



MEMORY, MEMORIA, DIE ERINNERUNG  
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As a researcher in the field of memory – in particular, the neurobiology of learning and memory – I feel an appropriate essay on my experiences over the nearly six months embraced in the nest of 19 Wallotstraße in the Grunewald forest is to combine a description of the events that I remember from Wiko with an explanation of why (from my neuroscientist's perspective) I think that I will remember the College for Life Sciences for a long time.

Looking back to my mind's eye before I arrived in Berlin in January, I saw the Wissenschaftskolleg as a kind of castle fortress with the elusive nature of a fairy tale. Being a “junior” academic in this buttress of intellect guarded by the strong tones of the German language, it was – to be perfectly honest – highly intimidating. But trailing my suitcase behind me, I took my first steps through the crunching snow into the new and unknown

(more on this later) to my home in the Neubau with the confidence one often gets from an adrenaline rush of excitement. By the time the California jetlag had worn off, I had already met the delightful, smiling Vera at the front desk, set up German lessons with sweet Ursula and Eva, embraced the unspoken social niceties involved in selecting a lunch table, and saw that one thing was certain: we were all in good hands. This was going to be a year to remember.

### Novelty

Animals (like humans) are especially susceptible to novelty. Put one in a new context and brain cells light up, tickled by the novelty of the experience. “Something new? Let’s encode this!” Put in a known place, neurons remain untickled. “Blah. Same-old.” The novelty of Wiko came in so many flavors for me. One, it was the first time that I was part of an interdisciplinary institute. I found myself in meetings with evolutionary and field biologists, linguists, and musicians (more on music later), discussing their views and opinions on topics in my own field of learning, memory and brain function in the auditory system. I have gained novel insights into the details of my own work from these often surprising conversations, which are now re-framed in a novel, broader, context. Two, I must report that this was my first truly independent research position. Let this be a subtle hint to those who will follow in the College for Life Sciences – Giovanni is our fearless leader, yes. Undoubtedly. But you are at the helm of the ship that is your project and your time. Junior or senior, managing what you do and when you do it is challenging (especially when you’re looking forward to the daily surprise called lunch served by the amazing Lena and her kitchen). So my advice is this: set many realistic goals/deadlines and one long-shot goal, and when you reach any of the above, have Giovanni make you one of his famous Amaretto Sours to celebrate. Three (because it seems like a good number – for quantification, you know), new places, new faces! I remain amazed by how little time it takes for strangers to become friends, colleagues, fast partners in wonder and lust for a deeper understanding of the condition of society, of art, life, the past, and the future.

### Emotion

The one factor that is overwhelmingly present in almost every circumstance that influences memory-making is: emotion. Emotion colors an experience in ways that can make

that memory last a lifetime. And at the other end of the spectrum, too much emotion – especially the negative kind we like to call stress – well, that has the opposite effect. Applause is necessary here for one of the greatest missions achieved by the Wiko staff and organization. That is the stress-free environment they have created for living and working at Wiko. Without stress, creativity flourishes and releases a true expression of one’s self. For example, and on another note for future CfLS Fellows: if you leave Wiko still doing what you came here doing, you must love it and are meant to do it. Wiko has a history of changing the course of a Fellow’s “after-Wiko” life. I think this is a testament to the freedom brought by release from all the duties and routine that can be dangerously susceptible to replace one’s identity. I am happy that Wiko and the CfLS gave me the opportunity to pause from the full-throttle madness that building a research career at an R01 institution in the United States can be to ask the questions, “Am I doing the right thing?” and “Does this make me happy(iest)?” With extended time spent surrounded by Fellows who are faculty members and professionals, learning from and about them, I feel an honest judgment was possible. The answer is that my sails are set steady ahead for my career in research and neuroscience. The choice I made at 15 years of age to be a scientist instead of a classical pianist holds. An auditory neuroscientist. Go figure. But that being said, I have also learned that we can soften the edges of the path we choose – one “secret project” that I have decided to revive and pursue (compelled by my interactions at Wiko) is to write a book on aesthetics, neuroscience, and the underlying plasticity of the brain.

### Environmental Enrichment

EE stands for all the wonderful things that spice our world, making today different from yesterday and a catapult to excitement for tomorrow. EE challenges us, soothes us, surprises us, awakens us. It helps lay down the foundation of memories that are distinct and unique and rich with detailed sensation. To be brief, a word cloud to allow you, dear reader and friend, to fill in with your own associations:

Towel warmers. The Clubraum at midnight. On Mondays. Pretzels. Sweet white wine. Top front seats on the M19. *Ausstieg links*. Spargel and Pfifferlinge at Floh’s. The way the windows open sideways and upside-down. Turning pages for the force that is Pierre Laurent. The Clubraum at 2 a.m. Alfred Brendel at the movies. Funny keys and locks. Classy champagne, especially the dimpled “Sweaty Mistress”. Berlin. Potsdam. Leipzig. *Berlin*. Ping-pong. The Berlin story of the baboon and zookeeper. Brazil-1,

Germany-7. Dinners at the Weiße Villa at sunset. Ping-pong. Racing-round-the-table ping-pong. The Wannsee. Naked lawn. The convertible. Bach. The train station in Leipzig. The Clubraum at 3 a.m. Still or sparkling? My laptop's interruptions during the CfLS Fellows Workshop. Espressos, cappuccinos, lattes, from the glorious coffee machine. Movie Sundays. Buffalo burrata. Paul Robertson's playground of sound space. Super-hot (so it hurts) currywursts at the farmer's market. Haunted houses and running suits. Giraffe bones. Kathleen's introduction to the Rector's Colloquium. Gladiators. Yuri's tough questions. Wendy's ebullient laugh. Church bells drifting past the white curtains from my window. The eminent sound of a cocktail party on Thursday evening. Reason to dress up for dinner. Tealights along the stone wall on the terrace of Wallotstraße 19 the night of the farewell party. My whiteboard.

### Music

I would like to end with a short comment about the grandest and greatest love of my life: Music. Any form. Any way. Any time or place. This was the wonderful indulgence of my time in Berlin. Music has a way of encapsulating a moment, so that when we hear it again, the moment returns to us in sweet recollection. Thus, when I hear *that* song or piece again, I remember the place and people and context in which we were hearing it – and all of the emotions that come along with re-living those experiences. With the Berliner Philharmonie, the Deutsche Oper, the Komische Oper, and various (slightly) shady and (some) not-so-shady clubs on the East Side, I have seen and heard love songs, soft crooners, mad Spanish guitars, punk rockers, and even a giant queen spider hitting an F6 (Thank you, Mozart). But what I will probably cherish most are memories from DJ-ing music at the Wiko end-of-the-year party. This is especially so because I asked my fellow Fellows to give me their requests for songs to dine and dance to. A happy consequence of these requests was that today, I hear a song come on over my headphones on my long walks to work and immediately remember the person associated. I smile at the glimpse of their inner self they willingly shared with me and with the 2013/2014 Wiko group. Thanks, Everyone.

Experience-dependent plasticity (constant change) in the topography of brain (how it's all wired up) is evidence that what we learn and remember becomes part of the physical "stuff" of what we are. In that respect, Wiko has set roots of budding lifelong memories that have enriched my person – right down to the biology of the neurons in my head. The

work I have accomplished in my time at Wiko sets the stage for this next chapter of my life and research career. How appropriate that Wiko has tapped into several (of many) factors that influence memory, plasticity, and brain health. Indeed, one day's dream is to use my research to enable enough of an understanding of the factors that control learning and remembering in a way that allows us to develop strategies for therapies that can rescue people from the depths of Alzheimer's disease, or to ease the learning of new languages (... German!). Maybe these strategies will involve music? I hope so. In any event, for those who say that the Wiko experience has changed them, let's just remember that this change is really quite literal. Thank you, Wiko, for the memories.