

Visiting Alexander Grothendieck

By Mohammad Hadi Hedayatzadeh

On February 18, 2011 I met Alexander Grothendieck at the gate of his house in Lasserre, France. The idea of meeting Grothendieck was on my mind ever since I learned about his beautiful Mathematics and his charismatic character as a student in Iran about 10 years before. At that time the idea was raw and more a fancy than something that could one day be realized.

The more I studied Algebraic Geometry the more I admired Grothendieck's mind and genius. I was determined to meet him. Towards the end of my graduate studies, at ETH Zurich, while at the Journées Arithmétiques in Rennes, France, I met Prof. Michel Raynaud. Our conversation soon converged toward Grothendieck. I explained to him how I felt about Grothendieck and that I really needed to meet him. He instructed me to contact Prof. Leila Schneps. I did. Prof. Schneps was very kind to share with me Grothendieck's home address. She warned me not to expect a kind response from him, and told me the stories of people with sad experiences. The decision was instantly made: I would go to the south of France as soon as I defended my PhD thesis.

On February 15, 2011, my spouse, Sepideh Farmani, and I left Zurich to go to the Pyrenees. On February 16 we arrived in Aurignac, France, about 35 km from Grothendieck's home in Lasserre. The next morning, we drove to Lasserre. We entered the little town, with tiny streets. Even though we had the postal address, finding the right house was by no means trivial; there was no number or name tag. We finally found the house, which had a rather big garden. As you can imagine the house did not have a door bell. We didn't know what to do. We talked to his neighbors. They were very nice people. They told us that Grothendieck would very rarely leave the house, maybe once a month to collect and send mail at the post office. They also told us that few months earlier a young lady had tried to meet him. Their advice was to shout his name, wait patiently, hope, and prepare

for disappointment. We followed their instructions. I never shout. I never talk loudly in public places. It was hard to shout "Monsieur Grothendieck" in an unknown place! After some hours, Grothendieck came out. The excitement was high! I called out his name again from behind the garden fence. He was about four meters away. He turned, but did not pay any attention. He looked at some of the plants in the garden. I'm not sure what he did. But after few minutes he went back in. It was getting dark. We waited a little longer in vain.

I was a little hurt, just a little; why would he not answer me? Why total ignorance? Sepideh suggested that I write a letter to him, where I introduce myself, tell him what I wanted to tell him, and explain what happened that day. I had a portrait of him printed on an A4 paper. On the back I wrote the letter. I put the letter in his



mailbox. We drove back to our hotel in Aurignac. That night I wrote to Prof. Winfried Scharlau, to tell him that I was there and asked him if he had any tips for increasing my chances of meeting Grothendieck.

The next morning, we drove back to Lasserre. There is a school in the town. There were about five children and two teachers. We met them and talked to them. We told them why we were there and they told us they knew that a great mathematician lived there, but they had never met him. We also talked to the lady at the post office. She told us that from time to time Grothendieck would come to the post office. Another friendly neighbor told us that Grothendieck's phone worked only in one direction and that usually he ordered his groceries on the phone. The neighbor with whom we had spoken the night before had told us that Grothendieck usually worked until late at night (about 3 or 4 in the morning) and he would wake up late in the morning, around noon. Of course they didn't know the exact time, but this was his lifestyle for a long time and this family had lived there for a long time, before the time

Grothendieck had abandoned all social interactions. So, not expecting to see him in the next couple of hours, we studied the little town.

It was early in the afternoon. I was pacing in front of his garden, hopelessly, and regularly checking his door. All of a sudden, Grothendieck came out of the house. He checked his plants and then moved towards the gate, where his mailbox was located. I rushed towards him. When there was only a fence between us, I called his name. He greeted me. He was checking his mail. Instead of introducing myself — which I had done in the letter— I told him that I had written something for him. He took the letter and started reading it.

He would stop now and then to answer a question or address a point in the letter. He apologized for not having answered my call the day before, because his hearing was not very good (something that became obvious the instant we started our conversation). I had said in the letter that I was a mathematician working in Arithmetic Algebraic Geometry, that I had just finished my PhD and that I was about to start a Postdoc position at the California Institute of Technology. But I had made a point not to discuss Mathematics. He had decided to leave Mathematics and I didn't want to violate his decision. And I didn't want to meet Grothendieck to "learn" Mathematics or to get "inspirations". For sure, I came to know him through Mathematics, but after reading more about him and his non-mathematical work, my admiration for him only grew. He was no longer just a great mathematician for me. Well, if I have to talk about my feelings about Grothendieck, I would have to write pages and pages. All I want to say here is that I didn't talk about Mathematics because he probably didn't want to and also it was not the reason why I wanted to meet him in the first place.



I had written about my background. That I was a Muslim from Iran. He said that he also believed in God, but he didn't follow any "traditional"

religion. I had written about my feelings towards the mathematical community and that I shared some of the feelings he had when he left the community.

When the letter was finished and he saw his portrait on the verso, he was quick to ask where I had obtained his picture. I was not sure how much he knew about Internet. I told him that I had downloaded it from the website Grothendieck-Circle. He was very displeased to hear it. He told me that he had requested the responsible people to take down the site. I assured him that the site was indeed inactive. I wanted to tell him that it was thanks to this site that many people (including myself) got to know more about him and that it was such a valuable source for his legacy, but I decided to let him be the speaker. He asked how I had obtained his address. I explained. He also asked if I was alone and if I had driven all the way from Zurich. When I told him that my spouse and I (and only the two of us) drove from Zurich to meet him, he was very touched, and thanked us. I think he did not realize what position he occupied in the heart of so many passionate mathematicians, for whom Mathematics was not everything, and saw Grothendieck not just as a great mathematician, but as an activist, a rebel and a person of principles.

He apologized that he could not invite me inside his house. He told me that back in the days, his door was always open and everybody was welcome to go inside his house whenever they wanted. I could sense sorrow in his blue eyes and deep voice. "But now, it would be better for your own well-



being not to come inside", he said. He just said that there were *des êtres occultes* that could harm me (maybe I should mention that our conversation was in French, so I'm translating, and neither French nor English being my mother tongue, I hope I have understood what he said

and am able to translate it to English the best I can). I didn't press him to elaborate. I believe that because of my Eastern spiritual heritage I was not shocked by what he said. But I am also a mathematician hit by the passion of Mathematics when I was 12. So, it was in my nature to examine these unexaminable claims.

He said: "you know, nobody loved Mathematics the way I did". It was clear that it was not one of those easy and cheap claims some people make. He said that he suffered for his *amour* of Mathematics like nobody else. I don't know how one measures these emotions, but it was evident that he had pondered over them for a very long time.

He talked about pain and the importance of suffering; *la douleur et la souffrance*. When he was instructing me to write to him, he emphasized on the fact that he would only reply my letters if I had written them "with pain" (and that he would know if I had suffered). This was how he did Mathematics, he declared.

He told me that he was not anymore doing Mathematics in the "traditional" sense, but was "using" or "applying" Mathematics in order to describe the "Universe". He would often need to invent new Mathematics for that, he added. He was not doing a physicist's job; rather a philosopher's. It is easy to dismiss this effort as futile, but from what I knew about Grothendieck and the serious air, with which he was speaking, I believe one should expect something profound in his "forthcoming" oeuvre (that we might never see!).

From the accounts I heard from his neighbors, of people trying to meet him and the way he spoke of some letters he had received, it was clear that he was wary of people meeting him. He stressed on several times that this was for their own good. He didn't ask me, but I assured him that I would not recount to anyone this visit, in order to save him (or them) from the ordeal of such visits. I kept my promise and I revealed my secret only after Grothendieck's passing.

It was now time to say goodbye. I queried whether I could visit him again. He said that we would soon meet each other again, but not in this world. In the meantime, however, I should write to him, he advised. Hesitantly, I asked him if he would allow me to take a photograph with him. I said I wanted to keep it as a memento. In his gentle manner, he told me to come closer. He shook my hands and hugged me and said that this hug was a better memento. Of course it was. Still today, I cherish that memory; the smell of the grass, the golden light of the setting Sun, his kind smile and the echo of his captivating voice.

Then, I watched him fill some bowls at gate of his garden. They were for neighbors' cats. Trying not to make him uncomfortable, I left and sat in the car, meters away from his garden. We watched him in high spirits, for the last time, as he was going back in, trying to engrave every millisecond in our memory...