The internal paradigmatic process of getting knowledge

The successful conscious attempt to acquire knowledge run something like this:

(1) We have some assumptions, ideas, notions, conceptions, theories, models, explanations of things and the world.
(2) Perhaps made actual by a practical problem
(3) A theoretical problem
(4) A method
(5) A new theory which solves the theoretical problem
Maybe (6) The practical problem solving

(1) When we start on conscious attempts to acquire knowledge (not to call it science \(^1\)), we do not start from scratch. We all have all ready a social setting, a way of life, a cultural horizon, a language. We have some more or less sophisticated assumptions about the world. Such a complicated process as conscious attempts to acquire knowledge does require a basis of a language and certain lifeform. A child 3 or 4 month of age, spreads its arms, gather them again around a brick and carries it to the mouth. The child instinctively is getting to know the world. But “getting to know” is not at all the same as “acquire knowledge”. The baby do not consciously try to realize something. To make attempts to acquire knowledge you have to have a language and certain assumptions etc..

(2) Sometimes our assumptions, ideas, our notions or our theories do not suffice. Maybe a practical problem arises, which makes it plain that better and deeper conceptions are necessary. A practical problem

---

\(^1\) In English the word “science” denotes mostly natural science. The german word “wissenschaft” denotes both social science, natural science and humanities. Here “science” have the same meaning as wissenschaft.
becomes a theoretical problem or maybe better, a practical problem makes a theoretical topical.
A theoretical problem can also arise because two theories do not fits together, or it can arise if you suddenly realizes areas, even a well known area, you do not even have a faint notion about.

(3) The theoretical problem is the starting point for the process of getting knowledge. Later I shall, in more detail, get back to what a theoretical problem is, but here I shall only point out that a theoretical problem is a problem about “Why….?” The starting point of the process of acquire knowledge is such a question, and the purpose of the whole process is to answer this question.

(4) The method used in order to get an answer or a solution of the problem is not unimportant, but it do not secures the reliability or truth of the answer. On the contrary it is quite clear that the best method is determined by the situation and the problem. It is the metod which is simplest, the method has the lowest costs (financially, political, personal, etc.) or that method which is most “rational”, most pedagogical, or most convincing, depending on what the situation or the problem dictates.

(5) The solution to a theoretical problem is a theory. Such a theory which solves the problem can then be included in our assumptions or conceptions – and can then in other process of acquire knowledge be the background for new theoretical problems. The knowlegeacquirering process or the science process can then start again.

(6) From a theory you can also act. If the theoretical problem we are solving is caused by a practical problem, and we have reached a theory which solves the theoretical problem, the theory can the “tell” us, what we have to do in order to solve the practical problem.

The reason for that I call this shortly described process for paradigmatic is because the process is the harmonic framework for valuable knowledge. It is a framework with a vast number of variations. You can start different
places, you can skip different elements or reshuffle the elements etc. But the reason for that I call it the basic form or the paradigmatic process of getting knowledge is that a lot of problems with in the theories of sciences and epistemology will be solved in a theoretical coherent way and not in ad hoc way.

What I have called the paradigmatic process of getting knowledge is a model. It is an abstraction, where some things are left out of account, an other characteristics are kept. The characteristics which are kept in this model are the epistemological characteristics, which makes the process a process of getting knowledge. In other words this model can explain why concrete attempts of acquire knowledge are successful, why other attempts are not.

It is a general model, in so far it does not have a content, and in the same time it can explain what happens in the process of getting knowledge.

That this process of getting knowledge is general means that independent of something specific. For example does it not matter whether the problem has been attempted solved before or whether the process has been run through before. In other words, in my opinion, this model is a essential model for “wissenschaft” and pedagogy.

The model is therefore a model for all conscious activity of getting knowledge. There is no concept or element in the model, which makes it specific for what the content is of the knowledge. This means it is model both for the humanities, social science and natural science. This does not mean that I think there is no difference between humanities and natural science. Of course there is a difference between to acquire knowledge about the nature and solve problems where human beings is involved. There are countless of problems both within natural science and human science. But they have that in common that it is the theoretical problems which determines the process of getting knowledge.

The model is also general in the sense that there is no particular understanding of the society hidden in it.
There is neither an emancipatoric power directly in the model. You can both have a problem like “Why has these workers so much waste time?” as you can have a problem “Why is there something called profit?” etc. Of course one can maintain that the model is political in the long run, especially in relation to getting knowledge and understanding, because the model is anticonservative, in the sense that the understanding of that the process starts with theoretical problems is the same as saying that our present knowledge is not good enough.

On another level the model is not neutral in a discussion about science. The model implies namely that descriptive science do contribute to knowledge, but maybe to cognition. Only in specific social and scientific contexts can descriptive science, in my opinion, be progressive for knowledge. And the it will be variations over a theme, or the model for acquiring knowledge, where problems is the starting point for getting knowledge.

An example:
For the descriptive researcher the problem is of course whether what is described actually is there or is as he or she is stating. The technique used in history, the critic of sources saw the light in the last half of the eighteenth century in Denmark. It was at the time very progressive because at the time the limits for knowledge was the limits of myths. It was not “allowed” to offend the national spirit or the national myths. In insisting on the scientific and the objective, and insisting on that it was not just “theory”, but descriptions of “facts”, when one used critic of sources in order to find the historical facts, they legitimized a rebellion against the myths and the taboos. The borders for getting knowledge was moved.
The reason for critic of sources was progressive was at that time the normal world picture was limited of national myths and taboos. The critic of sources as descriptive technique was not progressive in acquiring knowledge because of its content, but because of its historical situation. Now – to insist on critic of sources – would be reactionary, because critic of sources of course requires - sources.
If you go back in history a little it is only certain groups which has left sources behind. The mud-build huts has disappeared while the castles still
is standing. It was the rich, the beautiful and the clever who could write and leave behind – or pay to leave behind. The furrows has gone and food of yesterday has been eaten. To insist on a foundation of sources for one's description and on insisting on science first and foremost is a descriptive enterprise – or to insist on that exact descriptions are important in science – for example as precondition for theory formation – would systematically distort history. It would only be a history of one part of the population – and therefore reactionary.