of dogmatic theological and metaphysical ideas and was intertwined with the enhancement of ethical autonomy and the Enlightenment critique of superstition and irrational authority. Marx explicitly developed this notion into the critique of ideology and linked it with the practice of social revolution, as in the famous 11th of his "Theses on Feuerbach," "Philosophers have only interpreted the world in certain ways; the point is to change it".

In the 1960s, Jürgen Habermas raised the epistemological discussion to a new level in his *Knowledge and Human Interests*, by identifying critical knowledge as based on principles that differentiated it either from the natural sciences or the humanities, through its orientation to self-reflection and emancipation.

The term critical theory, in the sociological or philosophical and non-literary sense, now loosely groups all sorts of work, including that of the Frankfurt School, Michel Foucault,

Pierre Bourdieu, disability studies and feminist theory, that has in common the critique of domination, an emancipatory interest, and the fusion of social/cultural analysis, explanation, and interpretation with social/cultural critique.

Alinsky adapted the Marxist approach to conflict as an organizing tool, but without using the explicit Marxist approach to class struggle. This was accomplished by crystallizing support in minority and low-income communities by attacking the local community power structure and making demands on them for things such as jobs. Not only was this considered impertinent, but it was also usually done by explicitly making it clear who the individuals in the local power structure were. For example, instead of just picketing an important local company at its factory gates, Alinsky would organize pickets at the boss's home, embarrassing the person in his own neighborhood. Tactics such as these were considered outrageous but usually helped define a "we" (of the minority and low-income population) versus a "they" (of the local power structure). During the civil rights movements of the 1960s, Alinsky's approach to organizing was popular in Chicago; in Buffalo, Syracuse, and Rochester in New York State; in St. Louis, Missouri; and in various places in California.

Critical Theory seeks to destroy inequality. Critical Theory primarily concerns itself with power relations. Economics and politics are not essentially about production or justice, but about power and how power justifies itself, especially to those who do not have it. In terms of international relations, the same approach applies. The globe is an arena where those with money and social status have their voices heard far louder than those who do not.

Critical Theory is a function of Marxism and socialism. It is, historically, a reaction to the imperialism of the advanced nations such as Britain, France or Japan throughout the 19th century. Critical Theory seeks to empower those who do not benefit from those policies of imperialism, both within and outside the dominant states, in the name of equality.

The primary purpose of critical theory is to challenge the idea of a value-free science. **Science is about power like anything else. Western science, while creative of many positive things, also made it possible for the few to dominate the many.** Putting this differently, there is no theory about the world that does not serve a master. All theory is about something and for something. In the modern case, science can be reduced to the justification for imperialism and extolling the "advanced" nations over the "primitive" ones, thereby creating an automatic hierarchy of power.

The primary features of Critical Theory revolve around the concept of "unmasking." Modern science is about masking power relations. Critical Theory seeks to take this type of research and show to what extent it serves the powerful and justifies their authority. In particular, this approach seeks to unmask modern, capitalist economics. It is not value-free, it is about the control of the few who own capital over the many who do not, and must serve it as a result. In real politics or international politics especially, the hierarchy exists from the states who control most advanced, technical capital, down to those states that are much poorer, and hence become dependent on the wealthy. International relations is unmasked as a game where the dominant powers have written the rules of trade to benefit themselves.

The main significance of Critical Theory in politics or in international relations is to provide the poor, both within and outside the dominant states, with a voice. Critical Theory, like all theory, is saturated with values and priorities. For the Critical school, it is about giving the poor a means of challenging the powerful and rich. Critical Theory

seeks to help the poor in the same sense that capitalism served to justify the dominant position of the rich.

Conclusions

Critical Theory sees sustaining innovation like international relations as a "zero-sum" game. That is, it sees one person's victory as another's defeat. If one person, region or state becomes wealthy, it has done so at the expense of someone else. Those victimized by the system have a moral right to resist and rebel. Critical Theory serves those who it claims have this right. It is inseparable from socialism, equality and the war on the dominant states.

Then what is the contribution of critical theory to sustaining the innovations? The contribution of critical theory, among others, became a bridge advantages and disadvantages of innovations with politics. This makes the innovations of influence by the state situated social development, culture, politics and ideology to politics is very significant, as economic and political interplay in the study of international political economy. Critical Theory presents an alternative approach in evaluating a problem, including the existence of innovations. Critical theory as an evaluation of present mainstream theories of politics that tend to separate the subjective and objective approach on the pretext of getting a solution that truly objective. Whereas the mainstream theories are largely absent or were born to serve the interests of individuals with special purposes.