

Testimony of Jacob Palis

Christian Bonatti

I first met Jacob at a Dynamical Systems conference in Dijon, in 1985. It was my first time in Dijon, and at the time my mathematical field was the theory of foliations... Which was not clearly part of dynamical systems. My main motivation for participating to that meeting was, indeed, to meet Jacob.

In France at that time, there was a military service of 1 year that every young man in good health had to go through. Most people did it when they turned 18, but this could be delayed until the end of one's studies. Fortunately, for PhD recipients, there existed an alternative to this military service: you could ask to be made available to countries with some agreement with France. Usually as a mathematician, you would teach in a middle school somewhere in Africa.

But a few years before, IMPA had started to participate in that program, and they had been asking for young doctors in mathematics. Following in the footsteps of Jean-Christophe Yoccoz and Etienne Ghys, I had just been authorized to spend my military service at IMPA under the direction of Jacob Palis.

I did not know a word in Portuguese - indeed as many French people at the time, I thought that the language was Spanish! - and almost not a word in English. I did not know anything about Brazil, not even the cliché that it is the country of football and carnival.

Thus, I was meeting Brazilian people for the first time, which got me quite scared ... but Jacob could speak French. He assured me that language would not be an issue - at least at IMPA, where a few professors could speak some French.

At IMPA, Jacob took care of me, and included me in his group of students. I was not an easy person. I was too scared. I asked for help all the time. And at the same time I made jokes that only I found funny.

– 86 was the year of the football World Cup and I started to understand how football (futebol) was important for Brazilian people. Every window on my street was proudly exhibiting a Brazilian flag... but my window was on the favela side and there were no flags to be seen there. Thus I bought a huge Brazilian flag and I put it on my window, with the applause of the favela. On the contrary, on my door at IMPA, I glued a drawing of a football ball running over a Brazilian flag. Then, when the French team of Platini won against Brazil, eliminating the seleção, I just painted the football ball of my drawing in a « bleu blanc rouge » French flag, I put the drawing in an envelope, and I sent to Jacob ! I hope he forgives me now.

– Jacob was telling us proudly, like a child, about how he obtained two bottles of an hundred year old cachaça. A first one was offered to him by one of the prestigious professor at IMPA – whose name I can't recall. But soon, Jacob changed apartments in Rio, and he thought the bottle was lost ! He cried and complained about it so well, that he was offered another of the few bottles... Before finding back the lost bottle. He was so proud of the way he won the second bottle. I remember him telling that no one was

allowed to taste this mythic cachaça. Maybe if a very pretty woman asked him, maybe then he would allow her to smell it.

One evening he invited Lorenzo Diaz and myself - was it that time that Leonardo Mora was with us? Unlike many French people, I like my meat very well cooked (almost carbonized). Also, I was trying to stay alcohol-free for a year.

In honor of his French guest, he prepared a dinner with wine and a meat he served nearly raw. I understood I should quickly change my taste in meat, and make an exception regarding alcohol. As you can imagine, that didn't end half way...

After a first 20 year old Chivas, that Leonardo was drinking embedded in a younger Coca Cola, I said very seriously to Jacob « Jacob, you said something to us that you never should have said ». Obviously Jacob thought he offended me for any reason; and he apologized. But after a few seconds

I continued « where is THAT cachaça that you told us about !!!! ». And Lorenzo and myself were then treated to some drops of the precious beverage.

Let me say more seriously, that I was deeply enjoyed his course in Dynamical Systems as well as the seminar he was leading. Had I not spent this year with him at IMPA, I would never have done a career in Dynamical Systems. He truly changed my life, and when people ask « who are my mentors », they are obviously Rosenberg (my advisor), Haefliger (who advised my postdoc in Geneva), and Jacob Palis.

Let me finish by telling what everybody knows, but it deserves to be repeated. When I arrived in Brazil in 1985, the math department in most universities did not have any math doctor. You could be a permanent professor with just undergraduate studies. Very few math departments in Brazil had a PhD program. Just compare with the today situation, where even small universities require a PhD for a position.

When Peixoto won an international prize (the Bunge Foundation Award), the journalists in Brazil willing to meet him knew only one mathematician: the guy predicting the Loto on TV. Nowadays when you catch a taxi at the airport and you say you are going to IMPA, the driver immediately knows the Estrada Dona Castorina. For sure, all of this is not only Jacob's work....but he did a lot for the development and the international outlook of mathematics research in Brazil, and beyond: math in South America, math in many developing countries, are deeply indebted to him.

As a last word, let us just say that I consider Jacob as part of my family: when I speak of him to my father or my children, everybody knows who I am talking about.