RM lectures prior to the first test

- Social sciences are present in our daily lives, we read about the studies they produce in newspaper p.2

- The news media are filled with articles or reports based on various scientific sciences p.2

- Sex and food and the Japanese study

- We are all interested about the world around and in questions related to our social environment and that is why we should understand research method

- That is the case since the antiquity

- But for countless generations the answers were based on superstition, intuition and speculation p.2

- Superstition still endures, midwives and full moon,

- This situation has started to change since 2 centuries with the advent of social sciences

- The result has been a remarkable expansion of our knowledge about ourselves and the world p.2

- Common sense is not enough, since it does not provide us with the capacity to verify if our assumptions are correct p.2

- It led many people to believe that the earth was flat and that it was at the center of the universe

- Politicians who design policies use the finding of the social sciences to justify their policies p.3

- Private organization also fund social research to assist them in various business and magerial decisions p.3

- They do it also as a way to influence the behaviour of potential consumers p.3

- So it is our best interest to understand the benefits and critically evaluate social research p.3

- But first, why do we have to that, what is wrong with common sense or non-scientific information p.3

Introduction: What is specific about social science research?

- Science differs from other ways of knowing and doing research because of its aims and the procedures it uses to pursue those aims p.5

- First difference, science aims at objective knowledge

- That is not tied to immediate or practical problems, but is sought for its own case p.5

- As opposed folkway or everyday factual information for solving immediate, practical problems in our lives p.5

- Women and driving.

- Raise the question, is it really? Answer not completely.

- Scientific research is a recent development in human history p.5

- Ideas associated with science, such as experimentation, precise measurement, and the application of mathematics to description and explanation, developed mainly in the period ranging from 1600 to 1800, in Western Europe p.5

- They also had to be rigorous, use logic, mathematics, and above empirical systematic research p.6

- A major feature of the scientific method is the importance given to observation p.6

- The aim of systematic empirical research is to observe, describe, explain and predict in order to improve our understanding of reality p.6

- As opposed to casual research, which quickly gathers the most convenient and accessible information

- If possible, some example of the social science research, the challenge of Les Sceptiques du Québec.

A brief history of the scientific revolution

- Do you think a full moon influences behaviour? The nurse and the emergency. What happens when you see a black cat? When pass under a ladder?

- During the Middle age and beyond it, people were full of beliefs according to which if you wanted a baby to have a good health, you needed to go out on a night of full moon and pronounce incantations of various sorts. If you wanted your land to be fertile, you need to do dance around a certain type of tree and sing, etc. BUT....

- Pregnancy test for women to guess if it is a boy or a girl

- In the 17th and 18th century, man had become fully aware of the environment around him p.180, no longer mysterious decrees of an inscrutable providence

- The emergence of the social sciences was brought by the changes that took place from the Renaissance, the discovery of new sea routes, the new world, protestant reformation,

- At first it was a set of philosophical values, a new paradigms

The example of Galileo, natural science

- Thanks to it, Galileo (1564-1642), an Italian scientist established that the sun was at the center of the universe

- He, among other things, invented the first thermostat

- The telescope had been invented in 1608 in Holland

- Following a brief description of this telescope, he builds one and starts observing the sky, the stars and the planet, venus especially

- He will then test 2 hypothesis

1. The geocentric model of Ptolemy, earth is at the center of the solar system

- If so, he calculates the moments during which Venus will be illuminated by the sun

- He finds that Venus is not illuminated at the moments he thought it should

2. The heliocentric model, the sun is at the center, developed by Copernicus

- He collects data again and this time it supports the idea that the sun is at the center

- The sun is at the centre of the universe, Galileo, the earth rotates

The standardization of the scientific approach

- First the social sciences separated from philosophy and from non-academic activity such as journalism p.6

- Then each discipline took its own course

- Then Wilhelm Wundt set up the first experimental in 1879

- In 1927-32 Elton Mayo conducted a study on the productivity of factory worker and the influence of illumination on productivity p.7

- It is only later that it involved the empirical method p.6

The various social sciences

- The social sciences emerged with the renaissance, the rise of science, printing, protestant reformation, discoveries etc.

- (Edward Carr and the social sciences, man and his environment)

- They separated from philosophy and then evolved and different branches

- Like natural sciences, botany, chemistry, physics, etc.

- What are the various social sciences and what are they doing

Anthropology

- Anthropology studies the origin and varieties of human beings and their societies, the varieties of beliefs, culture, language, customs, evolution

- In Canada the predecessors of anthropology were the missionaries, explorers and travelers, as some of them were collecting data and writing journals describing what they saw p.7

- To be empirical means that you do not assume that you already know the anwsers, your research in not shaped by moral convictions or other traditional cultural assumptions, etc

- Anthropology studies the origins of varieties of human beings and their societies, their ways of live, beliefs, customs, language, culture, etc. p.7

- Edward Sapir a famous American linguist, was one of the father of the discipline in Canada, in the 20th century

- The first anthropology department was established at the University of Toronto p.7

- Economics studies how humn beings allocate scarce resources to produce goods and services and how these goods and services are distributed for consumption p. 8

- It is divided into 2 branches, macro-economics, the study of the entire economies

- Micro-economics, the study of the behaviour of individual firms, consumers and other economic actors

- It started in Canada with amateur writing on policy issues by government officials or businesspeople and was known first as political economy p.8

- The Dominion Bureau of statistics was set up in 1918 to provide standardized statistics for economic analysis p.8

- The Canadian Political Science association was established in 1929 and it included at the time economists (so it was a branch of political science)

- Then in 1967, the Canadian Economics Association was set up p.

- Geography is the study of physical environmental phenomena and their interrelation with human population

- People doing maps for mining companies in the 19 and 20th century were Canada's early geographers p.9

- Geography is the study of physical environmentla phenomena and their interrelations, including human populations as a factor of physical change in climates and terrains

- Early geographer in Canada were people doing map for mining companies p.9

- The first department was set up at the Univesity of British Columbia in 22

- History: the study of the human past using documents as evidence and as a source for accuracy p.9

- political science, studying the processes, institutions and activ ities of governments and groups reactin to and involved in these processes p.9

- It emerged as a discipline when scholars, during the 18th and 19th century, tried to classify varieties of government and political system and tried to explain why they existed p.9

- With the growth of democracy, analysis of elections and voting patterns also emerged p.9

- psychology is the study of behaviour and thought processes, psychologists do research on such thing as perceptions, memory, problem solving, learning how to use language, adjusting to the physical and social environment

- Normal and abnormal development of these processes from infancy to old age p.10

- It oberves human (and animals) and conduct experimental studies p.10

- The first experimental laboratory for psychology was set up at the University of Toronto in 1889 p.10

- Sociology emerged in the 19th century as the study of all aspects of social life in industrial and modern societies p.10

- It is now defined as the study of human social relationships, the rules and ideas that guide these relationships and the development of institutions and movements that converse and change society

- It emerged in Canadian universities as a separate independent discipline in the 1940s p.10

The uniqueness of social sciences

- Social science borrowed the scientific method from natural science, but what is unique about it p.10?

- Social scientists study human beings with whom they can communicate

- They study a society to which they belong, they are part of the object of the study themselves and can influence it p.11

(Anecdote of economists' prediction or political scientist)

- They research tools of social scientists is different

- Social scientists can observe, participate, perform interviews, conduct surveys, read documents and letters from the past

- They have more tools, but less accurate ones to an extent (the test on intelligence)

(Anecdote and controversy over IQ test)

- And since it involves communication, the research can be coloured by emotions, political concerns and other sources of bias

- Social reality is something much more difficult to investigate and for which producing strong and firm conclusions explanations is hard

- It is difficult to pin down how one element affect the other, it is often difficult to quantify it

- Qualitative evaluation is often used

- Difficult to pin down the beginning and the end of a phenomena, say like the Quiet Revolution in Quebec

- So social sciences are much less capable of establishing the laws of society, assuming such a thing exist

How does social science research work?

- How does the social science research process take place?

- But we do know a few things about it, without knowing that they are related to social sciences p.19

- You know about polls, studies discussed in the news, you have used the internet and the library p.19

(example of the study of sex and food)

- You have maybe discussed theories during some of your classes p.19

- You have conducted research on which Cegep to go before applying? (Ask the question)

- But social research is more slightly complex and conducted in a different way than casual research p.19

- So how do ideas for research begin and what are the aims and rules of scientific research?

<u>- Three aspects of research process will be examined</u>

- 1.How ideas for research begin or emerge

- 2.The norms and outlook of scientific research

- 3.The steps in the research process

2.The assumptions of the scientific method (norms and outlook of science)

- Assumptions 1, objectivity, researchers are not going to put their personal opinion into the research, should be as objective as possible

Example of a research conducted on smoking:

Q.1 Do you know that smoking is a cause sexual impotency for males?
Q.2 Do you know that secondary smoke kills babies?
Q. 3 Do you know that the skin of a smoker looks 10 years older than the actual age of the person?
Q.4 How many cigarettes do you smoke a day?
Q.5 For how long have you been smoking?
Q.6 Is it a cool thing for you to smoke?

- You do not distort the evidence to suit your own opinions about this and that p.22, honesty and rigour

Objectivity and science (still the norms and outlook of science)

1. **Natural science**

Parenthesis on science and neutrality, the IQ debate

The 1970s debates

The modern debate was prompted by psychology professor Arthur Jensen's 1969 publication of the controversial article, "How Much Can We Boost IQ and School Achievement?".[14]

- In IQ tests, it was found that there was a difference between whites and blacks.

- It is a not unreasonable hypothesis that genetic factors are strongly implicated in the average negro-white intelligence difference (although environmental factors also)

- In the press "as an attempt to defend racism on scientific grounds".

The 1990s debates

- The question of whether group differences in average IQ are purely social, economic, and cultural in nature or whether genetic factors may also be involved has continued to receive wide media coverage;

- Example: the American Anthropological Association issued a declaration which dismissed the debate on the grounds that they view 'race' to be a biologically meaningless categorisation of human beings,

- The publication of *The Bell Curve*, a best-selling 1994 book by American psychologist Richard Herrnstein and American Enterprise Institute political scientist Charles Murray, which included a discussion of racial differences in intelligence, received much attention in the popular press and ignited renewed debate within academia and amongst the general public.

- Its central point is that intelligence is a better predictor of many factors including financial income, job performance, unwed pregnancy, and crime than parents' socioeconomic status or education level.

- Much of the controversy concerned Chapters 13 and 14, in which the authors wrote about the enduring racial differences in intelligence and discussed implications of those differences. The authors were reported throughout the popular press as arguing that racial IQ differences are genetic,

- They said some genetic factors might be at play.

- "The debate about whether and how much genes and environment have to do with ethnic differences remains unresolved."

- Shortly after publication, many people rallied both in criticism and defense of the book. Some critics denounced the book and its authors as supporting scientific racism.

- If we find some factors related to genetics, maybe some racist people will take this as a scientific evidence for their theories. So a very tricky issue.

Another example, women and engineering

Differences between the sexes

In January 2005, Laurence Summers described, at a Conference on Diversifying the Science & Engineering Workforce sponsored by the National Bureau of Economic Research, the different ways of explaining why there were more men than women in high-end science and engineering positions. He gave the three main hypotheses in the following order: that more men than women were willing to make the commitment in terms of time and flexibility demanded by high-powered jobs, that there were differences in the intrinsic abilities of men and women (more specifically, men's higher variance in aptitude, abilities or preferences relevant to science and engineering), and that the

discrepancy was due to discrimination or socialization. He also stated his view that the order given reflected the relative importance of each of the three hypotheses.[7] An attendee made Summers' remarks public, and an intense response followed in the national news media and on Harvard's campus.[8]

[edit] Summers' opposition and support at Harvard

On March 15, 2005, members of Harvard's Faculty of Arts and Sciences, which instructs graduate students in GSAS and undergraduates in Harvard College, passed 218–185 a motion of "lack of confidence" in the leadership of Summers, with 18 abstentions. A second motion that offered a milder censure of the president passed 253 to 137, also with 18 abstentions.

The members of the Harvard Corporation, the University's highest governing body, are in charge of the selection of the president and issued statements strongly supporting Summers.

FAS faculty were not unanimous in their comments on Summers. Influential psychologist Steven Pinker defended the legitimacy of Summers' January remarks. When asked if Summers' remarks were "within the pale of legitimate academic discourse," Pinker responded "Good grief, shouldn't everything be within the pale of legitimate academic discourse, as long as it is presented with some degree of rigor? That's the difference between a university and a madrassa. [...] There is certainly enough evidence for the hypothesis to be taken seriously."[9]

Summers had stronger support among Harvard College students than among the college faculty. One poll by the Harvard Crimson indicated that students opposed his resignation by a three-to-one margin, with 57% of responding students opposing his resignation and 19% supporting it.[10]

Objectivity and the social science: the case of history

The historian and his facts

Intro. Facts are independent from the consciousness of the historians p.6, there is a passive process of receiving facts and then cooks them in his own style p.6

- There is a difference between "the hard core of facts" and the "surrounding pulp of disputable interpretation" p.7

- The great liberal journalist CP Scott used to say, "facts are sacred, opinion is free" p.7

- How far are the fact of history facts about single individuals and how far social facts ?

- What is a fact? Carr then compares 2 facts, that a table is in the middle of the room and the fact that Caesar crossed the Rubicon p.7,

- And let's assume that these two facts enter our consciousness in a comparable manner p.7, same objectivity, still what is a fact of history

- According to a common sense view, there are certain historical facts which are the same for all historians p.8, for example, the fact that the Battle of Marathon in Greece in 490 BC (or Stalingrad 1942-43)

- First observation, because for questions like these he relies on "auxiliary science", such as archaeology, epigraphy, numismatics, chronology and so forth p.8, establishing the exact origin of a fragment of Greek pottery, the study of ancient languages that no one speaks etc. p.8

- Second, the decision of establishing these facts rests not on their quality but on a a priori decision of the historian p.9

- Gendron and the Bouchard Parizeau rivalry

- How many people got their leg amputated in 1994?

- "The belief in a hardcore of historical facts existing objectively and independently of the interpretations of the historian is a preposterous fallacy, but one which it is very hard to eradicate" p.10

- Historical facts are related to judgement and opinion

- What about an event that took place in 1850 in Stalybridge, a vendor of gingerbread was kicked to death as a result of a petty dispute p.10

- In 1960 historian Kitson Clark mentioned it in a lecture, so it is a contender to become a historical facts p.10

- It now awaits sponsors and seconder, if many more historians x

- Maybe in the first place it will appear in footnotes, then in text of articles and books about the XIXth century England and maybe in 20-30 years it will be a historical fact

- So the status of historical fact of this incident will depend of a question of interpretation

- But if nobody takes up the case, it will replace into the limbo of unhistorical facts p.11

- And what will make the difference, it will depend on whether or not the interpretatin in support of which Kitson Clark cited this incident will be accepted as a significant one by other historians p.11

- So the status of historical fact of this incident will depend of a question of interpretation

- When one studies history, he borrows 15-20 volumes on Greece in the period of the Persian Wars p.11, I thought he had all the facts p.11, all those who were known or could be known p.11

- But he never thought of this: by what accident or process of attrition this selection of facts came out of the myriad of facts that must have been once open to somebody

- How some facts have survived and became the facts of history p.11

- Medieval and ancient history give us the impression or the illusion that we have all the facts at our disposal with a manageable compass, the distinction between facts and facts of history melts because the few known facts are all facts of history p.11

- But in fact there are many lacunae p.12

- Our picture of Greece in the fifth century BC is very incomplete because it relies on the picture formed by a small group of people mostly from Athens p.12

- We know fewer things on how Greece looked for a slave, a Spartan, a Theban, Corinthian, etc. p.12

- Some people had a view of Greece, wrote about it, and selected certain facts that supported that view p.12

- As for medieval history, we see that period as one where religious fervour was great, but all the people who wrote about medieval society at the time were chroniclers occupied in the practice of religion, its theory, etc. p.12

- This picture a medieval man devoutly religious is indestructible because of that selection that is left to us, whether it is true or not, partly true, etc. p.12-13

- So historical facts are “a series of accepted judgement” on certain events that become fact of history because at a certain point some historians decided they were facts of history

Facts and documents and sources

- 24 hours of interview with Parizeau

- But what is that footage telling us? P.16

- What people thought happened or what he thought should have happened, or simply his opinion on a number of events, or is it telling us his considered opinion after the events, after he reconstructed these events and had forgotten about some p.16

Changes in the paradigms the social science, again the example of history

- In the decades following the war, 1880 to 1914, the reconciliation approach

- Historians from the South, like Henry Grady and Woodrow Wilson sought a way to interpret the Civil War that would reconcile the north and the south

- (it emerged in the 1880s, after occupation)

- The secession movement had been a mistake, emancipation had been a good thing for white southerners, who would have kept a practice that was bound to disappear, not economically dynamic, etc.

- But the reconstruction, occupation and elevation of black southerners had been a mistake

- It was better to leave the Southerners as they were

- So this understanding was at the same time anti-slavery and racist, as opposed to the today's interpretation, anti racist and anti slavery

- All the whites emerged of the war recognizing their mistakes, and no one talked about the rights of black p.112

In the 1920s and 1930s, complete opposition among historians, following WWI

- The war a terrible tragedy, disillusion followed

- This was reflected in The Rise of the American Civilization, by Charles and Mary Beard, in 1927

- The war had not been about ideals, anti-slavery and compassion for the misery of the slaves who eventually were freed

- It was the economical interest of the North and the South that clashed, agrarian economy of the South against the South, free trade for the south, who was exporting, and protectionism for the North

- The situation of the freed slaves barely changed, racism endured, a proof no one cared for the blacks

- The constitution was not protecting them

- The war was also the result of the American political system, with its inflated rhetoric, partisan politics, religious fury, blinded sentiment of righteousness on both sides, unreasoned passion, hate, etc.

- The Civil war could not be glorified, it was the embodiment of how much things were and are wrong

- The dissenting voice of black activists and historians, like Frederick Douglass, or WEB Dubois

- Dubois in 1935 argued that the war had been about noble ideas and values, not money profits and economic interest, it had been about the abolition of slavery

- And by fighting the Blacks took part in that fight

In 1965, the remnants of a terrible clash of interpretations

- A historian then wrote a book called Patriotic Gore, by Edmund Wilson

- Men is like animal, he preys on others to live

- Lincoln sought to build nations through force and appeal to transcendent meaning, like Lenin and Bismarck

- And Robert Penn Warren, The Legacy of the Civil War

- In it he described the civil war as the great alibi for excusing everything that wrong or lacking in the US at that time

- The crusade had been tremendous, bloody, full of righteousness that there was enough overplus stored in heaven for the descendant of the crusaders, for them to be forgiven

- They wrote during the centennial of the war

- The 1960s were a time of high criticism of American society, sure of being the best during the Cold War, consumerism, sense of righteousness, materialism,

The 1990s

- Until a few years ago, lots of writings by historians, novels, documentaries, films, related to the Civil War

- Now a day there is no animosity related to the history of the Civil War and the way it is interpreted

- The North fought for a good cause, Union and the end of slavery

- The Southerners were brave and good soldiers, they fought long against long odds

- The movie Gettysburg shows the perspectives of both camps and the humanity of all those involved p.104

- Same thing with novels, other history books, etc.

- This production puts the emphasis on how antislavery, progress, war and national identity intertwined during the Civil war and cannot be separated from one another

- Slavery is the embodiment of anti-progress forces, shattering the nation and creating war

- War is the mean by which anti-slavery makes spreads

- The war re-creates national identity and the new nation is freed for a more fully shared kind of progress

- Whiter northerners, white southerners and Black Americans all grew morally during the war

- This is the common view

- The Civil War made permanent what had not been fully accomplished with the Declaration of Independence

- This war obviously had the late effect of putting the country on the long path of the civil war movement and greater equality

- A great nation redeems its sins through war and becomes better

- In one documentary, The Civil War, a TV series, it finishes with the reconciliation, a scene of 1913 with veterans of the battle of Gettysburg

- Both sides realized how futile it had been, etc.

- They did not die in vain, the memory of the war must be protected

Now

- With Obama

- Perhaps the Civil War will get less interest from historians

- Perhaps people will rediscover that the US, while racist, had always been also at the vanguard of progress

- Studying how some blacks became successful, how some whites had always seen them as equal, or at least in an open minded way

- Perhaps even in the South

- Selection of certain facts, based on interpretation in documents, the historian living in his time, aren't we getting into a form of relativism?

- "this amounts to total scepticism p.30

- So we moved from a history in the 19th century that had no meaning, to one in which it has an infinity of meaning p.30

- It does not follow that because mountains appears to have different shapes from different angles that in fact they have no shape at all. P.30

- "it does not follow that, because interpretation palsy a necessary part in establishing the facts of history, and because no existing interpretation is wholly objective, one interpretation is as good as another, and the facts of history are in principle not amenable to objective interpretation" p.31

- So how do we define the obligation of the historian to his facts?

- "The duty of the historian to respect his facts is not exhausted by the obligation to see that his facts are accurate" p.32

- "he must seek to bring in the picture all known or knowable facts relevant, in one sense or another, to the theme on which he is engaged and to the interpretation proposed" p.32

For the social science in general, the steps of the social research

- 2. The theories, speculations and ideas of the researcher must be verified empirically, that is to say that they must be verify by some form of observations of whatever the subject of the investigation is p.22

- The hypotheses must me verified and measure (exercise)

- It is verified by other scientist, who will be pleased to say that our method is flawed if they think it is, that is what ensures rigor, objectivity, but not absolute objectivity

(Mr. Bastien forgot to talk about this and that and the other)

- 3. Research is designed to add something to knowledge, it is based on the accumulated knowledge we have on a specific subject and, through empirical new observations, add to it

- 4. It must be communicated to other researchers, so that they can understand how the research was conducted, the conclusions.

- The methods and assumptions must be transparent

(aids and the aids conference in Montreal, how they conducted their research)

- Everything has to be proved, demonstrated p.22

- So this is the negative side, the sceptical side of research

The assumption of causes and effects

- The positive one, or naive one, is to believe that there some laws of nature, and in the case of social sciences, the laws of society p.23

- Same causes will produce same consequences, there are patterns and we can discover them p.23

- You believe in causes and effects and predictions (sometimes)

- The Greeks devised some ways to find these patterns

- One is deductive reasoning p.23 (drawing particular conclusions from a more general assumption), one has to be logical (knowing the law of gravity)

- It has to do with relationships between ideas, when we move from a broad focus on the ideas

- Then during the scientific revolution, the concept of inductive reasoning was developed, inferring a general pattern from a particular observation, then you refine the theory into a hypothesis

- My son and his wood hammer or spoon

- Inductive logic, by contrast, refers to thinking that organizes, summarizes and interprets factual information and tries to draw implications or conclusions

- These 2 approaches are necessary for scientific research p.23

- Theories of causes and effects, laws of nature and of society help us, but unlike faith, they are flexible p.23

- (The hypothesis data gathering interaction, you modify your hypothesis as you collect the data)

- Theories can be readjusted based on new data arising from research p.25

1. Scientists choose a topic and review the litterature

- The myth of the brilliant illumination, for brilliant idea are always in short supply p.19-20

- Personal experience may have an important part in it, the contribution holocaust survivors into the study of totalitarianism

- (or circumstances, my own research and the charter)

- Social research on women and the rise of feminism p.20

- Interest in understanding the downturns of the economy, reviewing the 1929 financial crisis p.21

- (the social scientist is a part of his world and reflects it)

- So personal and circumstantial reasons explain choices of research p.21

- Personal interest for a field and the desire to improve it, my own research on the charter of rights and freedoms p.21

- Unsatisfactory evidence, unexplainable trends, the decline of crime rate in the last couple of years despite violence on TV p.21

- So many things can spark an interest into something and then research p.21

2nd conception of a research design

- Say that you study education and computer and you found that articles and books published on the questions overlook the use of emails

- Your question then is, what is the impact of emails p.13

- Than you make the hypothesis that the use of email has rendered communication easier between teachers and students, and that in turn this increased the level of success at Cegep level p.14

- But how do you test that?

- First you have to develop a clear set of definitions of the different types of computer use

- For instance, browsing on the internet will have to be broken down into different purposes, like browsing for music, download, checking out entertainment for the weekend, looking for information to purchase things, etc.

- Similarly, use of emails have to be divided into smaller categories, junk mail, mails on a list, personal emails, etc.

3. Collect and analyse data

- You have to find out how many people used the emails before going to college p.14

- How much training they had, do they have access to the internet at home, family income, etc.

- How do you conduct the study, do you gather the data the computer lab, with a survey and a questionnaire

- If so who will administer the survey p.14

- In other words you need to develop a research design

- Than you need to collect the information

- Then you want to communicate your information

- By the way, hypotheses are statements that expresses cause-and-effect relationships

First, emphasis on deductive logic, from general to specific, with three steps

1. General abstract thought about a research topic

2. Hypothesis statement, translating no. 1 into cause and effect statement

3. Operationalization and measurement

- You develop empirical indicators of change and variation in the independent and dependant variables

(the impact temperature will have on water, which on is the independent and the dependent)

Second, inductive logic, three other steps, from specific to general

1. you organize the data, process information, etc

2. code and process the data

3. You assess the information, reformulate theories in light of the new data p.25

From theory to hypotheses,

In social research, causes and effects becomes related to our hypotheses become variables

The hypotheses take the form of if and then

If the temperature decreases to the freezing point, then the volume of the water will increase

- There is the independent and dependant variables

- If income increases, then the amount spent on entertainment by individual will increase

(What is the dependant and the independent variable)

- In these examples, temperature and income are the independent variables, they vary independently of other factors p.27, we do not care in this case why they vary, it is not the purpose of the study

- The volume and spending are the dependant variable, their change depend on the independent variables p.27

We must set up ways to detect changes in the dependant variables, that is central to our attention (an instrument to measure volume, data on spending and income)

- This is called operationalizing the dependant variables

- In physical science, various instruments of measurement exist for that, as thermometer for temperature p.27

- Questionnaire, questions and answers are often used in social science to determine how religious you are, how honest, socially involved,etc

- It is the specific way you define the idea of a phenomenon to a definition that you can measure

- (Religiousity becomes how many times a week you go to church, how many times you pray, etc)

- (how do you measure happiness of individuals or the level of development and the standards of living of a society?)

The validity of causal interpretation

- Do causes really exist, some say they are more a philosophical idea that suits us to interpret nature and reality p.30

- There are 4 conditions to be met to accept a causal interpretations

1. The cause must come before the effect (students who work part time will have lower grades)

2. You must establish a correlation between the 2 variables, the change between the independent variables, number of hours worked part time, and the dependant variables, school results (family income and number of children). There must be a consistent pattern of association

3. Eliminating alternative Causal influences

- There are other reasons for which school results vary, other than the number of hours worked

- Different research techniques are used to control these other factors that might influence the dependant variable, the most common one is laboratory experiment, but it is limited, statistical analysis is another way of performing the control function

Different types of research

- Say that there are some statistics on poverty, poverty and young people and the number of squeegees, but not many things else p.35

- The approach of the study may be either descriptive, explanatory or exploratory or bit of the 3

a) exploratory

- If you find that there is little information, you need to probe first, thus describe the phenomenon, how many young people are poor, what is their percentage of the population p.35

- Is teenage poverty real or a myth?

- The exploratory study does that, it finds the missing info on a subject, is it real?

(sexuality age and the new generation)

- It can be quantitative or qualitative, say you volunteer at a community center to gather information on squeegees who go there, you gain their confidence and start asking them questions p.35

- You may also interview fellow volunteers p.35, qualitative approach

- The descriptive and exploratory approach are close to one another, but description would normally follow exploratory, it is more thorough and complete

- First you demonstrate the existence of child poverty, then you describe it clearly in all its variations p.35, male versus females, countryside versus cities, etc.

b) descriptive

- The descriptive study would probably use different data gathering p.35

- The exploratory one might use field study, expert testimonies, available date, documentary

- The descriptive one would use surveys, it would cover a longer period of time, be more extensive, etc. p.36, more thorough

c) Explanatory

- The explanatory study tries to explain why things are the way they are p.36

- In our example, that would mean why certain kids become squeegees and others not

- They are more quantitative, they use questionnaires and survey techniques, or experimental approaches p.36

4. Epistemology of social sciences, what are the underlying assumptions of science, paradigm

- Set of beliefs, values and assumptions of research (progress in the 3rd world), life expectancy, literacy rate, child birth infant mortality

3 approaches

1. The positivist approach (pretty much what I described)

- The social science are like the natural sciences, trying to discover the truth, they use the same methods, reasoning and logic

- There are patterns to be discovered because most people are rational, they seek maximum benefit with minimum effort

- There are ways to measure that

- Scientists are capable of developing a neutral approach, value neutral, etc.

- Deductive method is used (hypotheses from theories), they can be tested, research can be conducted, theory can be measured

- Research are communicated in Journals written by scholars

The interpretative approach (growing trend)

- Some are critical of social science laws and pattern, social science is also humanistic and should be attention to the unique in men, the singular, not just what can be generalized

- Reality is subjective, there is no such thing as truth, universal values, everything is relative

- Different people in different places, at different time in history see things differently

- Social science consists of studying over the long term different group of people in different situations, and understand their perspective, lives, personalities, etc.

- Value neutral research is not possible, nor even desirable

- Researchers should be conscious of their own biases (as a white male this and that),

- As much as possible they should try to overcome it and take a stance of empathy

- Hypotheses are not tested, much less formulated, no preconceived theories should be in the mind of the researcher, description and trying to understand a relative reality is all there is to it

- The study must make sense to those studies (because you try to understand their perspective)

- Research results are produced in Journals

- Churchill and Hitler (outrageous)

- (Progress in the 3rd world, genital mutilations, we have to understand that)

- The British historian and the Zulus

- Forced fed girls in Mauritania

- Journalists have reported an unusual scourge among the mauritanian nomads - the force-feeding of their girls. For to be fat is considered a sensible// ideal for brides-to-be.

- Mothers cross sticks around the ankles and squeeze the ends together with rope till the girls cry out in pain.

- That is one of forcing daughters to swallow litres of milk and mountains of couscous for days on end until they developed wings of fat hanging from their arms and their skin was traced with silvery stretch-marks - attributes considered the

- Critical approach (goes along the interpretative)

- Social science is tool for political struggles and moral critique, it not knowledge for its own sake (people like Karl Marx, Hegel, the feminists, etc)

- Science's aim is dominance, it is not universal nor neutral, just the product of some historical, political and social conditions, reflecting the values of the dominant group

- Institutions and powerful people manipulate ideas and facts

- Social values are built on their values, if we dig underneath the surface, this is what we will find

- So research should take a moral stand, researchers should take side on behalf of those who are powerless and oppressed

- Linguists and the use of certain words, miss, significant other, etc.

- Historical research and education in Ontario

- The example of Ward Churchill

- Ward Churchill, former ethnic studies professor at the University of Colorado at Boulder, wrote an essay in September 2001 titled *Some People Push Back: On the Justice of Roosting Chickens* about the September 11, 2001 attacks, in which he argued that American foreign policies provoked the attacks. He described the people working in the World Trade Center as "little Eichmanns," a phrase coined by anarcho-primitivist John Zerzan. Churchill wrote that the workers were part of a "technocratic corps at the very heart of America's global financial empire".[1][2]

- In response to 2005 publicity from the mass media and in weblogs, Churchill was both widely condemned and widely defended. Some defenders who did not agree with Churchill's analysis and/or with his inflammatory phrasing nonetheless felt that the attacks on Churchill represented efforts at intimidation against academic discourse and suppression of political dissent.