IER (Institut für Energiewirtschaft und Rationelle Energieanwendung)

Project:
Life Cycle Analysis of Corn Ethanol and Sugar Cane Ethanol for Use in the U.S.
&
Comparison of Current and Potential Ethanol Sources

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Majors: Chemical-Biological Engineering and Management
I have always wanted to visit Europe, and as my ancestors come from Germany, my particular interest has been there. The opportunity I had this summer was more than I could have hoped for, and the experience was equally incredible. Germany itself was incredible with the great German food (and beer, can’t forget that), the access to the rest of Europe, and the list goes on. One part of my experience that I cannot forget is one of the main reasons I was there: my work. Working at the Institute for the Rational Use of Energy (IER) was an incredible learning experience, not only in terms of the academic knowledge I gained, but also in the different working environment present and the way in which Germans work. Basically, my entire stay was an exciting and fun learning experience in both Germany and at the IER.

Germany has always been a place I have wanted to travel, both because my great-great grandparents had come from Germany and also because of their prestige as one of the greatest engineering nations. After finding a program and then being accepted into the program, I couldn’t wait for summer to start (even more than usual). To be completely honest I had no idea what to expect, and for the most part relied on what other people told me and the stereotypes that are present for any culture. I was expecting to get to Germany, go to work in the morning and leave with the mass exodus at 5:00. I expected evenings to be spent touring the city and drinking beer. I hoped I would be able to find some German friends to drink beer with. I was hoping the cold and harsh stereotype didn’t make such an interaction difficult. On the weekends I planned to travel to the rest of Europe and experience all I could in a short summer. Other than that, I was hesitant to make any other expectations, and I just planned to enjoy the trip, and enjoy the trip I did.

For the most part, stereotypes were more or less true, but they are overly simplified and often misleading. Although work generally ended at five, it was not such a strong deadline as I would have thought, and many people would leave a little earlier or a little later. However, by the evening, the city streets were crowded and almost everybody was out enjoying the summer. There were certainly several bars and they were not empty of people, but most people just spent their time in the park, going to beer gardens, and shopping. Their activities were not all that different from the US, except for the fact that it seemed they spent a lot more time out and about and less time at home or work. Sometimes it would seem as if all of Stuttgart was walking down the main shopping district on a weeknight, something not commonly experienced in the U.S.

A handful of the activities that were rather different from in the US that I quite enjoyed were the beer gardens and the restaurants. I should digress to mention that beer is drank much more in Germany than
in the US, in line with any stereotype. Several reasons exist for this. To start, drinking beer is legal from the age of sixteen. It is also permissible (and common) to drink beer in public. Till then, I had never seen people walking around casually sipping on a bottle of beer. Despite the prevalence of beer, it was interesting how few of the people, young and old, were obnoxiously intoxicated. However I think the biggest reason beer is drunk so much in Germany is because it is so freaking good. Back home, I had never really acquired a taste for much beer and there were only a few varieties I knew of that I didn’t have to gag down. The first time I had a beer in Germany, I sat down and ordered it more out of curiosity than anything. I thought it was more of a fluke that I liked it than anything else, but the more beer I tried, the more convinced I became that beer could actually be good (at least in Germany). The beer was great, and I understand why it is so commonly consumed in Germany; but’ as good as it was the beer was not my highlight of German cuisine. I had not known what to expect of the food when I came, but it was great. Their food is not for everybody and it relies heavily on meat and starches, particularly pork and potatoes. To me it was as if my grandma had cooked every meal (don’t tell her that, I still tell her she’s the best). I was surprised at how much the food tasted like food from Iowa, although in retrospect it makes sense because much of Iowa is populated by German immigrants. As most people are not from Iowa and may not understand my enthusiasm, I will leave it to say that the German food was very hearty and delicious. Another thing to mention about German food is they are not afraid of fat. They lavish butter on all their bread, have yogurt with 15% fat (more than whole milk), and oil is not an object of scorn. If nothing else, it makes German food taste delicious, and surprisingly it does not make everybody weigh 300 pounds. For my last little thought on food, I must mention a couple things that I did not like about Germany. Breakfast in Germany was nothing like in America. It was not sweet and more often than not consisted of a pretzel over laden with butter and often contained cold-cut meat. You can even go to Munich and get a “weiswurst früstück” which is a pretzel, sausage and a beer… for breakfast! I’m not saying this is bad; I just missed my eggs, toast and overly sweet breakfast options. Another thing that really bothered me was the water. I’m not talking about the water from the tap or at home, but whenever you go to a restaurant you have to pay for water, even if it’s not carbonated. There were a couple times beer was cheaper than water, mostly because the water was so expensive. My advice if you ever go to Germany: bring a water bottle. Overall, German cuisine is great and the dinner conversations are friendly.

As far as friendly conversations go, they are not hard to find. I can understand where the impression that Germans are hard and cold came from. Much of the time walking down the street, their faces are relatively plank and they don’t really seem to interact. If you sit next to somebody they don’t just start up a conversation with you. In reality though, this is not really any different than anybody else. Whenever I walk to school, peoples faces are pretty blank and unfriendly. When I ride in the Boston public transport, there might be a few more friendly people willing to start a conversation, but it’s the exception. In the end, much of the way Germans act outwardly is no different than other places. However, relationships in Germany are a little different and may be the actual cause of perceived coldness. In
Germany it is not as common to have acquaintances as it is in the US. If you really take the time to get to know a German, they take the time to get to know you, and you are much more likely to become friends. However, if you just want to say hello to somebody and walk on, they are likely to respond coldly. That’s just how they treat half-hearted interactions. The fact that I would say “hello” or “how’s it going” and not really wait for much of a response seemed shallow to them. It’s just a different way of looking at things, and the gap is closing as an increasingly connected world brings these different ideologies closer together. What I’m trying to say is that Germans may sometimes seem a little distant, but having an actual conversation and making friends is no more difficult in Germany than in any other place that I have been.

Mentioning the other places that I have been, the number of other places increased dramatically this summer. Germany is positioned pretty well within Europe, particularly the South West region where I was staying. France and Switzerland were a couple hours away, Italy, Austria and many other countries were close enough for a weekend trip. Travel was easy and the places to go were incredible. Although I have talked so much about German culture, another incredible part about Germany is its location and access to everywhere else. Nearly every weekend I traveled to a different city, both in Germany and in the rest of Europe. The train system to deliver me to my destinations was incredible and the movement throughout the euro zone (the Schengen Area) was incredibly easy. The common currency made it even easier. In the end I was able to see the Mona Lisa, Milan, Venice, the United Nations, Vienna, the place where the sound of music was filmed, pieces of the Berlin wall and so much more. I wish I could go into detail about everywhere I went and all the things I did, but I simply don’t have the time (and there is a limit to this report). To sum it up, I just have to say the opportunity to experience the rest of Germany and the rest of Europe was incredible. The only advice I have is to take advantage of the new bussing system for transportation. It’s cheaper and you get Wi-Fi. Other than just go out and plan to have fun, because you will.

The food, the people, the culture and the travel were great and consumed much of my time, but on the weekdays for about 8 hours I was working. After all, it’s one of the main reasons I was there and it was the single part of my life that consumed the most time. Before I make my work sound bad, I have to say that I truly loved my work once I got into it. It may not have been as fun as traveling Europe and the rest of Germany, but that’s pretty obvious. However, the work that I did at the Institute for the responsible use of Energy was great. It fit my interests beyond what I could have hoped for and I had an incredible amount of freedom to shape my own research. In the beginning I was not so enthusiastic. The expectations of undergraduates in Germany are much different than what I was used to. The key difference, at least in my situation it that as a student I was not really expected to do anything. Its not that they didn’t want me to do anything or that they gave me mundane tasks, they just gave me a free reign. I could have done pretty much nothing and there wouldn’t have really been any negative consequences. When I was leaving
they told me a story about a student who had worked there one summer. They said they had seen her about once a week and that was only for a couple of hours. They assumed she had spent the rest of the time traveling or sitting in a bear garden. By the end of the summer the advisor wasn’t even sure if she was still there and she had not created a report or anything. And the weirdest thing is that while they were telling me this, they were laughing. The general attitude to the situation was: well she didn’t get much out of the summer, why did she even show up at all. This example simply illustrates an undergraduates ability to take responsibility for themselves. In my case, I completed the original task they had given me within a couple of weeks, and thereafter I didn’t know what to do at first. I simply wasn’t used to having nothing required. For about a week after I finished my original project I pretty much just sat at my computer trying to find something to do. It was the first time something like that had ever really happened to me, and it turned out great. I found an area of related research I was incredibly interested in, and my supervisor backed me all the way. From that point on it was easy. I still had no instruction, but I just followed my interests and had a great experience. Furthermore, instead of just having the original project report at the end of the summer, I had an entire other report that I thought was much more interesting (I may have been a little biased). The takeaway from this is that undergraduates are given a lot of freedom and not a whole lot of supervision in their research. What happens from there is up to the undergraduate. He can travel Europe the entire summer, or he can come up with his own interesting project. In the end, I found this situation as a great opportunity to grow as a person and professionally.

My summer in Stuttgart was incredible. The work that I did day to day, about 40 hours a week was an incredible experience. Not only did I get to research what I am passionate about, but I was able to take the responsibility to accomplish what I wanted. This was just one of the aspects of the German culture that I enjoyed. The people were friendly and great people spend time with. They were not stereotypically cold or withdrawn, at least no more than the rest of the world. The food and public atmosphere were incredible, and there is a reason Germans drink a lot of beer. And as if this were not enough, Stuttgart was positioned excellently to experience the rest of Germany and the rest of Europe. I can’t imagine a better way to have spent my summer and I am incredibly grateful to the Bürkert Foundation for making it possible!