

## Chapter 69

# Why this Silence?

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### ABSTRACT

*The teaching of scientific subjects at schools and universities presents the eminent opportunity for what the psychiatrist/phenomenologist Ronald Laing termed a devastating experiential invalidation. For a long time, international institutions have been on the watch for the pathetic condition of the current didactics and pedagogy of science, which is no longer able to motivate pupils. What the author of this chapter claims is that the problem is more serious than how it is usually characterized; the standard ways of causing pupils to assimilate logical-mathematical truths that are essential to their social surviving, radically invalidates the existential – and hence ethical and political – totality of their experience of the world, namely their voice and capacity to emit it. The experiment described in this chapter consists of a series of courses entirely aimed to re-legitimize the “negative” experience of doubt and “aporetic” disorientation that any normally sane human subject necessarily makes when her mind for the first time comes to deal with the enigmatic world of scientific truths. It served to re-work the legitimization of education that allows the pupils to listen to that subtle dimension of the phenomena and of their own minds, which alone is able to feed their deepest creative energies, whether scientific, artistic, or directly philosophical.*

### INTRODUCTION

*SOCRATES: Now this is just where my difficulty comes in. I can't get a proper grasp of what on earth knowledge really is. Could we manage to put it into words? What do all of you say? Who'll*

*speak first? Anyone who makes a mistake shall sit down and be Donkey, as the children say when they are playing ball; and anyone who comes through without a miss shall be King and make us answer any question he likes.—Well, why this silence? (Platone, Teeteto 146a).*

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## Why this Silence?

1. *Restoring life and meaning to the practice—at the moment highly poisonous—of knowledge transmission.*

⟨1⟩ *“But why do they so richly developed humanistic disciplines fail to perform the service here that is so admirably performed by the natural sciences in their sphere?” (Husserl 1935).*

Since the years in which Husserl wrote this passage, the situation has not changed. This is because our pupils are still obliged to assimilate the forms of the natural sciences in increasingly massive doses. This is in spite of the fact that there is not yet a psycho-pedagogy that teaches to manage the forms of their mind in such a way that this process of assimilation does not change into a systematic practice of ‘poisoning’. It was as a result becoming aware of that state of affairs that has led me to pursue the aim of providing the outlines of a *science of education* that could provide an antidote against such a state of poisoning, so widespread at all levels of our civilization.

As to the bottom of the problem, my interpretation of its causes continues to follow Husserl’s path: that state of crisis directly descends from the enigmas and the “inextricable obscurities” (Husserl 1936: 35) that arise from the very core of our sciences—“even of the mathematical ones” (ibid.)—and thus it is associated with them since their first beginning. For if Socrates becomes aware of his ignorance before the evidence from mathematics and physics (Plato, *Phaedo* 95e), this is why any single truth drawn from that domain—starting from  $1+1=2$  (ibid. 96e; but also e.g. Frege 1884:§36)—structurally brings with itself both “positive” knowledge and “negative,” perfect obscurity. For this reason, “any (scientific) evidence” is as such “the title of a problem” (Husserl cit.: 215) which from time immemorial reveals to those who really confront with it “the enigma of the world,” of course, but more immediately “the greatest of all enigmas” (ibid.), i.e., that of their own subjectivity, of their thinking and doubting

selfs, which since the first instant is confusedly but intensely intuited as the very source of the “problem” just perceived. Now, in what Heidegger (1938) called “the age of the world-image,” the “modern technical science” and its didactics/pedagogy even established themselves on the systematic denial and reduction to nonsense of that intrinsic inscrutability that any scientific evidence brings with itself, and consequently on the systematic expulsion of the learners’ thinking subjectivity from the domain of the really existing and interesting objects during the hour of mathematics.

This attitude of denial, however, not only gets rid of the “metaphysical” air that is gained by the scientific matters when they are regarded through the Philosopher’s eyes. No, if it were so, the crisis in question would not concern directly and from within the teaching of sciences, whereas it is just this crisis that is our concern. The point is that this censorship persists in obscuring a dimension of science—the creative and inherently dynamic, moving and evolutionary dimension—which covers, immediately reachable, the whole of its extension of surface—the “operations” that any pupil must learn to perform—just like its conceptual supporting structures. And that cannot but alienate the students’ subjectivity, and hence their attention and interest.

2. *The poison that must be neutralized is that of nonsense, as well as the fact that the latter is cynically and disenchantingly accepted by learners and teachers.*

Let me explain with an example, taken from an algebra handbook for secondary schools, where the author wants to give account for an incomprehensible eccentricity that has suddenly arisen to deny the apparent triviality of very well-known expressions such as “ $a^2=a \times a$ ” or “ $a \times 0=0$ ”:

⟨2⟩ *“Now suppose  $a^0$  and consider the identity  $a^0$ :  $a^0=1$ . If in the equality that expresses the above-*

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