

How I Became a Militant

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(as reproduced by Dan Gutkin)

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What follows reproduces, approximately, A. Grothendieck's presentation of himself during the public discussion "The Scientific Worker and the Social Machine," which took place at the Faculté des Sciences de Paris (Paris VI) on Tuesday, December 15, 1970, with the participation of Survivre. An account of this discussion by Denis Guedj follows this presentation. Grothendieck's case, described by himself in the lines below, seems to us all the more symptomatic of a certain necessary movement that has been quietly gathering for some time now. The hope for survival seems to us to be linked, first of all, to the hope that such "awakenings" do not remain isolated cases, but end up forming a current of ever-growing strength. Our goal — that of Survivre — is to contribute to it as much as we can.

It is fairly uncommon for scientists to ask themselves about the role their science plays in society. I even have the very clear impression that the higher scientists are placed in the social hierarchy — and thus the more identified they are with the establishment, or at least the more content with their lot — the less inclined they are to question this religion instilled in us from the earliest years of primary school: that all scientific knowledge is good, whatever its context; that all technical progress is good. And, as a corollary, that scientific research is always good. Thus scientists, including the most prestigious ones, generally know their science exclusively "from the inside," with perhaps some additional knowledge of certain administrative connections between their science and the rest of the world. To ask oneself a question such as: is present-day science in general, or my own research in particular, useful to humanity as a whole, or neutral, or harmful — this practically never happens, the answer being taken as self-evident, owing to habits of thought rooted since childhood and handed down over centuries. For those of us who teach, the question of the purpose of education, or even simply of its adaptation to career prospects, is just as rarely raised.

No more than my colleagues did I make an exception to this rule. For nearly twenty-five years I devoted the whole of my intellectual energy to mathematical research, all the while remaining in almost total ignorance of the role of mathematics in society — that is, for humanity as a whole — without even realizing that this was a question worth asking! Research had exerted a great fascination over me, and I threw myself into it from the moment I was a student, despite the uncertain future I foresaw for myself as a mathematician, being a foreigner in France. Things later became easier: I discovered the existence of the CNRS and spent eight years of my life there, from 1950 to 1958, always marveling at the thought that pursuing my favorite activity also guaranteed me material security — ever more generously, in fact, from year to year. Since 1959 I have been a professor at the Institut des Hautes Études Scientifiques, a small institute for pure research created at that time, originally funded solely by private (industrial) sources. Together with my few colleagues there, I enjoyed exceptionally favorable working conditions, of a kind scarcely found anywhere else except at the Institute for Advanced Study in Princeton, which had in fact served as the model for the IHES.

My relations with the other mathematicians (as, to a large extent, were those of mathematicians among themselves) were confined to mathematical discussions on matters of shared interest, an inexhaustible subject. Having had no teaching to do other than at the research level, with students preparing theses, I had scarcely had occasion to be directly confronted with the problems of education; besides, like most of my

colleagues, I personally considered elementary-level teaching a regrettable diversion from research, and I was glad to be spared it.

Fortunately, a small minority of scientists has begun to awaken, more or less abruptly, from the state of perfect quietude I have just described. In France, May 1968 was, in this sense, a powerful stimulus for many scientists and academics. The case of C. Chevalley is particularly telling in this regard. For my part, those events made me aware of the importance of the question of university teaching and its relation to research, and I took part in a working commission at the Faculté des Sciences d'Orsay charged with drawing up structural proposals on the subject. (Our conclusions, which tended toward a fairly clear distinction between the profession of teacher and that of researcher, were, incidentally, overturned with rare unanimity by the assistants and professors, and by the few students who joined the debates. . .) However, since I was not a teacher, my professional life was not altered in any way by the great ideological upheaval of May 68. Nevertheless, for about a year now, I have gradually become aware of the urgency of a number of problems, and since the end of July of last year I have devoted the greater part of my time to militant work for the Survivre movement, founded in July in Montreal, whose aim is the struggle for the survival of the human species — indeed, of life itself — threatened by the growing ecological imbalance caused by the indiscriminate use of science and technology and by suicidal social mechanisms, and threatened as well by military conflicts and the dangers of military conflict linked to the proliferation of military apparatus and arms industries. The questions raised in the small leaflet announcing today's meeting fall within Survivre's sphere of interest, since they seem to us essentially bound up with the question of our survival. I have been asked to relate here how, for me personally, the realization came about that led to a major upheaval in my professional life and in the nature of my activities.

To explain this, I should now note that there was a certain unease in my relations with most of my mathematician colleagues. It arose from the casualness with which these colleagues accepted contracts with the military (most often the American military), or agreed to take part in scientific meetings funded with military money. In fact, as far as I know, none of the colleagues I associated with took part in research of a military nature — either because they judged such participation reprehensible, or because their exclusive interest in pure research made them indifferent to the sort of advantages and prestige attached to military research. Thus the collaboration with the military of the colleagues I know provided them with a surplus of resources or additional working amenities, with no apparent counterpart — except the implicit endorsement they thereby granted to the military. This did not, however, stop them from professing “left-wing” views, or from being outraged at the colonial wars (Indochina, Algeria, Vietnam) waged by that very same military whose beneficent largesse they willingly accepted. They generally offer this attitude as justification for their collaboration with the military, since, in their view, this collaboration “in no way limited” their independence from the military, nor their freedom of opinion. They refuse to see that it helps lend an aura of respectability and liberalism to that apparatus of enslavement, destruction, and degradation of man that is the military. Here was a contradiction that shocked me. However, being accustomed since childhood to the difficulty of persuading others of moral points that seem obvious to me, I made the mistake of avoiding discussion of this important question, and confined myself to the realm of purely mathematical problems, which have the great advantage of easily securing agreement among minds. This situation continued until November 1969, when I learned by chance that the IHES had, for three years, been partly funded by military money. These subsidies, moreover, came with no conditions or constraints on the scientific functioning of the IHES, and had not been brought to the professors' attention by the administration — which explains my ignorance of them for so long. I now recognize that there had been negligence on my part, and that, given my firm

determination not to work at an institution subsidized by the military, it was my responsibility to stay informed about the sources of funding of the institution where I worked.

In any case, I did everything I immediately could to obtain the withdrawal of the IHES's military subsidies. Of my four colleagues, two were in principle in favor of maintaining these subsidies, another was indifferent, and another was hesitant on the question of principle.

All things considered, all four would have preferred the withdrawal of the military subsidies to my departure. They even took a joint step in that direction with the director of the IHES, which was soon contradicted by opposing steps taken by two of these same colleagues. None of my colleagues was willing to support my action wholeheartedly, which would certainly have sufficed to win the case. There is no need to go here into the details of the twists and turns that eventually convinced me that it was impossible to obtain any guarantee whatsoever that the IHES would not be subsidized by military funds in the future. This led me to leave the IHES last September. For the 1970/71 academic year, I am an associate professor at the Collège de France.

After a few weeks of bitterness and disappointment, I came to realize that it is better for me that things turned out as I have described. Indeed, at one point, when it seemed that the situation “was going to work itself out,” I was already preparing to return entirely to purely scientific pursuits. It was precisely finding myself in a situation where I had to abandon an institution to which I had given the best of my mathematical work (and whose scientific reputation I had been the first, together with J. Dieudonné, to establish) that gave me a shock strong enough to tear me away from my purely speculative and scientific interests, and to compel me, after discussions with numerous colleagues, to become aware of the principal problem of our time: that of survival, of which the question of the military and of armaments is only one of many aspects. This last still appears to me as the most flagrant from a moral point of view, but no longer as the most fundamental for an objective analysis of the mechanisms that are dragging humanity toward its own destruction.

Dan GUTKIN

DEFINITION: Science is the projection of our logico-rational structures onto an indeterminate given.

COROLLARY 1: “Doing science” means describing our own logico-rational structures in a logico-rational way; when this is not understood, a great many scientists are led to “mistake bladders for lanterns”¹.

COROLLARY 2: It is certainly not by scientific means that one can ever hope to reach the “given” referred to in the definition above.

¹*Prendre des vessies pour des lanternes* is a French idiom meaning to be badly mistaken, to confuse one thing for something entirely different.