**CS50**

Normally it would take me one hour to prepare a lecture.

I had already spent at least six hours staring at the computer screen. This was the last class I had to prepare and I wanted to make something special. I was assembling pictures and parts of movies to make a short video showing the highlights of CC50. I was hoping that, while watching this video, my students would realize how much Computer Science they had learned during those 11 weeks.

In fact, now I realize how much I have learned from this project myself. In the end of 2011, I had just finished taking Harvard's introductory Computer Science course (CS50) through its website and was overwhelmed by everything I had learned. By then I already had some prior Computer Science background and a little experience with teaching, but the most important thing was this idea that would not leave me: I had to bring this opportunity to my peers. This desire drove me to study and learn more about everything I needed in order to create the course's infrastructure and start teaching CS50 in Brazil – whose name I literally translated to CC50.

After two weeks of almost uninterrupted researching and coding I had my website up and running. I grew more anxious everyday. Would it work? Would my school accept the idea? And if so, would students be interested at all? Well, at least this last question was answered quickly enough. I can hardly describe my excitement when I saw the numbers: over 90 individuals had registered for the course within five days! I had thought of 15 students... Maybe 30. But 90 were completely beyond my expectations.

On August 22nd, 2011, I finally found myself in front of a class full of students, whose ages ranged from 14 to 40. After the Principal's speech and a welcoming cake, it was my turn. All of those people were staring at me, trusting me to teach them. At that moment I had no choice but to put all of my doubts aside and ask: “So, do you guys know what Computer Science is?!”

Had I given them enough time, their answer would probably have been a resounding no. As the weeks passed, however, the students began creating their first computer programs and their interest in the subject grew more and more palpable. But that was just the beginning. By the sixth week, those same students shared my joy when we received the news that Harvard's Professor David Malan had sent me a letter in recognition of the work with CC50 and had put up a link to my page on CS50's original website.

Finally, by the 11th week, many of those students had mastered many complex concepts like Hash Tables and Digital Forensics. I still remember one occasion when one of them came to me and said “Thank you so much teacher! I have learned far more Computer Science at CC50 than in the last year as a Freshman in College!”

If my students learned a lot from me, I certainly learned much more from them. Now, looking at the videos, I can clearly see the difference between the 17-year-old boy trembling nervously on the first class, pretending to be a teacher, and the same boy after eleven weeks, enjoying himself and feeling at home while teaching.

Now, more than 100 students have graduated from CC50. Many of them are starting to create their own apps, projects, and even companies. My inbox is filled everyday with dozens of emails from people all around the country who are taking CC50 online. Well, I guess those are the reasons why trying to convey all that CC50 meant to me in a three-minute video was such a hard task. But for the sake of my students, I had to try.

**Learning German**

"Mama, ich habe auf Deutsch geträumt!" I screamed to my host mother as I came running downstairs, feeling almost too excited to speak. I had dreamed in German. A silly dream about flying to Austria on a small airplane with friends, but my first dream in German nonetheless!

Two months earlier, soon after I set foot in Germany for the first time, I had come to know a feeling that I would later depict as one of the most terrible sensations I have ever had: the feeling of not being able to understand people. I can still clearly picture myself in one of those countless moments when I sat among friends and everyone talked, joked, and laughed while I literally just sat there, staring blankly at nothing and feeling too guilty to rob this joyful moment from one of those individuals only to satisfy my selfish desire for understanding.

Finally the dream about the Austrian airplane came, and with it the sudden realization that I was already capable of thinking in German. The grammatical structure, positioning of verbs, and freedom to create words are among the many things that make this language unique. When I studied other Latin languages like Spanish or Italian, for example, I had to dedicate most of my time to learning a objective function corresponding each word in Portuguese to another in the new language, but the structure of ideas and even the order of words remained pretty much the same.

Learning German, on the other hand, was a whole different concept - I really needed to think differently simply because of the language I was using. For example, in German the main verb must often be the last word in a sentence. Initially, I had a lot of trouble with long sentences, when I needed to guess what the main action would be, solely based on the context. If I did not do so, I would risk forgetting most of the details by the time the person finally got to the verb. By being regularly forced to use such constructions, I began paying attention to some subtleties in English and Portuguese that I would never have noticed without the new way of thinking that German had taught me.

At this point, one might ask why I do not feel the same towards English. Well, it probably has something to do with my having being in contact with it through songs, movies, and internet since I was very young. And despite my parents' complaints, I have not spoken a word of Portuguese to my younger sister for almost four years now: since the two of us decided to go to college in the United States we only talk to each other in English. Also, I believe that, although English is very different from Portuguese concerning vocabulary and grammar, when it comes to the way ideas are structured, English and Portuguese are not so different after all. German, on the other hand, consistently forces me to create chains of thought that would never make sense in any of the other languages.

Nowadays I continue to read books and watch movies in German, and I still use this "German way of reasoning" regularly when approaching concepts and problems of the most various subjects ranging from mathematics to everyday conversations. This is, in fact, the very prospect of a Harvard education that excites me the most: the possibility of learning not only raw academic subjects, but also - and more importantly - new ways of thinking.