Social science



- Past Year Questions
- What is Social Science (SS)?
- SS vs Humanities
- Similarities and Differences between SS and the Natural Sciences (NS)
- TOK reading
- Quantitative vs Qualitative
- Should we apply the SM to SS?

Past Year Questions (incl. History & humanities)

- 1. 'The social sciences are not really sciences, because they do not construct their knowledge according to scientific methods.' Discuss. (2008 A Levels)
- Discuss critically the extent to which the investigator's opinions and beliefs can influence enquiries in the field of **either** history **or** science. (2009 A Levels)
- 3. Given its failure to predict economic crises, such as the 2008 downturn, economics does not deserve to be called a field of knowledge. Critically evaluate this view. (2011 A Levels)
- 4. The sciences are more successful than the humanities because they are based on empirical facts as opposed to opinions. Discuss. (2011 A Levels)
- 5. Critically assess the view that we can never know what happened in the past. (2012 A Levels)
- *We will never know whether playing violent computer games causes people to be violent.' Critically assess this view with reference to knowledge construction in social science. (2013 A Levels)

```
Do you see any patterns in the questions?
```

- *Critically assess the view that good political decisions are the product of luck and not knowledge of what is for the best. (2014 A Levels)
- 8. To what extent do we learn about the world through literature? (2014 A Levels)
- 9. History is written by the winners.' Critically assess this view. (2014 A Levels)
- 10. Critically discuss the claim that quantitative research is more significant than qualitative research in the social sciences. (2016 A Levels)
- To what extent can society and behaviour be studied scientifically? (2017 A Levels)
- Critically assess the view that we cannot know any historical facts. (2017 A Levels)
- 13. Humans are free therefore their behaviour cannot be explained through social science research.' Critically discuss this view. (2019 A Levels)
- 14. Assess the extent to which science gives us knowledge of the world.(2020 A Levels)

What is Social Science (SS)?

- A.k.a. human sciences
- A group of <u>academic</u> disciplines that study the human aspects of the world.
- Aim: a rational and systematic understanding of human society.
- Method of Construction: Emphasises the use of the Scientific Method and rigorous standards of evidence, both quantitative and qualitative
 - + Quantitative e.g. surveys, questionnaires, experiments, modelling, statistics
 - + Qualitative e.g. interviews, focus group discussions, participant observation, open-ended questionnaires
- Different from the arts and humanities (though how to draw the line is disputable)
- Sometimes referred to as soft sciences for studying both the inter-subjective or structural aspects of society, are sometime referred to as soft sciences.
- In contrast to hard sciences, which focus exclusively on objective aspects of nature.
- Knowledge constructed: theories and explanations about aggregate and individual behaviour

<mark>SS vs Humanities (Oxford's division)</mark>

Social Sciences	Humanities
Anthropology and Museuem Ethnography	Classics
Archaeology	History
Global and Area Studies	Medieval and Modern Languages
Business	Oriental Studies
Economics	Theology and Religion
Education	English Language & Literature
Geography and the Environment	Linguistics, Philology and Phonetics
Government (Public Policy)	Music
International Development	Philosophy
Internet	Art
Law	
Politics and International Relations	
Social Policy and Intervention	
Sociology	

Which subject would you place into a different department?

Distinguishing between SS and Humanities

- From the example of how Oxford divides SS and Humanities (probably more for admin purposes than any strict rule on what each entails), it is not always clear whether a subject should be considered a social science or a humanities subject.
- Cambridge: 'lumps' both into "School of Humanities and Social Sciences"
- LSE: calls itself "one of the foremost social science universities in the world"; it has departments like "Department of International History" and "Department of Mathematics" – both of which were not under Oxford's division.

Distinguishing SS and Humanities

- Professor Iain McLean, Chair of Section S5 (Political Science and related subjects) at the British Academy, Senior Research Fellow of Nuffield College, Oxford – "What is Social Science?"
- SS the scientific study of human beings
- "What distinguishes the social sciences from the humanities is not so much subject-matter as **techniques**"
- But this division is "not hard and fast" as:
 - + 1) humanities scholars also "use scientific methods in, for instance, statistical analysis of large bodies of data, or carbon-dating of archaeological remains"
 - Probably referring to disciplines like History
 - + 2) "some social scientists are interested in narratives, eg of the development of international institutions, or customs in traditional societies"

- "So: the key difference is that <u>humanities</u> are (mostly) interested in the <u>unique</u>; **social sciences** are (mostly) interested in the **general**."
- Note the caveat of "mostly" suggests a level of ambiguity
- One particular approach in SS Interpretivist SS is an approach that is more interested in the unique

Similarities and Differences between NS and SS

- What makes SS a science?
- Falsifiability e.g. the Law of Demand states that at higher prices, buyers will buy less of a good
- Usage of the Scientific Method (observation, hypothesis, experimentation, law, theory): both NS and SS
- But social/human phenomena are <u>not the same</u> as natural phenomena: **free will!**
- Consequence: the extent that the SM can be applied to SS is limited
- "But what about the problem of free will, you may say? Human beings are autonomous, thinking individuals, not to be analysed statistically as if they were physical particles or viruses. Well, we can't predict how an individual human will behave (particle physics may say that about their subject, too) but we can make valid generalisations - about how most people behave in response to a price increase, or to a visual stimulus, for instance" - Iain McLean, "What is Social Science?"

•TOK reading

Methods of Knowledge Construction in SS

- Two main types: Quantitative and Qualitative
- Essence: if the data is numerical, then it is quantitative; if not, it is qualitative
 - + But qualitative>words and text; could be photographs, recordings (audio and visual)
- Whether one uses quantitative or qualitative methods is typically tied in with one's conceptual understanding of what SS seeks to know and the kind of reality that social phenomena partakes in
- Still, researchers should not become so caught up in the polarizing differences between qualitative and quantitative research
- "All quantitative data is based upon qualitative judgments; and all qualitative data can be described and manipulated numerically" (Prof Trochim, Cornell Uni)

	Qualitative	Quantitative
Conceptual	Concerned with understanding human behaviour from the informant's perspective	Concerned with discovering facts about social phenomena
	Assumes a dynamic and negotiated reality	Assumes a fixed and measurable reality
Methodological	Data are collected through participant observation and interviews	Data are collected through measuring things
	Data are analysed by themes from descriptions by informants	Data are analysed through numerical comparisons and statistical inferences
	Data are reported in the language of the informant	Data are reported through statistical analyses

Using Qual in Quant.

- Example: a self esteem scale a very common quantitative measure in social research
- Construction of Scale: researchers had to make **countless judgments** in constructing them: how to define self esteem; how to distinguish it from other related concepts; how to word potential scale items; how to make sure the items would be understandable to the intended respondents; what kinds of contexts it could be used in; what kinds of cultural and language constraints might be present; and on and on.
- Usage of Scale: researcher (can be different from developer) has to make another set of judgments: how well does the scale measure the intended concept; how reliable or consistent is it; how appropriate is it for the research context and intended respondents; and on and on.
- Respondents: even they make many judgments when filling out such a scale: what is meant by various terms and phrases; why is the researcher giving this scale to them; how much energy and effort do they want to expend to complete it, and so on.
- Consumers and Readers: make **lots of judgments** about the self esteem measure and its appropriateness in that research context.
- Conclusion: What may look like a simple, straightforward, cut-and-dried quantitative measure is actually based on lots of qualitative judgments made by lots of different people.

"Types of Data" (https://conjointly.com/kb/types-of-data/)

Using Quant in Qual.

- All qualitative information can be easily **converted** into quantitative,
- Why? There are many times when doing so would add considerable value to your research.
- The simplest way to do this is to divide the qualitative information into units and number them! Even that simple nominal enumeration can enable you to Similarity organize and process qualitative information more efficiently. Matrix for the
- Illustration: we might take text information (say, excerpts from transcripts) and pile these excerpts into piles of similar statements. When we do something even as easy as this simple grouping or piling task, we can describe the results quantitatively.
- For instance, if we had ten statements and we grouped these into five piles (as shown in the figure), we could describe the piles using a 10 x 10 table of 0's and 1's. If two statements were placed together in the same pile, we would put a 1 in their row-column juncture. If two statements were placed in different piles, we would use a 0. The resulting matrix or table describes the grouping of the ten statements in terms of their **similarity.** Even though the data in this example consists of qualitative statements (one per card), the result of our simple qualitative procedure (grouping similar excerpts into the same piles) is quantitative in nature.
- Once we have the data in numerical form, we can manipulate it numerically. For instance, we could have five different judges sort the 10 excerpts and obtain a 0-1 matrix like this for each judge. Then we could average the five matrices into a single one that shows the proportions of judges who grouped each pair together. This proportion could be considered an estimate of the similarity (across independent judges) of the excerpts.

"Types of Data" (https://conjointly.com/kb/types-of-data/)

	1	2	3	4	5	6	7	8	9	10	
1	1	1	0	0	0	1	0	0	1	0	
2	1	1	0	0	0	1	0	0	1	0	
З	0	0	1	1	0	0	0	0	0	0	
4	0	0	1	1	0	0	0	0	0	0	
5	0	0	0	0	1	0	0	1	0	0	
6	1	1	0	0	0	1	0	0	1	0	
7	0	0	0	0	0	0	1	0	0	0	
8	0	0	0	0	1	0	0	1	0	0	
9	1	1	0	0	0	1	0	0	1	0	
10	0	0	0	0	0	0	0	0	0	1	

Sorting of 10 qualitative

items

Binary

Square

sort

Quantitative Research

- Quantitative research "is the systematic examination of social phenomena, using statistical models and mathematical theories to develop, accumulate, and refine the scientific knowledge base" ("Quantitative Research, 2008)
- Quantitative research also provides "generalizable" findings and, according to Marlow (1993), is "characterized by hypothesis testing, using large samples, standardized measures, a deductive approach, and rigorously structured data collection instruments" (cited in "Quantitative Research")
- i.e. Quantitative Research is the method of choice for those who wish to approach SS in as similar a way as the natural scientists
- Aim: to establish general laws of behaviour and phenomena across different settings/contexts.
- Research is used to test a theory and ultimately support or reject it.

Quantitative -

Methods

- Experiments typically yield quantitative data, as they are concerned with measuring things. E.g. Milgram and Stanford Experiments
- Other research methods include controlled observations and questionnaires
- For example, a rating scale (e.g. Likert scale) or closed questions on a questionnaire would generate quantitative data as these produce either numerical data or data that can be put into categories (e.g.: "yes," "no" answers).
- Statistics help us turn quantitative data into useful information to help with decision making. We can use statistics to summarise our data, describing patterns, relationships, and connections.



Quantitative – Key Features

- Quantitative researchers try to **control variables** by conducting their studies in the **lab**.
- The researcher aims for **objectivity** (i.e., without bias).
- The design of the study is determined before it begins.
- For the quantitative researcher, reality is objective, exists separately to the researcher and is capable of being seen by anyone.
- Research is used to test a theory and ultimately support or reject it.

Evaluating the methods

- Recall: the key difference between NS and SS is what they study natural vs social/human phenomena
- Nonetheless, quantitative methods for SS try to be as close to the SM as possible
- Consequence: when evaluating the methods for SS, we can examine it on the same
 two levels we saw in Science but with the added factor of the Subject to consider
- A) **Data gathering** (e.g. measurable, controllable, replicable, observer effect, theory-ladenness)
- B) **Data interpretation** (e.g. peer review, problem of induction, underdetermination, confirmation bias)

Quantitative - Strengths

- Data gathering
 - + **Controllable** (e.g. experiments and questionnaires) means that such tests are **replicable**.
 - Even though we can't control strictly for human subjects, we can still control for a variety of factors such as age, socio-economic status, education qualifications, gender etc.
 - + Such replicability allows for large-scale testing and gathering of data (which is very helpful for generalisation later on) as opposed to methods like interviews which are labour-intensive (not to mention uncontrollable) and thus far harder to replicate
 - E.g. experiments, questionnaires, structured interviews
 - + Behaviour is measurable (though thoughts are not).
 - E.g. Consumer behaviour during a sale as recorded in shops' official sales figures, government census data revealing birth rates during a period when abortion was legalised

Quantitative - Strengths

• Data interpretation

- + Peer review: Quantitative data is based on measured values and can be checked by others. Hypotheses can be tested through the use of statistical analysis.
- + Law of Large Numbers: the large quantities of data generated allow for the researcher to draw trends of behaviour for large groups of people as the large numbers account for 'exceptional behaviour' due to free will
 - E.g. quantity of good demanded increases as the price of a good decreases
- + Rapid analysis: Sophisticated software removes much of the need for prolonged data analysis, especially with large volumes of data involved.
- + Objective: Quantitative data can be interpreted with statistical analysis, and since statistics are based on the principles of mathematics and because numerical data is less open to ambiguities of interpretation, the quantitative approach is viewed as objective and rational.

Quantitative - Strengths

- + Predictive power: That such theories and laws give us a <u>clear enough picture</u> of social phenomena can be seen by how these theories and laws allow us to predict and come up with policies to try and bring about certain outcomes.
 - E.g.: Keynesian Economics advocates government spending in times of recession so as to create jobs, thus giving the populace some much-needed income, which can then be used to spend on goods and services. This creates a virtuous cycle of creating more jobs and increased spending, eventually lifting the economy out of recession. That this works was famously seen in how the world got out of the Great Depression in the 1930s.
 - E.g.: In **Psychology**, experiments allow us to **gain insight into certain kinds of human behaviour**, thus giving us again some level of predictive power and hence the ability to **come up with policies and measures to bring about a certain outcome**.
 - E.g. The Milgram Experiment purportedly showed that human beings aren't inherently evil so much as they are (more) willing to carry out evil acts if they were ordered to do so by an authority figure. Such a finding allows us to understand why so many seemingly ordinary and seemingly good human beings were able to be part of atrocities like the Holocaust and the Abu Ghraib Prison Torture Scandal.

Such knowledge can then allow judges and juries to come to a more reasoned decision regarding the culpability of such individuals, as well as allow organisations to come up with measures to check a certain individual's power so as to prevent atrocities from happening

• Data-gathering

- + Unnatural: Experiments and tests do not take place in natural settings such that people might act very differently in a real-life situation
 - E.g. Stanford Experiment: totally made-up and artificial scenario.
 - Subjects could have been led into thinking, deliberately or otherwise, that any action would have no consequence as it was all 'made-up' and 'roleplaying'.
 - But if this was a real-life situation, they might act differently.
 - Perhaps a 'prisoner' would have stood up earlier to any act of abuse because it was clearly abuse instead of 'playacting'.
 [Note: I'm not saying that this happened; it's just hypothetical.]
- + Loaded Questions: Controlled questionnaires can still have loaded questions, i.e. ones which lead the respondent to respond in a certain way so as to obtain the results that a researcher wants (though this seems mitigable through peer review)

- + Subject interpretation: unlike natural science, the subject needs to interpret the question/task and each person can do so in very different ways, and between researcher and participants
 - Mitigation: use common terms in the questionnaire to reduce the subjectivity that comes when an interviewer asks a question in several different ways
 - Problem: doesn't always succeed in ensuring that the respondents all have the same interpretation of the terms.
 - E.g. a Likert scale typically has the ends of the scale as "Strongly Disagree" and "Strongly Agree"; such terms seem understandable enough even for a non-native speaker of English such that both he and a native speaker of English can agree on what strongly disagree and strongly agree mean.
 - However, when it comes to the questions itself, problems can arise.
 - Qn: "I have easy access to the supplies and equipment I need to do my work on this unit." seems simple enough
 - But "easy" can be interpreted differently: what is "easy" (filling in a form to obtain the required supplies) to person A could be "not so easy" to person B.
 - If so, unsurprising if they respond differently to the question such that while both A and B both put a 3 on that question, they actually mean different things.
 - Qn: "I have the freedom I need to meet customer needs".
 - Perhaps A's understanding of freedom is that her boss allows her to make most of the decisions, she can work from home if need be, she doesn't have to report her whereabouts to her boss everyday
 - Whereas B's understanding is merely that her boss will allow her to do all these <u>so long as</u> she first asks for permission.
 - Both having the same answer of 3 on the scale actually refers to different extents of freedom.
 - To make matters worse, the controlled nature of such methods typically mean that there is no avenue for the researcher to clarify what the subject meant/ subject's interpretation of a question or word.

- + Observer effect: because of the studying of a Subject (unlike NS' objects), the OE is amplified in SS
- + Why? Human subjects can and often do modify their behaviour in the presence of an observer
 - perhaps to impress the observers, to irritate them etc
- + Different for NS: carbon atoms and other natural phenomena presumably cannot do so
 - E.g. Hawthorne Effect: study of workers' productivity due to intensity of lighting at the Hawthorne Works (electric plant).

Initially, researchers thought that they had found a <u>direct, causal relationship</u> between the strength of lighting and productivity - productivity increases as light increases.

- But when the light was turned down, productivity still increased. Then the researchers realised that the workers had increased their productivity because they knew that they were being observed
- E.g. Stanford Experiment: one of the guards, Dave Eshelman, later said that he had "consciously created" his guard persona and was trying to see how far he could push things, i.e. abuse the prisoners, before the researchers would call it off.

- + Free will: human beings can always choose to act otherwise, meaning that any 'law' is more like a trend as it does not have to hold true for everyone (unlike laws of nature) (e.g. Phillips curve in economics)
- + Selection Bias/ Salience Theory-ladenness: the researcher always has to decide what is an important variable to observe and what isn't. The added complexity of the human subject makes the researcher more susceptible to leaving out important variables.
 - E.g. the Stanford Experiment subjects were determined to be "normal" and healthy by a battery of tests. But the researchers did not think that the wording of their newspaper advertisement – for volunteers for "a psychological study of prison life" – was a crucial variable.
 - Later on, two psychologists, Thomas Carnahan and Sam McFarland, recreated the original ad but also ran a separate ad omitting the phrase "prison life". They found that the people who responded to the two adds scored differently on a set of psychological tests.
 - Those who thought that they would be participating in a prison study had significantly higher levels of aggressiveness, authoritarianism, narcissism and social dominance, while scoring lower on measures of empathy and altruism.

- + Semantic TL-ness: recording down an observation in a way to privilege a theory
 E.g.: something like the Milgram experiment "the subject showed hesitation in applying
 the electric shock" when actually, the subject was daydreaming
- + **Perception TL-ness:** researcher observes something that isn't true due to influence from background beliefs/theory

E.g. same as above but in this case, the perception is influenced where the subject is seen to hesitate because of ethical quandary instead of being slow to respond due to daydreaming

- + Non-controllability: not truly controllable like in NS. One can control for SES, for e.g., but how to control the way that one was brought up by one's parents?
- + Measurability: behaviour can be measured but not thoughts.
 But SS is about the human being and so, thoughts are important if we wish to know what caused a certain behaviour. Otherwise, it could just be a case of false cause.
 E.g.: experimental set up shows that majority would consume more of a product after viewing an advertisement but because we cannot measure the thoughts of people, we cannot be sure if the change in demand is indeed due to the advertisements or some other factor, say trying to impress the researcher or their fellow subjects

• Data interpretation

- + Underdetermination: no evidence can objectively determine which theory to choose (CU) nor whether we should falsify an entire hypothesis or a background assumption (HU)
- + **Problem of induction:** obviously relevant here and (arguably) more of a problem for SS than NS given the free-willing nature of human beings is there **uniformity of behaviour**?
- + Subjectivity of Interpretation: Unlike NS, data for SS is open to much interpretation, even when it comes to numbers (as we saw earlier with subjects interpreting numbers differently on the Likert scale)
 - E.g. two researchers from competing camps could well agree to have the same question ("On a scale of 1 to 5, rate how happy you are when you are with your family.") and both agree that the data shows that 87% picked 4
 - But what "4" means could be different: maybe researcher1 thought that "5" is the <u>plausible</u> limit of human happiness but researcher2 interpreted 5 as the <u>theoretical</u> limit instead; the latter would thus think of "4" as being of a happier level than the former

Qualitative Research

- Qualitative research is empirical research where the data is not in the form of numbers
- An interest in qualitative data came about as the result of the dissatisfaction of some psychologists (e.g. Carl Rogers) with the scientific study of psychologists such as the behaviourists (e.g. B.F. Skinner).
- Since psychologists study people, the traditional approach to science was not seen as an appropriate way of carrying out research as it fails to capture the totality of human experience and the essence of what it is to be human.
- Aim of qualitative research: to understand the social reality of individuals, groups and cultures as nearly as possible as its participants feel it or live it. People and groups are hence studied in their natural setting.
- Research following a qualitative approach is exploratory and seeks to explain 'how' and 'why' a particular phenomenon, or behaviour, operates as it does in a particular context (in contrast to Quantitative which looks for general laws of behaviour that work across all/many settings)

Qualitative Research

- Qualitative research is hence contrasted with quantitative research as such:
 - **Insider** rather than outsider (think participant observation vs facilitator administering a questionnaire)
 - **Person-centered** rather than variable-centered (e.g. "Tom feels happy, where happiness means contentment and a feeling of being alive, when he is with his family" as opposed to "87% of people rated a 4 out of 5 for happiness when they are with their family")
 - Holistic rather than particularistic (more concerned with the entirety of a person's lived experience than with specifics about a person's behaviour, e.g. online shopping behaviour during a sale)
 - **Depth** rather than breadth (quantitative researchers tend to go for large quantities of data so as to apply statistics more meaningfully to generate knowledge claims but qualitative eschew those methods to go deeper so as to more accurately capture the subject's lived experience)

Qualitative methods

Data Gathering

- Qualitative researchers use a variety of methods to develop deep understanding of how people perceive their social realities and, in consequence, how they act within the social world.
- E.g.: diary accounts, open-ended questionnaires, documents, participant observation, interviews, focus group discussions, analysis of artifacts, documents and cultural records, and video and sound recordings
- A good example of a qualitative research method would be **unstructured interviews** (as opposed to structured ones) which generate qualitative data through the use of open questions.

This allows the **respondent to talk in some depth**, choosing his/her own words. This helps the researcher develop a **real sense of a person's understanding of a situation**.

• Contrast this with a <u>structured questionnaire</u> where Likert scales are used or even a <u>structured interview</u> where the interviewee has much less of a chance to talk about a topic that he/she would like to discuss.

	Category	Includes	Researchers should note
Example of	Appearance	Clothing, age, gender, physical appearance	Anything that might indicate membership in groups or in sub-populations of interest to the study, such as profession, social status, socioeconomic class, religion, or ethnicity
what to	Verbal behavior and interactions	Who speaks to whom and for how long; who initiates	Gender, age, ethnicity, and profession of speakers; dynamics of interaction
observe		interaction; languages or dialects spoken; tone of voice	
during	Physical behavior and	What people do, who does	How people use their bodies and voices to
participant	gestures	what, who interacts with whom, who is not interacting	behaviors indicate about their feelings toward one
observation	Personal space	How close people stand to one another	What individuals' preferences concerning personal space suggest about their relationships
	Human traffic	People who enter, leave, and spend time at the observation site	Where people enter and exit; how long they stay; who they are (ethnicity, age, gender); whether they are alone or accompanied; number of people
	People who stand out	Identification of people who receive a lot of attention from others	The characteristics of these individuals; what differentiates them from others; whether people consult them or they approach other people;

Qualitative methods

Data Interpretation

- Data analysis is less straightforward than for quantitative research.
- The qualitative researcher has to decide how to interpret the data, which can be an **endlessly creative process** (as opposed to a simple application of statistics to draw numerical correlations)
- Various techniques can be used to make sense of the data such as grounded theory and thematic analysis





PHASES OF THEMATIC ANALYSIS (ADAPTED FROM BRAUN & CLARKE, 2006)

	PHASES	DESCRIPTION OF ANALYSIS PROCESS				
1	Familiarising myself with data	 i) Narrative preparation, i.e. transcribing data ii) (Re-)reading the data and noting down initial ideas 				
2	Generating initial codes	 i) Coding interesting features of the data in a systematic fashion across entire data set ii) Collating data relevant to each code 				
3	Searching for themes	 i) Collating codes into potential themes ii) Gathering all data relevant to each potential theme 				
4	Reviewing themes	 i) Checking if themes work in relation to the coded extracts ii) Checking if themes work in relation to the entire data set iii) Reviewing data to search for additional themes iv) Generating a thematic "map" of the analysis 				
5	Defining and naming themes	 i) On-going analysis to refine the specifics of each theme and the overall story the analysis tells ii) Generating clear definitions and names for each theme 				
6	Producing the report	 i) Selection of vivid, compelling extract examples ii) Final analysis of selected extracts iii) Relating the analysis back to the research question, objectives and previous literature reviewed 				

Qualitative – Key Features

• Events can be understood adequately **only if they are seen in context**. Therefore, a qualitative researcher immerses her/himself in the field, in **natural** surroundings.

The contexts of inquiry are not contrived. Nothing is predefined or taken for granted.

- Qualitative researchers want subjects to speak for themselves, to provide their perspectives in words and other actions.
 Therefore, qualitative research is an interactive process in which the persons studied teach the researcher about their lives.
- The qualitative researcher is an integral part of the data; without the active participation of the researcher, no data exists.
- The **design** of the study **evolves** during the research and can be adjusted or changed as it progresses.
- For the qualitative researcher, there is no single reality; it is subjective and exists only in reference to the observer.
- Theory is data-driven and emerges as part of the research process, evolving from the data as they are collected. (as opposed to quant. where research tests theory)

Qualitative – Strengths

• Data gathering

- + Greater accuracy: gain insight into a subject's thoughts more accurately than quantitative methods because of the dynamic process of clarification; Researcher can always clarify what the subject means by a certain term or if the subject understands the term in the same way (e.g. in interviews and through participant observation)
- + Overcoming Selection Bias: because of close researcher involvement, the researcher gains an insider's view of the field which helps the researcher overcome selection bias/ salience theory-ladenness and select an otherwise overlooked variable.
 - E.g.: Aim: to find out why Catholic monks always chant their prayers instead of merely reciting it.
 A <u>non-Catholic and quantitative</u> researcher with little to no background knowledge of these Catholic monks might inadvertently, even with the best of efforts, come up with a questionnaire that **omits a significant answer** say, that these monks chant because it 'connects' them to the masses of monks before them who have chanted these same chants centuries earlier.
 Perhaps, to make matters even more stark, this is a reason that the monks themselves are not conscious of; hence, they cannot even suggest the answer, which is then missed.
 - A <u>qualitative</u> researcher, on the other hand, who has been allowed to spend time with the community, observing them at close quarters, speaking to them and interacting with them, might realise the great importance that the monks placed on being part of a historical tradition and community and come to the realisation that this could well be a significant reason for why the monks chant. She can then ask them if this is so, explaining to them her reasons for such a hypothesis, which are things that a quantitative researcher would not be able to do.

Qualitative – Strengths

- + Generate new hypotheses which lead to new knowledge: Qualitative descriptions can play the important role of suggesting possible relationships, causes, effects and dynamic processes.
 - Referring back to the previous example, perhaps a later researcher read the report and learned of this new significant reason which was hitherto unknown to him. This then 'inspired' him to generate the hypothesis that it is the monks' desire to belong to a larger, historical community that grants them solace and encouragement in their solitude.
- + Mitigating OE: Helps to overcome observer effect by habituation/'going native'
 The researcher becomes 'one of them' so that the community being observed is more likely
 to act naturally, thereby generating more accurate data

• Data interpretation

+ Qualitative analysis allows for ambiguities/contradictions in the data, which are a reflection of social reality (though not impossible for quantitative analysis to do so)

• Data Gathering

- + Accuracy: Still cannot observe a person's thoughts directly and so the researcher is always susceptible to the problem of the subject being dishonest or, worse, that the subject himself is not privy to his own true intentions (e.g. subconscious thoughts)
- + Small Sample Size: Because of the time and costs involved, qualitative designs do not generally draw samples from large-scale data sets. This affects the inductive justification for the knowledge claim later on.
- + Salience Theory-ladenness: still present; after all, given an infinite number of variables (options for what feelings one has, the intentions behind one's behaviour etc), this is inevitable if the researcher wishes to get started on the research. (e.g. trying to understand what makes people vulnerable by examining feelings of insecurity and courage, but not fulfilment at work)
- + Semantic TL-ness: when the researcher records down his/her interpretation of what the subject said (though this can be mitigated by the subject checking the observations or the researcher merely transcribing the interview)
- + Perception TL-ness: when the researcher interprets a particular action wrongly and sees it as something else (e.g. seeing someone walk quickly, stamping loudly to meet another person – interpreting it as an angry walk to confront someone when it could just well be the normal way that the person walks or the person is thinking of someone else that he has to confront later)

- + Non-controllable and thus non-replicable: because the researcher plays a central role in the collection of data, be it as an interviewer or participant-observer.
 - Recall the problem of observer effect even going native won't help because no two persons are the same such that the studied community will be behaving with different researchers in exactly the same way, not least because the researchers themselves will not behave in exactly the same way.

This is on top of other problems such as the researcher (inadvertently) emphasising certain key words or phrasing a question differently or in a different order that can then affect the answer given.

- + Non-controllable and thus non-replicable: because contexts, situations, events, conditions, and interactions cannot be truly controlled
 - The 'thing' being studied is a human being or group of human beings who don't stay static but have to go through life and its myriad events. This means that even if one were to ask them the <u>same set of questions</u> as before, the time elapsed means that there is always the potential that something has changed for them such that their answers/behaviour are not the same

• Data Interpretation

- + Limited Applicability: The small sample size and non-replicability means that generalizations cannot be made to a wider context than the one studied with any confidence
- + Subjective: the use of non-numerical data means that a lot more interpretation comes into play on the part of the researcher in terms of making sense of the data. What the subject/respondent meant could well be understood differently by different researchers, resulting in different conclusions from the same set of data.

	Quantitative	Qualitative
General framework	Seek to confirm hypotheses about phenomena	Seek to explore phenomena
	Instruments use more rigid style of eliciting and categorizing responses to questions	Instruments use more flexible, iterative style of eliciting and categorizing responses to questions
	Use highly structured methods such as questionnaires, surveys, and structured observation	Use semi-structured methods such as in-depth interviews, focus groups, and participant observation
Analytical objectives	To quantify variation	To describe variation
	To predict causal relationships	To describe and explain relationships
	To describe characteristics of a	To describe individual experiences
	population	To describe group norms
Question format	Closed-ended	Open-ended
Data format	Numerical (obtained by assigning numerical values to responses)	Textual (obtained from audiotapes, videotapes, and field notes)
Flexibility in study design	Study design is stable from beginning to end	Some aspects of the study are flexible (for example, the addition, exclusion, or wording of particular interview questions)
	Participant responses do not influence or determine how and which questions researchers ask next	Participant responses affect how and which questions researchers ask next
	Study design is subject to statistical assumptions and conditions	Study design is iterative, that is, data collection and research questions are adjusted according to what is learned

- What has been given here is not comprehensive
- 'Weave in' the points from the readings
- Find your own e.g.

Summary –

Quant vs Qual

Homework

- Read: Article A: "The Meanings of Methodology"
- Fill in "Approaches in the Social Sciences" Table
- Other readings:
- Article B: Abortion or Broken Windows How can the US be safer?
- Article C: 'Freakonomics' Abortion Research is Faulted by a Pair of Economists
- Article D: Excerpt from Freakonomics Where have all the Criminals Gone?