

OBJECTIVITY: THE IDEA AND IDEAL OF OBJECTIVITY

Autumn Term 2009

In the first paragraph of his autobiography, Charles Darwin wrote: "I have attempted to write the following account of myself, as if I were a dead man in another world looking back at my life." It is a striking appeal to the idea and ideal of objectivity, which the great scientist wants to apply to his own life. For many, the principle of objectivity is what defines science, especially modern science, which strives to acquire knowledge that, as a recent book puts it, bears no trace of the knower. Can we know what things are in themselves, free of everything that belongs merely to us and our perception of them, of all our biases and distortions? It would seem to be the only knowledge worth striving for. In this core class, we try to understand what objectivity means, how the idea has been defended and attacked, and how it changed the world.

Objectivity has not only been a scientific idea, even if in science it is much less often combined with other ideas and goals. Great novelists and storytellers like Flaubert and Chekhov talked about their ambition to describe objectively and dispassionately, to create a narrative voice that remains detached from every character and every event. And painters and sculptors have struggled, above everything else, with the question of how much of their own personality should be expressed in their works.

The deliberate striving for objectivity in the arts however, itself indicates a tension between objective knowledge and aesthetic representation and experience. One might even say, as one famous scientist did, that the problem with objectivity is that it cannot capture what is most important for us: for instance, it cannot explain the beauty of a flower or why an old song will move us to tears. More generally, a scientific worldview is often presented as void of all aesthetic and moral value.

In the world of politics, many decisive questions are almost inevitably framed in terms of what is particular to one perspective and cannot provide a basis for state coercion and what is impartial, neutral, objective, and just. Here too critics of an ideal of objectivity will be less enthusiastic. Does objectivity disguise the exercise of personal power, presenting it as the rule of reality, anodyne and irresistible? Does it deliver us from democratic rule into the hands of "specialists without spirit and vision and voluptuaries without heart"? We all yearn for objectivity, but when we get it, or seem to get it, the feeling is that something terribly important has been lost. Darwin, after all, went on to add: "Nor have I found this difficult, for life is nearly over with me."

I

THE SPIRIT OF SCIENCE

Which virtues and qualities are part of the life of the scientist? What does it mean to be objective? What sacrifices does it involve and what character does it tend to promote? Whether the scientist offers us a model for human life or whether science thrives on a stunted personality, blind to many important spheres of life. Could the scientific enterprise be taken over by robots and computers? Or is science somehow grounded in cultural and social practices, spiritual and moral qualities, human needs and emotions, perhaps even a sense of beauty?

Week One

Zola, *Doctor Pascal*

The classic novel on science, the passion for discovery and the conflict with everyday life, romantic love, and religion. A novel about science but also a scientific novel, "a novel for the scientific age, just like previous literature corresponded to an age of scholastics and theology": "Scientific investigation and experimental reasoning will oppose all the hypotheses of idealism and replace the novel of imagination with the novel of observation and experimentation."

Week Two

Descartes, *Discourse on Method*

Is knowledge something given to human beings or must we find and use the right means of acquiring it? Is science an occupation and if so what distinguishes it from all other human occupations? What pleasures, what pains, what hopes and fears are involved in the acquisition of knowledge? What are the advantages and disadvantages of knowledge for life? How can the means of acquiring knowledge be improved, how can we learn how to think if in order to do so we must use our thought?

Week Three

Goethe, *Scientific Studies*

A selection of philosophical and autobiographical writings on the meaning and purpose of science. The core of science should not be method or observation but experience and activity, the full range of human powers, including spiritual and moral qualities: "The abysses of intuition, a sure view of the present, mathematical depth, physical precision, sublimity of reason, sharpness of intellect, agile, yearning fantasy, loving joy in the sensuous: nothing can be foregone."

Week Four

Darwin, *Autobiography*

Hermann von Helmholtz, *An Autobiographical Sketch*

Max Planck, *Scientific Autobiography*

Einstein, *Autobiographical Notes*

Autobiographical texts from four of the most influential scientists of all time. Does the modern separation between the subject and object of knowledge render the lives of scientists irrelevant for science? Does it suffice to say that they were born, did research, and died? Or, on the contrary, does scientific truth begin with a certain way of life, a certain lifestyle, with the personalities and circumstances of individual scientists? How and in what circumstances do great scientists have great ideas?

Week Five

Guest Teacher

J. W. McAllister, Leiden

Is beauty a sign of truth in science? The idea that beauty is a sign of truth in science is intriguing and attractive. It recalls the ancient doctrine of the unity of the virtues, and it seems to promise scientists a route to identifying progress that does not depend on empirical tests. In this seminar, we will try to demystify the discussion by asking what we would need to establish in order to conclude that beauty is a sign of truth. We will see that the most plausible model of scientists' aesthetic preferences suggests that there is a link of a particular sort between beauty and truth, and that scientists can use this link to pursue truths, but that the resulting practice is still based on empirical data. (James McAllister)

II

RECAPITULATION AND A LOOK AHEAD

Week Six

Husserl, "Philosophy and the Crisis of European Man"

The crisis of objectivity: "Einstein may have revolutionized the formulas by which objective nature is perceived, but he did nothing to reformulate the space and time in which our actual life takes place." How science fails to do justice to the lifeworld within which the scientist works. How can one hope to explain the essence and value of science by means of natural science and the laws of nature?

III

THE SCIENCE OF SPIRIT

Whether objectivity is an idea limited to the natural sciences and the investigation of the natural world or whether it can be extended to the study of social life and individual creativity. Is there something about human nature that excludes scientific knowledge? Or are the human sciences merely waiting for their Galileo or their Newton? Why have the human sciences been unable to keep pace with the science of nature? Why have they remained prey to irremediable disagreement, arbitrariness, and ideology? Can one think objectively about history, society, biography, literature and ethical and aesthetic value?

Week Seven

Guest Teacher

Thomas Haskell, Rice

What does Objectivity mean among historians? Not certainty. Not uniformity of opinion. Not neutrality. Not avoidance of passion. History is not at all like laboratory science, engineering, or astronomy, yet historians do strive to learn the truth and uphold standards of objectivity. Like lawyers and judges they strive for evidentiary adequacy and take great pains to accumulate factual detail about what really happened. Again like the law, History is a decidedly interpretive enterprise in which rhetorical skills count for a lot and disagreement among experts is common. Establishing the context in which events happened is even more important to historians than to judges and lawyers, for like ethics and moral philosophy, history is all about causation, blame, and responsibility. Central though objectivity is to historians, two seemingly contradictory observations are equally characteristic of the discipline. First, the objectivity that historians seek is not at all technical; it does not differ in any deep way from everyday commonsense thinking in other spheres of human affairs. Here lies its pedagogical glory. To be uninformed about one's place in time is to shrink one's mental horizons and cripple one's understanding of human affairs. Second, History is always written from a perspective shaped by political, ethical and moral values. This may seem to exclude objectivity, but, as we shall see, that is not the case. (Thomas Haskell)

Week Eight

The Delimitation of the Human Sciences

How can we distinguish the human sciences from the sciences of nature? In what way can lived experience be understood? What sort of relationship may be said to exist between the subject and object of knowledge when both are connected in the stream of human life? What is the

epistemic value of the contributions of the human sciences and to what extent can they be raised to the level of objective knowledge?

Dilthey, *The Formation of the Historical World in the Human Sciences*

Week Nine

Objectivity and Value

A general introduction to the problem of objective value. A scientific worldview is often presented as void of all aesthetic and moral value. Does the sphere of value fall on the subjective side of the old distinction between values and facts? Or is there a sphere of objective value? What would be the consequences of the rejection of value judgments in social science?

Max Weber, "Objectivity in Social Science"

Week Ten

The Knowledge of Cultural Forms

If the human sciences want to think and speak rigorously about the forms of cultural life, they face a difficult task. What can they oppose to mathematics, mechanics, physics, and biology? How are language, myth, art, and religion related to one another? Whereas objective validity in the natural sciences rests ultimately on universal laws of nature ranging over all places and times, an analogous type of objective validity arises in the study of culture quite independent of such universal laws.

Cassirer, *The Logic of the Cultural Sciences*