Origins: Approaches

The development of the scientific method I've discussed up until now was focused mainly on the *natural sciences*: physics, astronomy, biology. But during the second half of the 19th century, the social sciences started to arrive on the scene.

During this time, people were shifting back to the ontological view of **realism**, which assumes that the physical world is 'real'; the world we perceive is *external* and *exists independently from our thought*.

The *epistemological* view was becoming more *'positivistic'*, meaning that scientists thought that we can gain knowledge about the true nature of the world through observation and experimentation.

This realistic, positivistic view was mostly applied to natural phenomena. But as the social sciences developed and became distinct scientific fields, the question rose whether the realistic view should also be applied to social and psychological phenomena.

According to the view called **objectivism**, the ontological position of realism *does* indeed apply. Psychological and social phenomena like 'intelligence' and 'social cohesion' are *external, independent* properties that exist separately from our mental representation of these properties.

Objectivism can be contrasted with **constructivism**. According to constructivism, the nature of social phenomena depends on the social actors involved. This means reality is *not* independent and external; instead, reality is considered primarily a *mental construction* that depends on the observer and the context.

For example, properties like 'happiness' or 'femininity' are not external, not unchanging and cannot be objectively defined. How these properties are perceived and what they mean depends on what culture and social group the observer is part of, and the specific historical period.

So if our psychological and social reality is constructed, subjective and elusive, how do we obtain any knowledge about it? What epistemological position fits the ontological position of constructivism?

Well, in fact there's a group of related views, called **Interpretivism**.

These **interpretivist** views all assume that a researcher's experience or observation of a social phenomenon can be very different from how the people who are involved in the social phenomenon experience it themselves. The focus should therefore lie with understanding the phenomenon from the point of view of the people involved.

The three interpretivist views I want to discuss are called **hermeneutics, phenomenology and verstehen**. They differ slightly on how this understanding of psychological and social reality can be gained.

Let's look at **hermeneutics** first. The term hermeneutics comes from the theological discipline concerned with the interpretation of scripture.

Hermeneutics aims to explain social phenomena by *interpreting* people's behavior within their social context. Researchers need to take context into account and try to understand how people see the world in order to understand their actions.

Phenomenology is closely related to hermeneutics. It starts from the premise that people are not inert objects. They think and feel about the world around them, and this influences their actions. To understand their actions it is necessary to investigate the meaning that they attach to the phenomena that they experience.

This means investigating how people experience the world from their perspective. And to achieve such an understanding of someone else's experiences, researchers need to eliminate as many of their own preconceived notions as they possibly can.

Verstehen is the third interpretivist view. It has close ties with Hermeneutics and Phenomenology. Verstehen is mainly associated with sociologist Max Weber. Verstehen refers to the empathic understanding of social phenomena. Researchers need to assume the perspective of the research subjects to interpret how they see the world. Only then can a researcher try to explain their actions.

For example, if European researchers investigate 'happiness' in an isolated Amazonian tribe, they should do so from the tribe's perspective, taking the tribe's social context into account.

For this tribe, it might be that the community is more important that the individual. This could mean that happiness is considered a group property that does not even apply to individuals. Now in order to grasp such a totally different view of the world, researchers need to immerse themselves in the culture of the person or group they are investigating.

Now of course there are some problems with the constructivist, interpretivist view. First, there is the problem of **layered interpretation**. The researcher interprets the subject's interpretations, and then interprets the findings again as they're placed in a framework or related to a theory. With every added layer of interpretation there is more chance of misinterpretation.

A second, more serious problem is the **lack of comparability of outcomes**. When in our example happiness is subjective and means different things in different cultures we just cannot compare them. This means we can never come up with general theories or universal explanations that apply to more than just particular groups in particular

periods in time.

A third problem is a difference in **frame of reference.** If the frame of reference of the researcher is very different, it can be hard for the researcher to assume the subject's point of view. This makes it hard to find out what the relevant aspects of the social context even are.

The **constructivist-interpretivist** view is generally associated with a **qualitative** approach to science. That means observations are made through unstructured interviews or **participatory observation**, where the researcher becomes part of a group to observe it.

The data are obtained from one or just a few research subjects. The data are analyzed qualitatively by interpreting texts or recorded material.

In contrast, the **objectivist – positivist** view is associated with **quantitative** research methods. Observations are collected that can be counted or measured, so that data can be aggregated over many research subjects. The subjects are intended to represent a much larger group, possibly in support of a universal explanation. The data are analyzed using quantitative, statistical techniques.

Now although a *qualitative* approach is usually associated with a *constructivist* view of science and a *quantitative* approach with an *objectivist* view, there is no reason to limit ourselves to only qualitative or only quantitative methods.

Both approaches have their advantages and drawbacks. For some research questions a qualitative approach is better, in other cases a quantitative approach is more appropriate. In fact, a **mixed-method approach**, where both methods are used to complement each other, is steadily gaining popularity.