Before I start to present my approach to the main point of the paper, I would like to mention a linguistic problem which, in my opinion, is not unessential. In the English language philosophical tradition the philosophy of science is based on the analytical philosophy and the division between science and humanities or the Arts. In this philosophical tradition science is understood as a study of nature and the behaviour of natural things likewise the knowledge about them that we obtain through observation and experiments. In opposition to science, the humanities are understood as the subject of study concerned with human beings, their ideas, action and relationships between them. In my opinion, the division into science and the humanities has only a practical sense only. The criteria of this main division could be useful from the analytical point of view. They divide attitudes which are strict and based on observation or experiments connected with nature from different and often irrational or irregular human activities which in most of the cases have nothing to do with any kind of truth.

My conviction is that according to modern and contemporary philosophy this division is rather useless, because even though it builds some borders, it skips the main epistemological problem of philosophy, mention for instance by Descartes, Kant and Husserl. The real problem is how to build the subject which is adequate to the reality and which will know something about the reality. In other words, the question is how the cognition is possible.

In consequence I have to reject the division and join those both sides in the humanistic philosophy of science. The humanistic philosophy of science is a philosophical reflection connected with both science and humanities (or the Arts). The division is not important, when you think about the epistemological
problem of relations between the subject and the object which is based on the human understanding of reality.

Before I present my main topic, I would like to show the sources of the humanistic philosophy of science and its most important theses. I consider it quite relevant, because it is to some extent original. The humanistic philosophy of science, which I am trying to build, rises against traditional, scientismical ideal of the philosophy of science. Its main inspiration are non orthodox philosophies of science built by Thomas S. Kuhn, Paul Feyerabend, Edmund Husserl and Stefan Amsterdamski. I treat Kuhn, Feyerabend and Amsterdamski as followers of traditional, scientismical attitude in the so called philosophy of science „witnessing the crisis” which happened in this philosophy. On the other hand Husserl and some of his allies and students are the critics of the scientism. Their criticism, I suppose, tackles many important elements. A positive inspiration to my humanistic philosophy of science is contemporary philosophical hermeneutics, represented by Martin Heidegger and Hans-Georg Gadamer.

Contemporary philosophy of science has been going through a crisis. The first person who mention it was Husserl. He said that we cannot speak about the crisis of some particular branches of science when we can easily and clearly see their success. According to Husserl, the crisis of science means that its scientific character, understood as a whole manner in which it established its true goal and worked out its method is being questioned. From the Husserl’s point of view the problem of particular branches of science resolves itself into a riddle of subjectivity of the who apprehends. This is related with a riddle of a topic and a method of a psychology. The second half of the nineteenth century was the time of a big importance of sciences and the prosperity which the man owed them. Along with it there was a change in the problem range, very important for the humanity. Sciences, which are interested in facts only, create poeple of facts only. According to Husserl, the cruclity and tragedy of the First World War made the problems of the humanity important again. Again some fundamental philosophical question relating to the sense of the world, rationality and freedom were asked. The objective, factual sciences (both strict and the Humanities) cannot give any answer. Before, in Husserl’s opinion, it was not always like that. In the ancient Greek society the most important thing was „the philosophical form of existence” (Daseinform) which was free education from a subject its whole life and rules of the pure reason. Theoretical philosophy was the basic problem. Such philosophy made free not
only a philosopher but anybody who was philosophically educated. This theoretical autonomy was followed by practical autonomy. The man, who built himself intuitively on his reason was the ideal of antiquity and the Renaissance. Such a man built also the world which surrounded him. He built the political and social existence of The Mankind which he educated from the free reason, from the intuition of a universal philosophy.

The positivistic philosophy of science „cut down the head of the philosophy” rejecting the questions about the essence of the rationality, the existence of God, the sense of the world or the immorality. Instead it assumed a dogmatic phenomenalism. Thanks to it, positivism become a part of the old, ancient, philosophical and metaphysical conception of science. It is a part of this conception because other, irrational (so called irrational) parts of the conception were rejected by positivism. New philosophy of science, based on the Enlightenment’s ideal of the humanity paid a special attention to methodology and efficiency. It had undeniably some success but science become a domain of professional and expert scientists, who were far away from the philosophy and its questions.

Amsterdamski\(^3\) refers to the Husserl’s traditions of the philosophy of science criticism. He presents two alternative ideals of science and the conflict between them. Amsterdamski is trying to present both of them indiscriminately. From his point of view the conflict of these ideals is unsolvable on a philosophical ground because when we assume, that we place ourselves outside the system which we examine and which we belong to we are unable to reach the whole knowledge about it. On the other hand, if we agree that we are a part of the system which we examine from the inside, we are not able to reach an objective knowledge about it. In consequence, in Amsterdamski’s opinion, our choices are conditioned by the values the realization of which is expected from our knowledge.

The conflict of these ideals of knowledge is also unsolvable on a methodological ground. The acceptance of the ideals of knowledge excludes an acceptance of some methodological principles. For the first ideal of the knowledge the most important is psychological, linguistic or historical (cultural in global) understanding of the world in which man lives and acts. For the second ideal the most important is expanding technological possibilities which are, in Amsterdamski’s opinion, taking control of the world: both people and nature. Contemporary, so called, science is a result of the realization of the second ideal. It does not mean that it is the only possible ideal of the knowledge. This ideal could be criticized too. Amsterdamski thinks that on the basis of the ideal, which joins cognitive and technical function of the knowledge it can be accepted and regarded as rational only when we accept

the methodological rules which enable its operational usage. The acceptance of 
this ideal is not a necessity of the reason but the choice made by the European 
culture. The choice could be accepted or rejected, but the ideal should not be 
treated as an eternal. It's analysis and criticism is one of the tasks of the 
philosophy of science. Amsterdamski in his analyses gives a distinctive 
rationale bases for a pluralistic philosophy of science. To create the bases is 
the most important goal when you want to build the philosophy of science, which 
is not based on a scientism.

Another, really very interesting criticism of the scientism was carried out 
by Leszek Kołakowski⁴. His criticism is an effect of the widened concept of 
positivism including in it, for instance, pragmatism and conventionalism. 
Kołakowski thinks, that widely understood positivism could be characterized 
by such four principles:

1. The principle of phenomenalism states that there is no real difference 
between the essence and the phenomenon.
2. The principle of nominalism forbids the supposition that the knowledge 
has, in real, equivalents different from individual, concrete objects.
3. The principle of rejection of cognitive value of evaluation and standardization.
4. The principle of belief in a fundamental unity of knowledge.

Although I do not want to repeat Kołakowski's explanation of these 
principles, I would like to point out that such a philosophical conception leads 
to a special kind of „ideology of science” (ideology of the scientism). This 
ideology builds monuments for science, puts it in the most important place, 
and accepts all four principles. The scientism rejects the problems linked with 
the metaphysics and the theory of cognition. It results from the first two 
principles. The acceptance of phenomenalism and the nominalism eliminates 
traditional, philosophical problems. The third principle throws out ethics, 
aesthetics and religion. These disciplines and their problems are not interesting 
for scientism's confessors. In their field of interest lies the science for which the 
most important pattern is physics, a scientific method and its improvement. 
Because of this, he is especially interested in the methodology and the theory of 
language. The scientism builds only one model of science. It does not permit 
any alternative. Apart from that, scientism excludes man's every day life from 
philosophy.

Scientism can also be characterized by five myths⁵. This characteristic is 
very useful and it shows some important features of scientism, which are 
important from the point of view of today culture and civilization.

⁵ Compare: M. Ilowiecki, Rozum nie jedno ma imię, „Odra” 1987, nr 2, p. 83-86.
1. There is only one kind of truthful knowledge – it is the knowledge received by methods of science. The knowledge is what can be expressed mathematically. It can also be formalized and it was mentioned by methodologically rigorous experience. It means, that science is the only source of cognition.

2. The only thing, which is worth cognition and examination is what can be examined according to scientific fundations. Because of this, many phenomena are out of the domain of scientific interests. Reality is „mechanical” and „analytical” and it is possible to explain the reality by reduction.

3. The knowledge, both in the sphere of its delivery (teaching and learning) and obtaining (researching and investigations) should be split into separate elements or segments. This is why the only way to improve knowledge is specialization. Only the narrow the specialization can guarantee that you „know something” in your field.

4. Only the experts have a qualification for undertaking decisions in the spheres of economic, social and political life, because they know what is right and what is wrong or what is good and what is bad.

It is very easy to see that the first two myths are very near to the four principles of positivism. Besides, the three next say quite a lot about the ideological aspects of scientism like a belief in scientific and technological progress and specialization which will lead us to the truth and happiness. Is the programme of scientism satisfactory? It is hard to answer this question unequivocally. It is certain, that scientism forced on a narrowly understood practice and efficiency. From the philosophical point of view it could be useful if we agree that the notion „philosophy of science” and methodology are synonymous.

This solution is not satisfactory for me. I found some allies in the field of contemporary philosophy of science. Some of them have been already mentioned. Instead of making friends among them and developing their tradition, I tend to look for companionship among philosophers who create contemporary hermeneutics. They were and still are „disappinted”; but they notice some other important features of the doday philosophy of science. For instance, Wilhelm Dilthey shook the belief in the unity of the ways of cognition in different sciences. This belief was common to the positivism of the nineteenth and twenteth centuries. Heidegger points out, that even in scientism rejecting metaphysics it is possible to find some really important metaphysical assumptions. Those assumption are quite often unconcious. If you want to find a metaphysical assumption, you have to ask in a philosophicaly important way. Gadamer mentioned, that modern science and scientism, narrowed down and impoverishd the old, ancient conception of science. Contemporary hermeneutics does not want to give this conception up.
In my opinion, the presentation and the criticism of scientism mentioned above enable me to formulate some postulates of the humanistic philosophy of science. The humanistic philosophy of science does no deny that scientism and positivism have some achievements. It does not want to take an interest in methodological or logical problems which are not, however, rejected or considered as nonsense. It takes a pluralistic stand keeping tolerance for some others viewpoints and at the same time endeavours to reach their basis. I try to present main postulates of the humanistic philosophy of science in three points.

1. The acceptance of the fact of equality of different epistemological and ontological theories. A possibility of building the humanistic philosophy of science means, of course, that I have to choose one of the philosophical orientation and some ontological and epistemological belives. The chosen view is favored only because it is my own acknowledgement. It leads to the rejection of the belief that the principle of phenomenalism and nominalism stand in the science as absolute. Humanistic philosophy of science does not reject them completely. It just points out that science can give some examples of the occurance of these principles and some examples in which these principles do not occure. Humanistic philosophy of science accepts a multipliety of cognitive ways which can lead to scientific cognition.

2. The acceptance of the cognitive value of evaluation. It accepts the importance of religion, metaphisies, arts and ethics, and connected with these problems for science. It can be supposed that their rejection is artificial and it can lead to some falsifications. Because of that, humanistic philosophy of science does not want to avoid any problems, connected with the human being-in-world.

3. The rejection of the belief in „wounderful“ possibilities of science, especially narrowed to the strict science. The belief in „wounderful“ cognitive possibilities of science cannot be retained when we agree that absolute truth and knowledge is impossible. The knowledge, which is a moment between everything, what I gain during learning and what I lose during forgetting can never be any absolute value. It has the only sense as a knowledge-for-myself. The social value of science cannot also be treated absolutely because it has a historical sense only. From the point of view of the humanistic philosophy of science social values are relative in a historical and linguistic sense.

Postulates which were presented above have temporary character only, and I will certainly change them along with further delimation of the field of a proposed reflection. However I suppose, that the proposed direction of a philosophical reflection is very attractive because it wants to say something about science, without rejecting the tradicional, philosophical questions. One of these is the problem of ontologisation and deontologisation of cognition which is, in my opinion, the main epistemological problem of the philosophy
of science. In my conception of ontologisation of cognition I try to follow Heidegger⁶. Heideggerian ontologisation of cognition is based on the fact, that being of heideggerian Dasein is always being-in-a-world. It is peculiar to being Dasein that it meets what there is. Dasein can Be-in-world doing something, building something, living somewhere, being interested in something, having something to do with something etc. In all those changing ways of being-in-world Dasein is anxious about something as much as it is. For Heidegger, Dasein has to be anxious, and even when man speaks, that he is joyful, his joy is a different kind of anxiety. The objectification of the world, connected with the division of he who apprehends from what is apprehended has no sense. According to Heidegger, when we say that we meet in our cognition an object, it assumes our being-in-world full of anxiety about the object which we apprehend.

The cognition cannot be qualified as a sensual influence of the world on a subject or as something which is possible thanks to the common origin of the world and the subject. The cognition is a way of being concious: being-in-world is being concious that it is. All the efforts to separate the being (and the theory of cognition) from the world (ontology) leads to a distortion. How does it happen that the world appears? It is because we always are in some relation to it. „Being” (everything what does exist) appears as a tool i.e. something I am anxious about. For instance a typewriter is not a typewriter at all but the typewriter that I am somehow anxious about, because I am typing a work entitled Humanistic philosophy of science and its main epistemological problem. The anxiety gets the tool from the hiding-place, it exposes the tool. Without the anxiety the world would not be exposed and Dasein would be absent.

This short example shows how I want to build my new philosophy of science. It is just an example, but I suppose that it could help to find out where I see the most important, from the epistemological point of view, problem of contemporary theory of cognition, included in the philosophy of science.