IISER Pune 2016
Report

Contents

1 Introduction

From October until December 2016 I spent two months at the *Indian Institute of Science Education and Research* (IISER) Pune in India. During the stay, I worked with Dr. Raghav Rajan's group of the neurobiology of complex learned behaviours which investigates how song learning and initiation is controlled by the brain, using the zebra finch as model organism. The project I was part of addressed the question, if the distance to the female during courtship influences the song and dance of the adult male zebra finch.

Pune is a growing city with almost as many inhabitants as Berlin, located in the state of Maharashtra, 150 km south-east from its capital Mumbai. Pune is a center for automobile and IT industries, but due to its many colleges, universities and research institutes, the city is also called "the Oxford of the East".

2 Preparations – Before Going to India

2.1 Funding and Scholarships

Funding my stay in India turned out to be a bit difficult because the university's general scholarship programme *A New Passage to India* by the DAAD ended mid of 2016 and generating money for a consecutive programme failed due to disagreement between the DAAD and the Indian committee. I do not know if there is a new programme yet, but the DAAD tried to reorganize the money when I left for India. There will probably be a new scholarship programme soon. Fortunately, the *Centre for Modern Indian Studies* (CeMIS) of the university has a different *A New Passage to India* scholarship and they had some scholarships left at the end of the year. Usually, the *A New Passage to India* scholarship is in total around 2200 € granted for two months. Since living in India is not very expensive, this funding is sufficient for the flights and living expenses for considerably more than 2 months.
Another option for funding would be to apply for a *PROMOS* scholarship. Receiving *Auslandsbafög* is unfortunately not possible, because they do not give money for voluntary internships which are not explicitly stated in the curriculum.

2.2 Visa

For an internship at IISER Pune, a student visa is required. For applicants from Lower Saxony, the application has to be submitted at the *Indo-German Consultancy Services* in Hamburg, which is the official service provider of the Consulate General of India in Hamburg (and Frankfurt a. M.). I applied eight weeks before my departure to India. The validity period of the visa starts on the day of approval. If the approved period is longer than six months, which has been the case for my visa, you have to register at the

Foreigner Registration Office (FRO) in India within the first two weeks. This process is complicated, requires a lot of different documents, patience, nerves and visits to the local police station and the FRO itself. I have been guided by someone from the IISER, but the whole process took more than three weeks anyway. However, it proved to be an interesting insight into how Indian bureaucracy works and I enjoyed the rides through the city. Remark: it could be recommendable to avoid having a visa valid for more than six months if possible, but the registration process is manageable.

2.3 Vaccinations

Important when visiting India. Take into account that some vaccinations take their time, especially when injections have to be repeated after a certain time interval. At the *Tropenmedizinische und allgemeine Impfberatung, Göttingen* you get your vaccinations (usually compensated for by your health insurance), but I recommend visiting the *Reisemedizinische Beratung* at the university hospital. There, aside from the necessary vaccinations, you are also generally examined and equipped with travel medications (paid by the university if you bring the signed form "Antrag auf reisemedizinische Beratung").

2.4 Flight

There is a direct flight from Frankfurt a. M. to Pune a few times a week, but also other routes e. g. via Dubai, Mumbai or Delhi are possible. If you ask for it, a driver from the IISER will pick you up at the airport.

3 India

3.1 IISER Pune – Life on Campus

The IISER started building the campus in 2006 so the buildings are quite modern. Different research, lecture and dining buildings are spread on a surprisingly green and tidy enclosed area. The gates of the campus as well as the building entrances are guarded by security guards, which has been a bit unfamiliar in the beginning.

I have been accommodated in a single room at one of the two student hostels on campus. The BSc-MSc hostel has shared rooms and it is strictly forbidden to visit the opposite sex on their floors (there are actually separated entrances and elevators!). The PhD hostel is a bit more relaxed and has mainly single rooms. Washrooms are on the floor. In the basement of the BSc-MSc hostel, there is a small stationary shop where you can buy pens, USB drives, writing pads and so on, but also sweets, toilet paper (not present in hostel washrooms because Indians usually use water instead of toilet paper) and other useful stuff. Xerox is also available. The building next to the hostels houses the two canteens,

one upstairs and one downstairs. You get food – breakfast, lunch, snacks, dinner – all day long and there is even a night canteen, which is frequently used by the students (many students go to bed very late, you always meet someone on campus at 2 a.m. on weekdays). Both canteens have equally good food, but I preferred the upstairs canteen because it has not been too crowded even during peak times and at least some of the employees speak English.

The IISER people are very helpful so don't hesitate to ask questions. For example it took me two weeks to get used to the spiciness of the food (and also the names have been unfamiliar), so before having food, I asked random people in front of the menu board for advice: "Is this spicy?", "Do you like that?", "Could you recommend something not too spicy?". In general, getting to know people is quite easy, finding friends not that much. I think this is because social structures are already stabilized and no one else is looking for friends as it is for example common for students in ERASMUS programmes. In addition, the other students have been busy organising the annual IISER cultural festival *Karavaan*, and, being close to the end of the term, studying for their final exams. As a result, almost nobody wanted to leave campus and I had to explore Pune on my own. Usually life on campus is quite vibrant, there are a lot of student organisations such as a quiz club, an astro club or a club organizing a national science quiz and the students are really into it. In addition, there are other events such as night concerts, *Karavaan* as already mentioned and also religious festivals such as *Diwali*, the Hindu festival of light, are celebrated together.

The best experience alongside the concerts and dance performances of *Karavaan* has been *Pinkathon*, a run for women only, whose annual event in Pune has been hosted by the IISER. I participated in the 5 km run. The atmosphere with almost 6000 participants in front of the stage before sunrise and all those motivated women from small girls to really old ladies has been unique. The event's aims are to raise awareness for women empowerment and health. Always worth supporting, not only in India. ;)

3.2 In the Lab

I decided to do the internship in Dr. Raghav Rajan's working group, because the field of research matched my main scientific interest, which lies in neuroethology; I am interested in understanding the neuronal basis of behaviour. Dr. Raghav Rajan's group of the neurobiology of complex learned behaviours investigates how song learning and initiation is controlled by the brain, using the zebra finch as model organism. During a preparatory interview via skype, we decided on a project, in which I would investigate the role of a certain brain area in song initiation. Unfortunately the project didn't work out due to missing surgical material, insufficiency number of birds and a couple of other reasons. I didn't have the feeling, that my internship was, apart from the skype interview, planned in advance. Also the other lab members weren't aware of me joining the lab. The unfeasibility of the project became clear after three weeks in which I did literally nothing. I frequently asked the other lab members for something to do, but they didn't have

anything. Also assisting in or watching other experiments wasn't possible, because data acquisition is automatized and nobody needed help for analysis. I felt very useless. After these three weeks, I have been assigned to the project of a Masters student, which I also could have been doing three weeks before. The project addressed the question, if the distance to the female during courtship influences the song and dance of the adult male zebra finch. It wasn't entirely in my field of interest, but I was glad to have a purpose. In sum, the people in the lab have been nice, but the internship has been very frustrating. I decided to go back to Germany earlier than originally planned.

Some different aspects: The IISER labs are generally well equipped, comparable to German labs, but the budget is very low and also has been cut down recently by the government. My lab couldn't even afford paper towels. In my lab, the students don't have fixed workplaces with computers, they work on their own laptops. Also the office has been a bit run-down. The working habits of the students have been quite diverse; some have been in the lab each day without having a weekend, others came to the lab around midday and left around 6 a.m. for a few hours of sleep. I had the impression that Indian students generally invest more time in being in the lab and don't focus that much on a life outside of the lab compared to German students.

3.3 Life off Campus and Travelling

The area outside the campus, despite being relatively modern, is a striking contrast to the campus itself and overloaded with new and thrilling impressions. It is very overwhelming in the beginning, exotic and also a bit frightening. The traffic is chaotic and loud, honking vehicles everywhere, dirty and dusty streets, women in colourful clothes, street vendors, stray dogs and almost no other foreigners. The West of Pune, where the IISER is located, is an area where mostly locals live. Foreigners are a rarity, I rarely saw other Europeans around (and on) IISER campus. Yes, you will be stared at (as everywhere else as well), but because there are only few tourists, the local shopkeepers are nicer, not obtrusive and there are not many beggars specialized on tourists. However, it takes a while to go to the city center and well-known sights. In my opinion, Pune is a very exciting and lively city, I always enjoyed exploring. Nice places to visit are for example Pashan market, the Chaturshringi Temple, the ARAI stone quarry (nearby) and Aga Khan Palace, Fergusson College Road, Shaniwar Wada and the inner city (requires transport). Travelling alone is always more stressful because it is harder to avoid and endure unwanted approaches, so go with someone else if possible to feel more comfortable (see also "Useful Tips").
Because I was very sick of being on my own, didn't dare to travel India on my own and could not find other travel mates, I booked a guided tour in the North of India. It was a wonderful experience and I gained so many new invaluable experiences! I enjoyed exploring new cities, the long bus drives through the rural areas, visiting palaces and bazaars and learning about the local people and culture.

4 Useful Tips

1. Although already mentioned: Avoid going to India on your own, especially if you are a woman. Most of the people from IISER prefer to stay within their "IISER bubble"; it has been very (!) difficult to find adventurous people who want to go to the city center, some sights nearby or even a restaurant near the campus. Not to speak of going to other cities or states. Having had another exchange student as travel mate, with whom I could also have shared the overwhelming impressions would have made my stay much easier. Furthermore, don't rely on the possibility that there could be another exchange student from another university or country, I have been the only non-Indian student on campus. Please, do take this serious, it is no fun to always be on your own.
Travelling alone as a woman is definitely possible, but you don't get that much of unwanted attentions of men if you are in company. It never happened something serious but I felt quite uncomfortable in some situations. By the way, gender equality has been no issue on campus. I have never had the feeling of being unequally treated because of being a woman or from Europe.

2. Read travel guides and travel reports before going to India, it dampens the culture shock. I recommend visiting Göttingen's public library, they have a range of suitable books.

3. Bring enough passport size photographs ("Indian" format is mostly not required), especially if you have to register at the FRO or want to buy a local simcard.

4. The Heritage Walk is a very good opportunity to get to know Pune and its inner city, definitely worth the early rise! Tours every weekend, in English. `http://www.puneheritagewalk.com/`

5. Get a local simcard to stay in contact with other people from IISER and to be able to use mobile internet (useful for taxi apps, see below). Some German mobile phones don't accept foreign simcards, so you it might be necessary to buy a new one.

6. English is not that wide-spread as I anticipated. Be aware that most rikshaw and taxi drivers as well as the housekeeping and canteen staff don't speak English. But sometimes, communication doesn't need a common language =)

7. Get a taxi app, either *Ola* or *Uber*. Both systems are GPS-based, the drivers get your request and the route directly on their smartphones. For me it made travelling within the city easier, because most drivers don't speak English and this way you don't have to argue about the foreigner-adjusted prices (some rikshaw drivers refuse to go by meter), you pay by distance and time. Going with a taxi is more reliable and mostly cheaper than going by auto-rikshaw. However, rikshaw drives are more fun=)

8. Bring or buy a drinking bottle. There are water dispensers and filtering machines everywhere on campus, which can be used safely. Buying water in plastic bottles is not necessary.

9. There is a mailing list which will keep you updated on colloquia, other events such as *Pinkathon* or *Karavaan* and general organisational issues. Ask the IT department to add your email address to this list as soon as possible.

5 Conclusion

Why did I want to go to India for an internship in the first place? Despite working on an interesting research project, I wanted to experience something entirely different; different-minded people, a new culture. In the latter point, I haven't been disappointed. India has been an adventure, I met a lot of nice people, I found good friends on campus and in the lab, I made valuable new experiences (positive and negative), I explored and travelled and I learned a lot about myself. The decision to go home earlier arose from the generally very stressful situation of always being alone and not having a meaningful project. In addition, the supervision and assistance from the IISER has been non-existent. After some time, I realized that it makes more sense to proceed with my studies in Göttingen rather than to stay in India.
Would I go back sometime? To India in general? Certainly, there are far too many aspects I still want to know and too many regions of India I haven't visited. To the IISER for an internship? Maybe, if the proper planning of the internship would be ensured and if someone else would accompany me.

With this report, I wanted to give you an insight into the two months I spent at the IISER, the positive and the negative aspects, but also to make you curious about India. Please contact me (email: ▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮) if you have further questions, I am looking forward to answer them.

6 Impressions

(1) Pashan Market, Pune. ~25 min walking distance from campus.
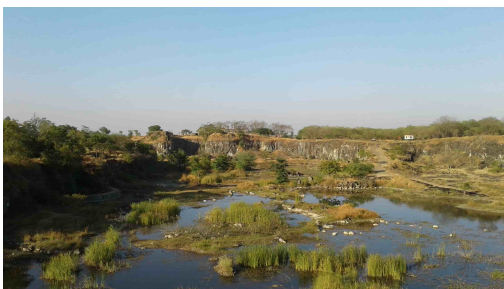
(2) Aga Khan Palace, Pune.

(3) Concert during Karavaan.

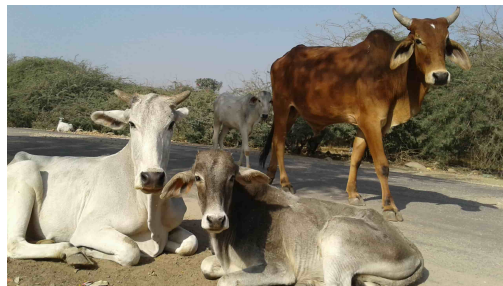(4) Pinkathon Bollywood Zumba warm-up at 6 am.

(5) ARAI Stone Quarry, Pune. ~45 min walking distance from campus.
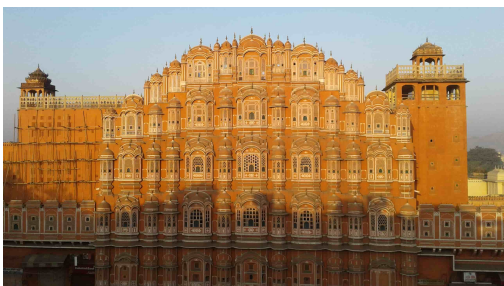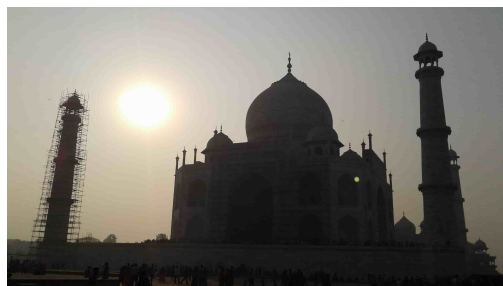

(6) Delhi.

(7) Jama Masjid ("Friday Mosque"), Delhi.

(8) Cows, Rajasthan.

(9) Hawa Mahal ("Palace of Wind"), Jaipur.

(10) Taj Mahal, Agra.