

Chapter 8. The Provocateur

In the years 1970-1973 Grothendieck took his duties as mathematician very seriously, both as thesis advisor for his graduate students and in his courses. He had not yet broken with the mathematical community, although he held the question of the survival of society to be of greater importance. Indeed, he often met with great sympathy from his colleagues when engaged in political actions. There were, however, actions where his behavior towards his colleagues must have seemed provocative, aggressive and even downright offensive. Thus one receives a very mixed picture, both in a positive and negative sense, of Grothendieck's "provocations" in those years.

During the first three weeks of August 1971, a summer school and international conference on mathematical logic took place in Cambridge, England, with the name NATO Advanced Study Institute. In the run-up to this summer school a sizable group of scientists objected to funding by NATO as a matter of principle. Since the organizers of the conference in Cambridge were not prepared to distance themselves from the military and political goals of NATO, the critics organized a "counter-conference". This was originally supposed to take place in Aarhus, Denmark, no doubt mainly because one of the principle organizers, Yoshindo Suzuki, worked there. Due to organizational difficulties, the counterevent, which went by the name of the Bertrand Russell Memorial Logic Conference, eventually took place in August 1971 in Uldum, Denmark. The appeal of the organizers states:

It is a fact that NATO is a military pact, which ideologically supports the massacre of tens of thousands of people in Indochina and materially supports the fascist dictatorship in Greece, and which promotes the expansion of imperialist aspirations all over the world. We hold that it is not morally justifiable for the scientific community to continue to prostitute itself, lending this organization an appearance of respectability and culture, in exchange for financial resources that are otherwise difficult to obtain [...]

Grothendieck was invited to the conference because of the significance of his topos theory in logics, and naturally also because of his generally known political activities. The bulletin *Survivre* reported twice on this counter-event, and called for participation.

In connection with this conference Grothendieck was also invited to the Nordic Summer University in Jyväskylä, Finland. Several universities participated in this joint event with a focus on human and social sciences. Together with the logicians George Wilmers, Max Dickmann and G.

Jakobsen (at that time Dickmann's wife), he participated, though only briefly, in both conferences.

Grothendieck went to Jyväskylä first, where he reported on his trip to Vietnam. Altogether he was dissatisfied with the result. In bulletin No. 9 of *Survivre* he writes:

Unfortunately our expectations were disappointed with respect to fruitful, open discussions on non-technical themes, and the intellectual level and the more or less open-minded attitudes of many of our colleagues in sociology seemed disappointing: much narrow-minded political dogmatism and much "scientism"!

In Uldum, Grothendieck gave two or three talks on topos theory; he also gave an introduction to a discussion about scientism (August 5, 1971) and he spoke on his trip to Vietnam (August 6). Wilmers told the author that lively discussions took place. Although all agreed in rejecting the corruption of scientists by the military-industrial complex, the majority felt that Grothendieck's position was otherwise too radical. The conference proceedings¹ contain Grothendieck's text on scientism: "The New Universal Church", which was taken from issue No. 9 of the bulletin *Survivre*.

In Wilmers' e-mail there is an undertone of resignation as he expresses how necessary those actions had been at that time, how little success they had obtained, and how much more urgent they would be today [2009]! One cannot but agree with this opinion, considering how the third-party-insanity which has come to dominate university activities obliges scientists to cooperate with establishments generally oriented towards economic success.

Dickman sums up his personal impression of Grothendieck during this trip as follows (e-mail and oral communication with the author in English):

An extremely honest and principled man. On social and political issues he took a "man-of-the-street" kind of attitude, sharply contrasting with many a mandarin's arrogance. He never used arguments of authority; discussions with him, even in disagreement, took place on pleasant terms of equality. I still remember my former wife's observation: "This man's attitude contrasts with what you may expect from one of the world's leading mathematicians."

¹ A detailed account of the Uldum conference and its past history can be found in A. Slomson, "Uldum 1971: the Bertrand Russell Memorial Logic Conference and the controversy surrounding it", in Proc. Bertrand Russell Memorial Conference, Denmark 1971, editors: J. Bell, J. Cole, G. Priest, A. Slomson, 1973. Most of these articles appeared also in 1974 in the volume "*Pourquoi la Mathématique?*" in the collection *Inédit, Série 7*, edited by Robert Jaulin.

We also remember him saying that he began to know the “real world” only after he began to care about “human” questions; he remarked that, during his period at the IHES he “only knew hotel and lecture rooms” during his trips.

He also appeared to me to be a very naive person. His naivety was wide ranging. Here are a couple of examples: He genuinely searched for gentle and well-intentioned solutions to problems - that, to be honest, were not in the 'Zeitgeist' --, such as energy saving; however, his ideas on this question seemed to ignore the massive character of the problem. (We explicitly discussed this question; at the time he seemed to be more aware than us on the urgency of this problem.) ...

In the summer of 1972, an international summer school on "Modular Functions of One Variable" took place in Antwerp, lasting from July 17 to August 3, with Deligne, Kuyk, Poitou and Serre as members of the organizing committee. Like the Logic Conference in Cambridge, this conference was a NATO Advanced Study Institute. On top of that, further funding came from embodiments of the capitalistic economic system such as Coca-Cola or Rank Xerox. Grothendieck was absolutely outraged. By his own account he turned to the organizers and planned speakers and requested them to reconsider their participation. The original version in English of his circular letter, dated July 6, 1971, reads as follows:

To the organizers and anticipated participants of the NATO-sponsored 1972 Summer School on Modular Functions.

Dear Colleagues,

Soon after I heard about the projected Summer School, I got a copy of Godemont's letter to the organizers, of which copies were sent also to all anticipated participants. I wholeheartedly agree with the stand Godemont takes, and it is pointless therefore to repeat here in my personal style the points he forcefully made in his own. Instead, I now wish to tell you about my decision to attend this Summer School on my own funds, should it take place and be financed by NATO as contemplated. Not, of course, in order to participate in discussions on technicalities on modular functions, but in order to voice in personal and public discussions, and through any civilized means I or others can devise, my disapproval of what I consider as a corruption of science. I hope that some other colleagues sharing our feelings and our concerns will join me; however my decision is not dependent on this. The aim would be to help you personally, and possibly some other colleagues as well, to come to realize that there is something fundamentally wrong in the way most mathematicians (and any other kind of scientist as well) are taking it easy with their social responsibilities, being convinced that whatever pushes Science (or themselves) still a bit further, is Supreme Good in itself and does not need further justification. As there are things infinitely more important and precious on earth than sophisticated knowledge of properties of modular functions - such as the respect for life, and indeed the continuation of life itself - I do hope that my or our

presence will have a disrupting effect as far as concentration on mathematical technicalities is concerned - yet a clarifying and constructive one on those more essential matters. As other likewise dissenting scientists, I do of course value such a thing as academic freedom, but not as an absolute, not at the expense of more essential rights of people who may not be academics (such as the right to live, or some forms of freedom that we academics are taking for granted for our own personal selves), which are being suppressed increasingly throughout the world, notably by military organizations such as Nato. Therefore we do believe that "Academic Freedom" does not include the "right" to give support to military and hence destructive institutions such as Nato, and we hope that an increasing number of people, including yourself, will come to realize this and become instrumental in spreading this knowledge, through various actions such as the one I am contemplating in connection with the Summer School. By the time such scientific meetings as the one you are expected to attend will have to be protected by the police against outraged protesters, hopefully including non-scientists as well, the lesson will be learned by many among us. At least the sides will be clear by then to everyone, which would be an important step indeed.

I would like to add still some more personal comments. Why, among the hundreds of meetings financed by Nato, did I decide to take action just on this particular one? This is because, through the persons of some of the organizers, and also partly through the subject, it very much feels to me like something happening "in my own house" - and certainly we should start sweeping our own house first! Thus, I have been working in nearly constant contact with J.-P. Serre for about twenty years, including many years of collaboration within the Bourbaki group; many of my best recollections of past work are tied up some way or other with our common "master" Bourbaki or with Serre, and at various times I had occasion to acknowledge the influence of one or the other on my work. Deligne has been my student for several years (coming quickly to surpass his master in mathematical insight and technical power), and I used to be particularly enthusiastic about his seemingly unlimited potentialities; he eventually became my colleague at IHES - which made me quite exultant indeed, unfortunately only for a short time, as I left soon after over an issue quite similar to the one causing this letter. This brings me to my own share of responsibility in this sad situation: That even some young people, and very "bright" ones, will not waste a minute's thought on such "pointless" questions as their social responsibilities and the social implications of their overall behaviour as scientists. After all we, the elders, never wasted so much as an hour discussing such matters with them, and thus even those among us who did not consider such questions futile would necessarily propagate the feeling that they indeed are. However, if we are not spiritually dead we should still be able to learn, not merely more mathematics, and come to change our teaching in such a way that it will no longer propagate such deadly errors.

Any comments to these reflections would be welcome. Whatever strong my convictions and my ways of expressing them, they do not imply any hostility towards any particular person. I am just convinced that the kind of attitude that makes it possible to scientists to attend, say, a Nato Summer School, is suicidal in the large, hence condemned to disappear within the next generation or two - whether or not there are any other

generations afterwards.

Yours for life, peace and freedom

A. Grothendieck

As announced in this letter, Grothendieck appeared at the opening event uninvited and took the floor unasked, upon which Serre left the lecture hall. He attempted to explain his point of view to the audience, but according to the accounts of several witnesses his demeanor differed vastly from the more rational tone of his circular letter. Staging a sort student happening, bringing red balloons into the lecture hall, certainly did not serve the cause which he defended. He undoubtedly overstepped the boundary between provocation and personal insult, shouting from the back of the hall, "Légion d'honneur! Légion d'honneur!" alluding to the fact that Serre had recently been awarded this medal. Furthermore he reproached one of the organizers with incompetence. Cartier, who witnessed everything, commented on the incident in the following manner:

For me this was all sad, because, as I recall, the audience was mostly on Grothendieck's side. But even people who felt close to his political and social views were repelled by his behavior [...] He behaved like a teenager gone wild.²

His action had little success, and he departed immediately after the botched opening event. One might comment on Grothendieck's conduct towards Serre in a manner similar to what was said about Grothendieck's remarks on the Riemann-Roch theorem (see Chapter 6). Serre was not just any mathematician: he was the one from whom Grothendieck had learned the most, who had been the closest to him for many years, who had supported him the most and to whom he was the most grateful. Grothendieck often referred to him in his meditations as an "elder brother" [aîné]. Why did he have to attack him in this manner?

In taking stock of these actions, one can observe the following: Grothendieck was deeply convinced of the validity of the goals of *Survivre*. It was equally clear to him that, given the same information and explanations, everyone would inevitably hold the same convictions. For him it was certain that any rational, reasonable and logically thinking person could not do otherwise than share the point of view of *Survivre*. To the group of rational, reasonable and logical thinking persons belonged above all

² Quoted from Allyn Jackson, *loc. cit.*

(one might assume) mathematicians. He expected them to be the first to join his movement. When they did not, his disappointment was as great as the one resulting from his conflict with the state and the IHES.

After he had experienced this for the second time, it was clear to him that his former colleagues could only think and act reasonably within the narrow, limited area of mathematics. They were blind to everything outside of mathematics. What did he have in common with these people anymore? How could he be involved with them?

Naturally one can also see the situation from the other side. Serre, whose significance in Grothendieck's life has just been mentioned, said, "One could only speak about mathematics with him." One might wonder if that isn't a little bit too harsh, but coming from Serre this remark carries a certain weight.

At this point, we reach a decisive point in Grothendieck's life. Earlier it was said that he "lived in another world". Mathematics was the bridge that connected that other world with our world. When Grothendieck began to tear down this bridge, or refused to cross it, personal relationships with him were inevitably torn apart.