## Aeroplane VLAAMSE TECHNISCHE KRING Monthly - Edition 6: May 2015



RoboChef: A new star in the kitchen



**Visiting Antwerp** 



International Experiences



In the footsteps of Father Damien Davel

#### **One year in Leuven**

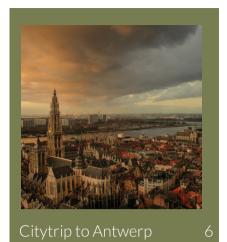
X.U. Manu De Block, Studentenwijk Arenberg 6. bus 1, 3001 Heverlee - Afzender: VTK Ondersteuning vzw - gratis - Afgiftekantoor: Leuven 1

## May

- 3-7 Election Week @Alma 3
- 3 Reception Palm Sunday
- 4 Chili con Carne Barbecue Movie Night Cantus (Dutch)
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Last month in engineering

#### Word from the president

Dear international friends,

It is almost time to switch places. Many of you will return home, and I will start working abroad for my first job, at DEME. I'm curious about how drastically that will change my life. Change however, is usually something positive. This is the last time I am writing this 'column' if you will, but it is not my job to fill this page, it is my pleasure to try to offer some value to those who decide to read this. So as final advice, I decided to cover the topic of nuances, conflicting ideas and grey area, as nothing is ever black or white, and therefore it is smart to not treat anything that way.

The first pair of lessons is 1: to be happy with yourself and 2: to constantly change and improve yourself. On a superficial level this feels odd, accepting oneself is not wanting to be anyone else and not craving change. If you are happy the way you are, there is no apparent need for personal development. This is obviously wrong, because you are never perfect. And it is those who like themselves, who consider themselves valuable enough to invest in themselves. So don't live your life with the goal of trying to find peace with the way you are, nor pursuing drastic change. Love yourself and don't stop improving.

Number two is fully living in the present moment, while still caring for the future. It is sad how many moments you let pass by, worrying about the future or dwelling in the past. Worries and guilt are big useless distractions. You don't need to feel guilt to be a good person, draw conclusions to prevent the same things from happening again and move on. About fearing the future, I'll quote Mark Twain: "I've had a lot of worries in my life, most of which never happened." But isn't just focusing all your attention on the present stupid, short-sightedness is a big problem in our society, right? Yes, you need a vision and should have goals to work towards. But once you have those, there is no need to worry, the best way to care about your future is to focus and work hard in the present moment to achieve those goals, step by step.

Next up is the advice to not care about what other people think of you. This is key to being yourself and living instead of getting lived. Let people think what they want, you decide who you are and what you value. In most cases, people won't even be thinking about you in the first place. The conflict here is not to confuse this with not caring about how YOU are making other people feel. Pay attention to your influence on others, it is essential to a good social life. The truth lies in the middle here, because if you care about what other people think, you're a people pleaser, everyone is your friend but at the same time no one is. If you ignore how you are making people feel however, people won't like you probably. If you avoid both mistakes, the 33% rule applies; some people like you, some are indifferent, and some don't.

To wrap up: how about not being outcome dependent versus really wanting something? Our society puts too much focus on results, while you should love the process of achieving them. You practice sports because it's fun, not solely to get in shape. Most things are not as obvious as this example, but always try to love the process. On the other hand, it is important to have desires. It's a healthy motivation to really want something, as long as you don't attach your identity to it, or let it decide your mood. Also, don't make the mistake here to quit on your goals because you don't love the process, but find a way to start loving it. If you do this, you'll be happier, as the process takes way more time than the moments you achieve a milestone.

Think about it. Develop yourself. The best of luck with the bright future ahead of you!

### **Word from the vice-president**

Dear internationals,

The end of this academic year is coming closer and closer and with that comes also the end of my student life and my last words to you as vice-president of VTK. This also means that, after three years, I will no longer be a member of the praesidium. During those three years I tried to organize all kinds of activities and I hope you've enjoyed some of them during your stay in Leuven. Though three years might have been long enough because my blue sweater has lost its zipper.

With the end of my story comes a whole new story for somebody else. Next week a new team of enthusiastic students will organize an election week in front Alma 3 to try to convince you they will make a hell of good praesidium for next year. The name of the serious team this year is "The Gospel of Luke", thank God, they already have humour. Besides this serious team, there are also two funny teams, they will organize an amusing afternoon on Wednesday. The first funny team is called "Scholploeg", the word schol meaning cheers but also as in plaice (the fish). For the people who have been to a cantus, you might have seen them before with their blue t-shirts with a white plaice on it. The second funny team is called "Pedagogica", they stand for even more relations between engineers and pedagogues. Make sure you visit the election week, there will be some free or at least cheap drinks and foodies.

When this election week has passed, all the students know it is time to start focusing on the exam period in June. For me, hopefully the very last exam period of my life. I almost can't believe it, those 5 years have gone by so quickly! I will miss this student life but I'm also excited to start building a new life, to contribute my part to society and to explore some new horizons.

I have decided to combine these last two points and to some volunteering work before I start my two years internship (if you want to become an independent architect in Belgium, you have to do two years of internship first). After relaxing and enjoying vacation in July and August, I will go to Argentina in September and October, they call it voluntourism, combining vacation with volunteering. My first stop will be in Campo Largo in the province of Chaco, there is an orphanage home/day centre that was founded by a Belgian nun. Afterwards I go to Buenos Aires to help at La Casita in Escobar which is also an orphanage home/day centre.

But first let's finish this friggin' master's thesis!

Love,

Emily (vice@vtk.be)

## **CityTrip: Antwerp**

As the < Gopass 10 > allows people under the age of 26 to travel anywhere in Belgium for only five euros, most of you will find it very easy to take a day off on the weekend and visit one of Belgium's beautiful cities. Every month, we'll give some practical information and background on one of these Belgian cities, and this month we'll introduce you to the largest city in Flanders: Antwerp.



Antwerp is a city that has definitely gone with the times, which makes it very interesting to visit. Where most cities in Belgium are interesting for their history, Antwerp has always strived to stay modern. A lot of people from the city consider themselves the upper class of Belgium, the rest of Belgium does not. Regardless, Antwerp has evolved from an important city in the middle ages to the trendy hub it is today. Apart from the beautiful buildings which can still be seen all over the place, Antwerp is known for its humongous harbour, its major role in contemporary art and fashion, and its vibrant nightlife. And on top of all that, the city is also the world's number one spot for diamond trade.

The first thing you'll notice when arriving in Antwerp is the train station. Many debates have been held over which style it actually is built in, but everyone would agree that it is absolutely beautiful. When you leave the station, you can go right into the Antwerp zoo, or left into the city center. Directly to the left of the station you'll find the diamond quarter, where many Jewish stores are selling precious jewelry that's way above our budgets. Fun fact: the annual turnover coming from diamonds in that little piece of Antwerp is 54 billion, which is exactly as much as the Belgian state budget for 2015.

From here on you will probably follow the main road into the city, the famous Meir. It is the largest shopping street in Belgium, and the area surrounding it makes for a great afternoon for anyone with a love for clothes. This is also the neighborhood where you can find the Rubenshuis (the former residence of the Flemish master painter, now a museum) and the St. Jacob's Church, where Rubens is buried. Following the Meir, you'll head into the historical center of the city. This is where you can find the gothic Cathedral of Our Lady, a prestigious building which also houses some of the works of the Flemish masters. The cathedral holds the record for being the tallest church in the Benelux. Very close by you'll find the Grote Markt, which like many cities in Flanders houses the old city hall as well as the former guildhalls.

For those of you that want to head further into the city, you can visit the picturesque district of Zurenborg. Many of the houses there have been built in fin-de-siècle styles like Art Nouveau, and this district will certainly appeal to both architects and romantics alike. One can also look for the Museum of Fine Arts, which houses an even larger collection of paintings by the Flemish masters. For something completely different, you can find yourself a way to the port of Antwerp, which is the third largest port in all of Europe. Sitting on the dockside while boats as large as a village come floating by with thousands of containers is truly an unforgettable experience.

The nightlife in Antwerp is probably the most diverse you'll find in all of Belgium. There are hundreds of bars, and many clubs



where you can dance the night away. Ranging from the pubs near the Grote Markt to the famous House club Café d'Anvers, Antwerp makes sure that nobody wants to go home early.

Antwerp is a city with many facets and faces, and it certainly does all it can to attract the young citizens of the 21st century. If you want to treat yourself to a day of the good life, just take out your GoPass and get on the train to visit Flander's most flamboyant metropolis.



# **International Experiences**

The year is almost coming to a close, and we've asked some international students to write about their experiences in Leuven. Studying in a foreign country can be scary, and when you arrive, many things won't turn out as expected. But in the end, most of the surprises will be happy ones, and you'll learn that a year abroad truly is an amazing experience that no one can ever take away from you. Jehan (India) and Javi (Spain) shared with us their stories about expectations versus reality, studying versus partying, and what makes Leuven such a wonderful place to be.



#### Jehan

Leuven, the first time I actually thought about the concept of living here was just a few days after getting my last admission letter. Europe was never really in the plan. I like most other countries in the universal mindset, and set my target at USA. It was not that I didn't get in anywhere else, I was just curious, as my mind finally had some free time marked with the abrupt end of all the expectation and anxiety of awaiting results. It was now the serious thinking time, sitting down after all the buzz of having all the world as my options, I soon realized what my options really are. Leuven was not a blind pick out of the box, but it was the most recommended EU College for my proclivity towards research in Nanotechnology by my seniors. The funny thing was no one in USA was aware of Leuven and mentioning Belgium just made matters worse. It was like European colleges were on a different planet to them and the same vice versa. Belgium, a country 107 times smaller than mine, with the main languages being German, Dutch and French, none in my forte. But worst of all every time I googled for feedback, HitchHikers guide would pop with his blunt bold comment "Belgium is the rudest word in the Universe, yet by strange coincidence, also the name of a country in earth, completely banned in all parts of the galaxy, except In on part where they don't know what it means and in serious screenplays".

My sisters take was that's why the chocolate from there was bitter and not sweet (It didn't help!!). Parents also were not so inclined, being the first in the family to go abroad for education and that too in a place where no one speaks English terrified them. After extensive networking my parents found a distant relative of mine in Germany whose only comment about Belgium was "Our beer is better ". It soon became pointless to involve others, it was all on me and me alone. Finally I decided, not because of Tomorrowland but that it would be much less of a financial burden on my parents and myself to take Leuven, it didn't go well at the dinner table when I announced my decision and with time it didn't get better.

Finally three months later with my bags packed and tears everywhere, I said bye to all my friends and family who gathered at the airport as if to pay me their respects, (We Indians make an emotional movie out of every small thing). It was in the plane that I met my first friend, "Proshant". I was approached by a hefty gentleman saying his family was given all window seats, and he wanted to change seats with me to be beside them. Not being stingy with the window which surprisingly most people invest their time while booking, I agreed. I shifted to the back on an aisle seat and next to me was Proshant. From there I slowly got introduced to the multitude of Indians in Belgium and especially in Leuven itself. Leuven was not some remote town but it was one of the most culturally rich and historical places of the entire Europe. That's what you get when the person next to you studies anthropology. We soon went our separate ways when we reached the airport but fate had it that we would cross again as roommates in Leuven City Hostel. I tried to prepare myself for when I reached Brussels as you can't always rely on Google. I approached the gentleman at the supermarket cash counter, took a deep breath, collected my wits and in my own pace with confidence tried to muster up all the French that I learnt from the Duolingo app that I so sporadically practiced back home and in my most earnest effort tried to say "Which direction is Ravenstraat?". Smirking with a smile seeing how I was struggling to pronounce, he stopped me to ask "Do you know English? ". For one second I thought there is a God. It was form that moment that all the misconceptions went out the door. I soon came to realize like Leuven was none other than a student town truly blessed with a blend of beautiful rich history and an international outlook which I had never come to experience ever before. It is here that passions and fantasies became a reality. Indians aren't so welcoming to change, that is why beyond cricket and chess other games aren't really there. Youtube used to be a magical window where people were free and not judged to do what they like. I would have never dreamt in just six months I would find so many likeminded people here, now I spent my Friday's playing "Go " with my friend Alex form the Netherlands, Cards against humanity on Saturdays with board game night at Pangaea



and D&D session on Sundays. The University is also guite different, the focus in India is theoretical and less conceptual, with the main focus being around remembering standard proofs and their immediate applications. Strong focus is given on manipulation over understanding. I knew I would be expected to be more practical here, but the concept of an oral exam at first frightened me. It was only after my first experience that I really understood the value. So many times the understanding depth of people, even from a student to a professor, is different in the ways we visualize or understand or interpret things. It was during an oral exam when I just told the professor that I can't understand what you are asking of me in this question that he told me just explain what you understood that I realized what exactly was the purpose of the question. The skill and outlook of the professors has truly expanded the views I had with my field. I have learnt and also shared my culture many times here in Leuven. Yes, it did take much time to get accustomed to certain cultural shocks, from a professor offering beer to regular greetings by kissing one on the cheek. Yet truly I feel that despite our differences, I feel very humbled and grateful to have the company of friends that I have today for not only their cultural tolerance and acceptance, but also the sheer joy of their company. To my Polish friends who say that it is never too late to have a drink, to my Croatian friends where any random topic can be conversation, to my Iranian friends in how we keep saying that nothing has changed in 1400 years (It's a Zoroastrian thing), to my American friends who like making the most serious conversation out of the most unexpected subjects. And to all my friends I have truly experienced an international learning and grooming atmosphere here, and I am truly indebt to you all.

But what makes Leuven so memorable to me, are the small attachments I have gained where the tiniest extra effort taken by others makes you feel right at home. The letters in the occasional soup at De Moete, the unlimited free Alma fries paradox, to the general confusion I get when I ask someone what beer I should try. How randomly some nights students throw water balloons at pedestrians, to the profound efforts everyone takes to correctly pronounce my name in my own language, to the weird bug print in the toilets, free coffee at the department machine, random free beer a guy gives you if he bought more than he can handle or when you dressed pretty good for Halloween, to the disgust when I tell people how I love the French fries here. But the amazing part is that Leuven, although so rich and expressive in sharing its culture, has never enforced it upon others and has led to a kind of symbiotic paradise between their culture and ours. I have not lost my identity here in Leuven, I still celebrate Indian festivals and eat Indian food which I can both order and cook almost every day. Leuven is a site of some of the best Turkish, Ethiopian, Italian, Iranian food I had in a long time, and the Indian food here is also not that bad. There is no shortage of awesome cultural events, going from St Patrick's Day to some really messed up traditions like Cantus, but utmost all the freedom of open minded expression here in Leuven is blissful, one can feel free to protest a certain act peacefully here and voice their opinion. Something like that back home is so often met with police raids, tear gas and overflow of dramatization, melodrama and manipulation. I truly enjoy Flemish people, VTK has truly spent a great time and consideration to make us international students feel at home here. Truly awesome are the member of VTK organizing committee like Christophe, Marijn, and Job who have always taken time out to make life here just more fun, that some days I don't really feel away from home.

#### Javi

My experience in Leuven started in those warm and nice days of September, between beers and laughs. Since the very beginning I knew I wanted to come here, however, I would not have expected what Leuven is. Leuven means having everything in one place; Leuven has it all, from young people to a great University, without forgetting beers, parties, beautiful buildings, activities and cultural life... There isn't a day when you have to stay at home; there are always things to do, opportunities to get, people to meet, etc. I would like to explain my experience by dismantling three lies about

living here. First big lie: "Belgians are not kind towards foreign people", I had been told before coming, people said like "at the end you will be only with another Erasmus people", and this is the biggest lie ever; I have made, not only very good friends, but best friends here, friends I do know will be there for a long time, because afterwards I have also been told that if you have a Belgian friend, you have him forever. For instance, I still remember one day in the canteen, I had not enough money to pay my food, and suddenly a guy that I had never seen just paid for my food without knowing neither my name or my Facebook; of course, I returned his money some days after. Second even bigger lie: "Leuven is only party", there is no doubt about that Leuven IS party, nevertheless there are much more things here: it is a very active city, with exhibitions, museums, concerts, libraries, shops, architecture and arts, workshops, markets, events... As an example we have the ExistenzWeek, the week when all the students of 4th year of Architecture do their best to create a beautiful space in an abandoned building and turn it into a cultural-exchange space, with exhibitions, lectures, parties, cafes... Third - and not less important - lie: "It is horrible to live



with this weather", this is the first thing everybody will say when you decide to go to the Northern Europe from the South; but definitely I have to say that although this is not Andalusia sunny every day, you also learn how to take advantage of the weather, and especially how to enjoy every day, no matter if it is sunny, cloudy, or whatever. The happiness you will have one sunny day seeing all the parks full of people on the grass and the terraces of the Oude Markt absolutely full is something you cannot feel in a Mediterranean climate. Coming to Leuven has been one of the best choices of my life, and now I feel sort of engaged with this city and with Belgium: I do know I will be back someday after finishing my Erasmus.



# Last month in engineering

For the first time ever, a quantum computer has been used successfully for machine learning. The machine makes clever use of quantum entanglement to mimic some of the core processes in machine learning, which may greatly increase the speed of future devices.

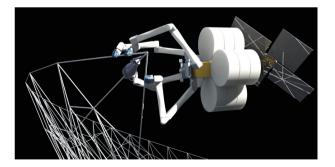




Researchers from Stanford have developed a new battery. The battery charges ultrafast, and outperforms conventional Lithium batteries in several fields. The battery exploits the advantages of using aluminum while cleverly eliminating some of the material's drawbacks.

RoboChef is coming! A pair of robot arms has been developed that can cook 2000 meals if you place the ingredients in front of him in the correct way. Many improvements still have to be made, but the robochef is expected to hit the shelves in 2017.





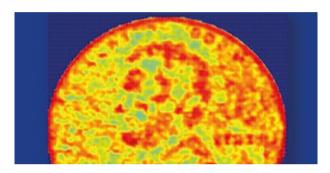
A company called Tethers Unlimited has developed a system of spiderlike robot arms that can be used to create future megastructures in space. The system will allow for more versatility in building blocks sent up to space, improving the cost effectiveness of space construction.

The new European research project MUSE hopes to create a system that can translate books to virtual worlds. This way, people can learn history by actively walking around in the past, instead of reading through books.



A new drone startup project aims to renew the forests. The drones are able to analyze a forest, and then shoot seed pods into the ground to repopulate the soil. The method would be faster than traditional hand planting, and would cut overall reforesting costs by 15%.

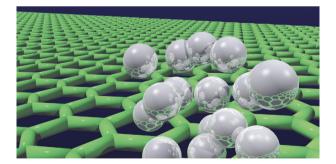




Researchers from Caltech have made a tool that can take 3D images of objects and send them immediately to a 3D printer to print. The device, called Nanophotonic Coherent Imager (NCI), is the first consumer-friendly tool to achieve these results.

A Japanese Magnetic Levitation train broke the land speed record twice. First at 590 km/h, and one week later it topped that with a stunning 603 km/h. The real operating speed of the new train will be 505 km/h, which is still the highest operating speed achieved on land.





A new membrane for desalination of water has been successfully tested. The water filtering membrane consists of porous graphene, and the flow of water through it is at least an order of magnitude higher than current state-of-the-art polymeric membranes.

Google has received a patent for uploading and downloading robot personalities to and from the cloud. This raises some interesting possibilities as well as ethical questions, such as the possibility to store and spread the personalities of real people.



## Leuven Secrets: The priest who went to Hawaii

Have you ever heard of Father Damien? Before I went to Leuven, I'd never heard of him. When I first arrived here, however, I noticed that a lot of Flemish people seem to know a lot about this guy. Apparently his story is something they learn about in high school. I never bothered to look anything up, however, and maybe I should have. The only reason that I started looking him up now is because I found his body. Well, the place where he is buried that is.

Which hill in Leuven is the steepest to cycle? It's an ongoing debate between me and my friends, and many possible winners have been proposed: perhaps the road to Abbey Keizersberg is the steepest, or perhaps it is the bicycle road that follows the train tracks in Heverlee. Personally, I think it's the Ramberg. If you follow the Naamsestraat into the city center, right before the St. Michiels' Church, there is a narrow street to your left that heads very far down very fast. Atop of that, the road is paved with badly placed cobblestones. You know, because Belgium.

I like going down a good steep road, because that means I don't have to do anything. This road, however, is so



terrible that I don't even want to follow it downhill, let alone uphill (which is really impossible). Therefore I strongly advise to take another road down. Either way, I was heading to a friend of mine, and I passed by the square at the bottom of the Ramberg. I looked at the Ramberg street



sign, and then at another street sign. 'Pater Damiaanplein', it read. That guy again. I looked around over the square, and only then did I notice the church. Between the steep roads downhill is a church which I never noticed. It's not hidden at all, but somehow it remained undetected for all these years.

I quickly found out why the square was named after Father Damien. Apparently, after a praiseworthy life and a saint's death, he was eventually brought back to Belgium to be buried in Leuven. In this tiny church, hidden in plain sight, the body of a saint rests unnoticed among the students. This strange happenstance made me finally sit behind my laptop and look up what he actually did during his life, and that's why I'm writing this now.

Father Damien was born not far from Leuven. in a village called Tremelo. After a harsh youth at his father's farm, he decided to become a priest. After years of education, Damien went to Hawaii as a missionary. He soon found out that there was a colony of lepers on the island of Molokai. The lepers received food and supplies, but no medical assistance. Father Damien noted that giving the lepers a priest was the least he could do, so he went to Molokai to give the lepers spiritual guidance. During his time at the

colony, circumstances greatly improved for the lepers. He built new houses, organized new villages, and erected a church and a school. He assisted the people in the colony as priest, physician, construction worker and undertaker. Eventually, however, the inevitable happened: Father Damien contracted leprosy himself. He died at the age of 49, after having helped the colony for many years. This tale of sacrifice quickly spread across the world, and is still taught in schools all over Belgium today. Damien's body was initially buried in Hawaii, but was later brought back to Belgium to be buried in our fair city. Damien's story was known among Catholics for years, and in 2009 Father Damien was declared a saint.

After reading this tale of self-sacrifice I understood

why Belgian children all know the story. It is remarkable, almost unthinkable now, to see someone give away his life so freely to help other people he or she doesn't even know. I know for myself that I would never have the courage to do so, and although I am myself not a Catholic, I paid my respects to Father Damien at the church. Some people deserve to be honored, not because they have a certain belief or motivation, but just because they do things that the average person would never ever dare.

