FONDAZIONE BRUNO KESSLER
MAGAZINE

# Mobility Story: Giovanni Garberoglio #1
# My 1st mobility

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**The first of four steps to go over a study stay in the US, full of small big anecdotes, between self-irony and unexpected epiphanies.**

When the Universe decides to deliver you a message, it tries relentlessly until you get it.

Towards the end of 2015, I began to have a vague feeling that maybe this time the recipient of such a message could just be me. In my private life, I had just been though some pretty significant changes that, among other things, had made me free to resume managing my time in total autonomy. A breadth of scenarios, hitherto unimaginable, were opening up before me and, in the vertigo of the many possibilities that lay before me, I almost did not notice the e-mail in which the re-opening of the call for the Mobility project was being announced.

Almost… because after a few days I received an unexpected letter from prof. Karl Johnson with the University of Pittsburgh, by whom I had spent some time as a post-doc 10 years earlier, asking me if I could suggest a brilliant student who was interested in going to the US to participate in a project on the quantum properties of water molecules.

Wasn't this serendipity? In the last year or so, I had been engaged in this topic as well, as part of a collaboration with the National Institute of Standards and Technology (NIST), in the United States.

The collaboration with NIST had begun several years before, and precisely due to Karl's intervention. NIST were looking for someone capable of performing high-precision calculations of some properties of helium gas, where the effect of quantum mechanics is not negligible, especially given the accuracy that NIST set out to achieve. Karl had published a few years before similar calculations for hydrogen, by using a method known as "path integral method", and Dr. Allan Harvey from NIST had asked him whether this method could be generalized to the case of helium. There were a few properties of this gas that NIST was interested in determining; they had repeatedly tried to measure them, but in spite of the progress made they were unable to obtain the values with an accuracy that suited their purposes. What if these numbers could instead be calculated with the required accuracy, starting from the fundamental equations of physics? Karl had advised him to contact me, since, according to him, if there was anyone able to help, that was me.

And he was right indeed. After the first and encouraging successes with helium, we wondered what would happen in more complicated cases, and so we tackled argon, molecular hydrogen and its isotopic variants, as well as the behavior of some gaseous mixtures. In this move towards more

complex systems we had already put our attention on the case of water. Not much on the “common” H 2 O but rather on its “heavy” variety where one or more of the hydrogen atoms are replaced by more massive isotopes, deuterium (D) in the first place. In the specific case, NIST’s interest was (and is, at the time of writing) to establish the reference equation of state for heavy water D 2 O, an “isotopologue” of water that is very rare but that is also of significant practical interest. The idea at the heart of this research was precisely to determine whether even in the heavy water case calculations could be so precise as to compete with the best experimental results and help improve the accuracy of the reference equation of state for this substance, the formulation of which is among the institutional requirements of NIST.

In short, within a week or so it seemed that everywhere I turned there was water. Imported directly from the United States of America.

I don’t remember exactly when this happened, but at some point I realized what the message was: enough with this sedentary life, made of days spent in front of computer, programming! Every so often collaborations also need that people see each other and not only through the screen of a computer or via electronic mail.

Among other things, on a second thought, the decade-long collaboration with NIST had taken place all by email! I didn’t know what Allan looked like nor had I ever heard his voice, even though I had published several articles with him and had also received funding from him! It was actually the time to do something about this…

And, besides this, there was another “bird” I wished to kill with the same stone. Many of my colleagues that had experienced Mobility before me agreed on the fact that a stay abroad was also a time for research, finally!

It’s not that you usually spend all day twiddling your thumbs, but it was clear to me that the more you advance in your career (or in seniority) the more “sidelines” you are expected to devote your time to: organization of research project related activities, mentoring of doctoral students, procurement of funds, writing intermediate or final reports and so on.

Among other things, all this happened to me around the end of the year, when all this merely “bureaucratic” portion of research activities grows and takes up endless days. The mirage of a period to be dedicated to the “real thing” attracted me with such a seductive song that I think only the mythological mermaids of Ulysses can hope to match.

And so… let’s go on Mobility! The deadline for submitting applications was not so far; early January, if I remembered correctly, just around the Christmas holidays that certainly would not have helped to get organized. But since I was dancing, I would have to keep dancing! I was leaving for the United States, so why not go and visit both the groups with whom I was in contact? The idea was clear: I would first go to NIST where I laid the foundation for the calculation of the quantum properties of water, and then I would have used this base to try and help Karl. In Pittsburgh, they were looking for a new method for separating the isotopes of water that was energetically more efficient than the traditional ones, precisely by using their different quantum behavior. To achieve these goals, I would also

have to get my codes straight: what better time to try and learn a new programming language, like C++, specifically designed for this kind of ambitious projects?

My application was accepted, and the dance suddenly became a tarantella.

First, my passport had, of course, just expired but I did not worry that much. Ten years earlier, when I was not living in Trento yet, they managed to make me have it in less than a month. So, in 2016, they would have been even faster, right?

No.

If before you just needed to go the police station, complete the application form, and wait about three weeks, now… well, now everything was much more technological. Forms are now submitted online from the comfort of your home, but the appointment you get for a month later is not to receive the passport, but to submit a new application, this time on paper, after which you are made an appointment after another month when (hopefully) you will be able to get the passport. Total time to receive your passport, two months, two.

So much for progress! (But the passport is “electronic”, whatever that means). At this point it’s March, and the departure is scheduled for late June. There is still plenty of time, right?

No.

And this time it’s a bit my fault: I have set out to go on a grand tour thinking it was quiet and peaceful. Two months in Boulder, Colorado, at NIST and two months in Pittsburgh. Two plus two equals four of course, and to stay four months in the USA you must apply for a visa. But what visa? To visit NIST a B1 (tourist/business) will suffice, but Pittsburgh had proposed the J1 (study and exchange visa). On top of this, the Foundation and the hosting organization need to sign some preliminary documents, pass the scrutiny of the various legal departments with a few rounds of proposals and counterproposals. The final agreement is reached after a while and finally, at the beginning of May. I am ready to submit the visa application to the US Embassy. The United States of America: a modern, efficient Country, with a streamlined bureaucracy, I will get my visa in a few days, right?

No.

I start to fear that, instead of us learning from the US, the US is learning from us.

Online application (with a nagging sense of deja vu attached), appointment with the Embassy, interview, turning in my passport to have the visa applied to it, and a very convenient courier delivery in an unspecified future.

I finally get my stamped passport at the beginning of June. A month to get organized. Oh well, I can get everything done over the Internet: find a plane ticket and rent a small apartment from the comfort of the couch at home. Nice and easy, right?

No.

As for the trip, my first idea is to do the triangle Europe-Denver-Pittsburgh-Europe, but as I try to find “affordable” solutions (the travel budget is about € 1,200), the triangulation seems to amount more around €2000… considering the fact that I am planning to leave after the American July 4 holiday. At one point I had the idea: enter and exit the US from the same airport and take a domestic flight to and from Pittsburgh. Eureka! The fare is “right” (= just a little bit over the budget), and the first problem is solved.

But how’s the second one going? Unfortunately neither NIST nor the University of Pittsburgh have guest accomodation options. It is therefore necessary to clothe the American entrepreneurial spirit

and fend for yourself. My colleague from Boulder suggests that I start from craigslist, which is a classifieds ads website that has been used successfully by some recent visitors. The monthly budget for food and accommodation is € 1,100, a hefty sum, more than enough, right?

No.

Boulder It is a university town, where half the population is “native” and half are students. So craigslist is full of offers for rooms in shared apartments. Ok, I feel young at heart, but I think I’m done with forced cohabitation… I cannot help but noticing the prices though. Rates for single rooms in apartments are around € 800. A little less as you move away from “downtown” (which in the US means: get a car otherwise you won’t get there), and a little more for accommodation within walking distance (which in the US means: two blocks, max!). I’m starting to worry. I was almost ready to reconsider spending two months in the company of pimply college students when, from hidden depths of craigslist emerges a lifeline: I found an offer for a studio in downtown Boulder for “only” $ 1,050/month, all inclusive. It seems almost a miracle, given that all other offers for furnished studios that I had seen so far started off at least twice the rate. Could it be that, after all these drawbacks, luck starts to turn on my side?

I don’t think twice and write an email. I promptly get a return email from Mr. williampleshrentals101@post.com where, in an ultra-professional tone, he informs me that, in order to block the apartment, I have to send him as soon as possible the $ 1,050 for the first month rent plus a contribution for cleaning costs of a few hundred dollars, plus a deposit of $ 1,000 as a security deposit.

After a week of fruitless searching, anyone would have jumped at this chance, wouldn’t they?

NO!

It sounded fishy. The email address was not institutional, the sense of urgency that emanated from the response, the insistence that the $ 1,000 deposit would be definitely been refunded, don’t worry, no problem. Mhm, in these cases my Ligurian spirit surfaces irrepressibly and urges me to proceed with extreme caution before paying. We have to get someone knowledgeable involved: who better than Big Brother? Big Brother does not know anything about Mr. William Plesh in Boulder, or about any “William Plesh Rentals” in Colorado. But browsing the Web, I find a lot ‘of alerts about scams on apartments for rent that are running on craigslist. The litmus test comes to me once again from the Big Brother, to whom I ask to find the pages for the beautiful pictures that the mysterious Mr. William had posted in support of its announcement. The photos refer to a website (this time an apparently legitimate one) of a Boulder real estate agency. Just a shame that the beautiful furnished studio, with all expenses included, in the city center is being rented at $ 3,000/month… Farewell, craigslist.

Time is still passing. Now I have my tickets in hand, but no place to go. Asking around, several people suggested that I tried and find a temporary accommodation through airbnb, saying that once in the area, I would definitely find something more long-term. One thing about this advice sounds good: temporary accommodation. The rest, not that great.

Italy is in 2016, but the US are definitely in it even more. If I cannot find anything on the internet, it will be hard to find something “on site.”

But in the meantime, let’s try the airbnb option. I download the convenient app, I register and wonder what is available in Boulder say in the first 10 days after my arrival. The map of the city fills

up with signs, and for a moment I feel relieved. At least here I found a lot of offers!

Then I look at the rates.
I take off my glasses.
I clean them thoroughly.
Recheck the rates.

Yes, I had got it right the first time. Typically, it comes to $ 100/day for a small room in the house of some family. Some offer 20 or 30% discount for longer periods, such as a month. Significantly over budget.

My eye, however, caught an ad for a small room within walking distance (20 minute walk, according to Big Brother) from the laboratory where I would be working. They are asking for $ 40/ day for periods of a week or more. Reviews by those who have already been there are good, and in fact I would like, after a week of searching in vain, to take home some results. I ask to book for ten days.

The answer comes in a bit broken Italian, but my request is accepted. At this point I also have access to a more detailed profile of my guest. An Italian guy who has lived in the US since he was 5 years old. I will have to share the house with other guests thay may arrive and with a friendly dog. I feel a bit relieved, and renew my efforts in the search for the long term solution. Efforts so far still fruitless. After giving up craigslist, I had opted to seek studios and small apartments in several residential complexes. Big Brother had proposed a few ones, and I had written to a couple of them, but hadn't receive any response. Others explicitly posed a minimum 6-month lease term contract. Boulder, a university town… They were clearly targeting people who would stay there longer than I would.

June was now coming to an end, and the date of my departure was getting closer and closer. And the more time passed, the more a slight anxiety was repeatedly surfacing on my conscience. My colleague Allan, after warning me to be careful of scams on craigslist (he had asked for information and had received an email like that of Mr. William) came up with a proposal that at first seemed interesting: "Listen, Giovanni, unfortunately I cannot find much within your budget. There would be this hotel near the lab, which was very popular several years ago. Although it is now a bit in decline, they might make you a good offer if you stay there for a long time. Follow the link to the trip advisor reviews. Keep in mind, though, that usually discontented people are more likely to write them… "

And indeed TripAdvisor reviews didn't presented a rosy view of this hotel.

The kindest review said bluntly that they would need a nice restoration or at least to buy new sets of sheets. Then I had the bright idea to go and see what Big Brother thought of this place. corporate website … cute. Tripadvisor comments … already seen. Links to local news…

wait, wait, what had happened?
A few months earlier there had been an explosion in one of the rooms.

No, it was not the revenge of a very unhappy customer. Some guests were just refining drugs. The articles of local newspapers more or less gave an account of the dynamics: an efficient procedure to extract the active ingredient from marijuana is to get it through some type of alcohol at high temperature. Some of the hotel guests had put on their stills, without sealing the distillation circuit well. The alcohol had evaporated around the room, and its subsequent detonation had shattered a

bit of glass. No one was seriously injured, nor distillers or other hotel guests. This episode, however, reminded me that I had seen several reviews on tripadvisor.

Several people complained of widespread smell of smoke, and tobacco was not what they smelled. What kind of place was this? The secret base of a gang of drug traffickers?

Big Brother, I want to know!

Hmmm… Nope. No international smuggling operations. No sinister gang of drug dealers. Everything relatively “normal.” A couple of clicks and I realized that Colorado is the Amsterdam of the US. A few years earlier it had also legalized marijuana for recreational use. And Big Brother had already appraised to procure a range of addresses where to get the best stuff. Given the desperation that was getting hold of me, I confess that the thought of paying a visit to the place almost crossed my mind. But marja was not going to be the drugs that would accompany my stay in US.

Meanwhile my lonely search for a long-term accommodation proceeded unrelentingly. After running into the silence of the studios, I was devoting myself to actual real estate agents. The first one I contacted had replied that the only apartment they had available in the period that interested me was about $ 90/day.

Thanks, let me think about it, goodbye. I found two or three other agencies, and I send my request.

After a couple of days Ella, the same lady of the first agency, writes again. She informs me that her firm actually acts as a “hub” for all apartment leases in Boulder, and so all my requests were being directed to her. Given my interest, she offers me a 10% off, reminding me that I would not find another throughout Boulder for the period I had in mind.

By now time was running out, and the alternative was to live, for the same amount, in someone’s home. I take two or three days to think about it and ask Allan for advice, He tells me that the company is legitimate and famous and that, the day before he checked the area where was the apartment that was proposed to me was. The area was very nice, about 25 minutes from the lab, and that the rate seemed “typical” to him.

It was now the end of June, and frankly I was sick and tired of trying. I write to Ella, and fix the apartment. I feel relieved. I have to make a down payment with the first month, and the usual cleaning fee. So € 2,500 fly away from my account to end up making some lucky Coloradian richer. For the apartment in Pittsburgh, II was a bit luckier. Karl had given me the email address of the agency, which he regularly contacts to find accommodation for his guests. I get a reply from Michele who tells me she could offer a room at the rate of $ 900 / month (no thanks) or a “studio flat” for $ 1,400 / month in the Bloomfield neighborhood.

Bloomfield, who was he? I get a little more information, especially from a former colleague from Pittsburgh with whom I stayed in touch over the years, who says that “Bloomfield is awesome!”. It is actually considered is considered a Pittsburgh “Little Italy” of sorts, even if the ethnic distribution has changed a bit lately. The distance to the University is reasonable (for a European walker like myself) a 25-minute walk. And Bloomfield be it!

Michele, however, wanted the two month rent in advance to secure the apartment. Another € 2500 left for the US. At this point I do the math: I have already spent all that they would give me. And I have not left yet!

But the departure is imminent. A week later I find myself in the company of my backpack and my minimalist baggage (a nearly 15 kg bag) at the Verona airport ready to leave for Frankfurt where I took the intercontinental flight to Denver. I'm 1,86 m high, and at the time of booking, they had asked me if for a small additional fee I would like to reserve a seat with more legroom. Of course! And also for the return flight, please.

I already foretasted a "comfortable" intercontinental flight, with on demand movies and excellent lunches.

The devil, as Italians say, always hides in the details.

The movies were on demand, a good choice of definitely new movies (I watched two or three superheroe and science fiction ones… my weak point), the lunches were not too bad, and the leg room was actually more than enough. The problem was the width. I have ridden in buses that, from this point of view, were much more comfortable. Getting off eleven hours later through the plane front door I couldn't but notice, with a certain envy and through deep sighs, the spacious and comfortable business class seats.

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